TABLE OF CONTENTS

ARTICLES

Prosecution of Fraud and Civil RICO Claims in the Involuntary Insurance Market
   John K. Gisleson .................. 1

Cybercarriage of Goods: Implications for the Trucking Industry
   Robert T. Gabor, Q.C. .......... 25

An Optimal Model for Reforming COGSA in the United States: Australia’s COGSA Compromise
   Sean R. Thornton.................. 43

Bird Strikes Against Aircraft – Issues of Liability
   Ruwantissa Abeyratne............ 63

Transportation Education at the University of Denver
   Paul Stephen Dempsey......... 87
   Andrew Goetz
   Joseph Szyliowicz
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# TABLE OF CONTENTS

## ARTICLES

- Predatory Practices & Monopolization in the Airline Industry: A Case Study of Minneapolis/St. Paul  
  *Paul Stephen Dempsey* ............... 129

- Reform of Air Cargo Transport Regulation through the WTO and GATS  
  *Stephen Dolan* .................... 189

- Time and Demurrage and the Case for Uniformity  
  *Paul W. Stewart, Esq* and  
  *Christine H. Scheinberg, Esq* ... 235
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## Volume 29 2002 No. 3

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## TABLE OF CONTENTS

### FOREWORD

Steven Kropp .................... 247

### ARTICLES

How Airline Security Fees in a Post September 11, 2001 Environment Are Spiraling Out of Control

*Anthony Ryan* .................... 253

Beginning of a Redefined Industry: How the European Court of Justice’s Decision in the Open Skies Case Could Change the Global Aviation Industry

*Berry White* ..................... 267

The Victims Compensation Fund: A Model for Future Mass Casualty Situations

*Jessica Ramirez* .................. 283

Border Crisis: Time for a New Collective Review of Tri-Nation Border Security

*Daniel C. Stiles* .................. 299


*Owen Bishop* ..................... 313

The Time Has Come for the Government to Develop and Implement a Transportation Plan for Yucca Mountain

*Chessa Bieri* ..................... 333
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Prosecution of Fraud and Civil RICO Claims in the Involuntary Insurance Market

John K. Gisleson*

I. Introduction

As a result of the intense competition in the trucking industry and the difficulty of verifying the representations on all of the applications for insurance, the incidence of fraud in the involuntary insurance market (also known as the commercial automobile assigned risk market) has been a serious problem. Unlike the voluntary market, where commercial insurers can reject an applicant for insurance after reviewing financial and operating information, insurers in the assigned risk market are required to extend insurance coverage based on information provided in a standard-form application so long as the applicant meets eligibility requirements. This automatic coverage coupled with federal regulations mandating insurance coverage for all trucking vehicles, regardless of whether they are listed on an insurance policy, facilitates the ability of an applicant to misrepresent the scope and extent of coverage.

This article provides an overview of how to identify fraud and prosecute civil claims to recover the true earned premium under commercial motor carrier liability insurance policies. Although the focus is on assigned risk plans in Pennsylvania and New Jersey, most of the issues apply equally to other state plans and to the voluntary market as well.

* Mr. Gisleson is a commercial litigator in the Pittsburgh office of Schnader Harrison Segal & Lewis LLP (www.schnader.com). He represents both plaintiffs and defendants in complex commercial litigation, including cases involving breach of contract, fraud, RICO, breach of fiduciary duty, professional liability, and other commercial claims. The views expressed in this article are those of the author alone and should not be considered those of Schnader Harrison Segal & Lewis LLP, its clients or the participants in any involuntary insurance market.

II. Federal Regulation of Insurance

All truckers must comply with federal financial responsibility requirements, which may be met through the purchase of liability insurance. The federal government imposes three key requirements:

- The truckers' insurance coverage must be the primary insurance applicable to the truckers' operations;
- All vehicles in the fleet must be covered by the insurance policy whether or not they have been reported to the insurer and regardless of whether the vehicles are leased or owned; and
- Notification to the regulatory agencies is required whenever insurance coverage is canceled or not renewed.

The overriding purpose behind these requirements is to protect the innocent motoring public and all other parties affected by the truckers' operations. Proof of the insurer's compliance with these requirements is made by filing a Certificate of Insurance, either Form B.M.C. 91 or B.M.C. 91X, with the federal government. When an insurer issues a Certificate of Insurance to the government, Form MCS-90 must also be endorsed to the insurance policy. Form MCS-90, the terms of which are dictated by the government, provides that the insurer agrees to pay, within the limits of liability described herein, any final judgment recovered against the insured for public liability resulting from negligence in the operation, maintenance or use of motor vehicles... regardless of...
whether or not each vehicle is specifically described in the policy and whether or not such negligence occurs on any route or in any territory authorized to be served by the insured or elsewhere. As a result of those forms, all of the trucker's vehicles are insured regardless of whether they have been disclosed to the trucker's insurance carrier.

III. Assigned Risk Plans

Commercial insurance policies generally are issued by insurers who voluntarily agree to provide insurance coverage, often in a highly competitive marketplace. For various reasons, some truckers are unable to obtain the requisite insurance from an insurer on a voluntary basis. To respond to this situation, "assigned risk" plans or similar mechanisms have been created in most states that distribute the risks associated with these applicants under a proportional scheme to all insurers doing business in the state.

The plans or other mechanisms establish their own set of rules known as Commercial Automobile Insurance Procedures (ACAIP) and assign trucker applicants in the assigned risk market to certain participating insurers known as "servicing carriers." The CAIP establish the rights and responsibilities of the insurer, insured and insurance broker (also known as a producer). The CAIP defines the eligibility of applicants and producers, plan administration and procedures, assignment of applicants to specific insurers, standards of insurance coverage, and the source of applicable rules and premium rates for insurance coverage. Before applying to either the Pennsylvania Plan or the New Jersey Plan, a trucker must have tried and failed to obtain insurance in the voluntary market in the sixty days prior to the date of the application.

Underwriting in the assigned risk plans differs in two significant respects from the voluntary market. The underwriter has neither the discretion to decline the coverage requested nor authority to modify the premiums beyond those specifically authorized for involuntary business applicants. As a result, the servicing carrier must accept risks it might decline in the voluntary market, and its ability to assure sufficient premium income to cover losses is more circumscribed.

IV. The Insurance Application and Premium Rating

The CAIP rules are applied initially by insurance producers, who obtain information from the trucker necessary to complete the application and then calculate the estimated premium based on CAIP rules. The application seeks information to identify the risk and determine the pre-

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mium, including the applicant’s ownership of vehicles, garage location, cost of hiring leased vehicles, loss history, and radius of operation. The producer assists the prospective insuree in the completion of the application, the submission of it to the plan, and in the subsequent correspondence concerning the prospective insuree’s operations. A properly completed application should provide the same information and result in the same premium regardless of the identity of the insurance producer who completes the application or the servicing carrier who issues the policy.

The servicing carrier specifically relies on the representations in the application when issuing a liability policy. As a result, the applications to the Pennsylvania and New Jersey Plans specifically require both the applicant and the producer to give certifications concerning the information in the application. Applicants to both Plans must certify that “all statements contained in this application are true.” Applicants in the New Jersey Plan further certify that the statements [in the application] are offered as an inducement to the Servicing Carrier to issue the policy for which I am applying. Producers in both Plans must certify that they read the Plan manual, “explained the provisions (of the Plan) to the applicant, and have included in this application all required information given to me by the applicant.” Producers in the New Jersey Plan also must certify that they understand that intentional misstatement of information may subject [the producers] to penalties as provided by law. Similarly, the Pennsylvania Plan has a general Anti-Fraud Statement on the application—applicable to both producer and trucker—stating that [a]ny person who knowingly and with intent to defraud any insurance company or other person files an application for insurance or statement of claim containing any materially false information or conceals for the purpose of misleading, information concerning any fact material thereto commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties. In proving fraud claims based on misrepresentations in the insurance applications, counsel should rely on execution of those certifications as evidence of specific intent to defraud, materiality of the misrepresentations, and reasonable reliance by the servicing carrier on the misrepresentations.

Basically, there are three methods by which premium is calculated based on the information on an application: (1) gross receipts, (2) specified auto, and (3) cost of hire. Although gross receipts, if used, would be the sole method for calculating premium, truckers may be rated, and typically are rated, using a combination of specified autos and cost of hire. As its name implies, gross receipts rating calculates premium based on a formula using a trucker’s gross receipts. A trucker generally must have
an established operating history for a period of years to qualify for rating under this method.

Specified auto rating is the most common method of insuring vehicles. The number of owned vehicles is used as the measure of the level of exposure to liability, and the insurer assigns a separate premium for each owned or long-term leased vehicle. As to long-term leased vehicles, each Plan specifies the length of time necessary for a vehicle to be considered long-term leased (e.g., six months in the New Jersey Plan and one year under the Pennsylvania Plan), and long-term leased vehicles are viewed the same as owned vehicles for premium purposes because of the comparable amount of control the trucker has over the vehicles. After policy inception, vehicles are added to the policy as they enter a trucker's fleet and deleted from the policy when they leave the fleet.

Cost of hire rating is a rating method for developing premium for vehicles leased on a short-term basis (as defined by Plan rules). Like gross receipts rating, cost of hire does not use the number of vehicles as a measure of exposure. As a surrogate for the number of vehicles in operation, cost of hire rating uses the expense involved in leasing the hired autos as the measure of exposure. Unlike gross receipts rating, which is intended to develop premiums approximately equivalent to the specified car premiums, the cost of hire rating rules are intended to develop premiums higher than specified auto premiums. The higher premium is intended to reflect the additional exposure resulting from the insuree's lack of control over the maintenance of short-term hired vehicles and (if the vehicle is hired with a driver) the insuree's lack of control over the driver.

V. POTENTIAL MISREPRESENTATIONS ON AN APPLICATION

There are five key questions on the application that are typically the subject of fraud claims: (1) the location of the trucker's headquarters; (2) the number of vehicles owned and long-term leased; (3) the cost of hiring vehicles on short-term leases; (4) the radius of trucking operations; and, (5) the trucker's loss history. Responses to these questions constitute material representations since each has a significant effect on the premium charged to a trucker.10

A. PRINCIPAL GARAGE

First, the trucker's headquarters (also known as the principal garage location) determines the assigned risk plan to which the trucker must apply. For example, if the trucker is headquartered in Pennsylvania, the

10. Included in the Addendum to this article is a non-exclusive list of indicators, both from the application as well as the trucker's conduct during the policy period that can be used to assist in identifying potentially fraudulent conduct.
trucker must apply to the Pennsylvania Plan. Similarly, if headquartered in New Jersey, the trucker must apply to the New Jersey Plan. For truckers with multi-state operations, they must apply to the state where its operating headquarters are located. "Operating headquarters" is defined as "the chief or usual place of business."

There are at least two reasons why a trucker may misrepresent its state of principal garaging. First, another state's assigned risk plan may be less expensive than that where the trucker is actually located. For example, all things being equal, rates under the New Jersey Plan are less expensive than the Pennsylvania Plan. Second, the assigned risk plan where a trucker is located may have canceled its insurance because of non-payment of the insurance premium or some other reason. Under CAIP rules, if a trucker fails to pay premiums, it is ineligible for insurance through the Plan until the trucker cures the non-payment. To avoid this bar, the trucker may, for example, obtain a post office box or establish a mail drop (i.e., rent a small amount of space and a phone line) in another state and list that state as its principal garage or headquarters.

To verify the actual garaging location, counsel should check the applicant's articles of incorporation, tax returns, federal or state regulatory filings, vehicle registrations, equipment leases, bills of lading, and addresses on prior insurance policies. A representative of the insurance carrier or a private investigator also should physically visit the alleged headquarters to verify the trucker's actual garaging at the location on the application.

B. OWNED AND LONG-TERM LEASED VEHICLES

A trucker may misrepresent the number of vehicles it owns and long-term leases it holds. A trucker has an incentive to underreport vehicles for two reasons. First, the premium increases with each vehicle added to the policy. Second, the insurance regulations provide that all vehicles operating under a trucker's motor carrier authority have insurance. Thus, vehicles are covered regardless of whether they are specifically identified on the application. If a vehicle is in an accident but was not listed on the application, it is therefore covered by insurance if operating under the insured's motor carrier number.\footnote{In that circumstance the insurer may have a claim back against the trucker for indemnification of any losses the insurer had to pay under the policy if information concerning that vehicle were fraudulently concealed. See 49 C.F.R. § 387.15 (2000) (MCS-90 endorsement specifically provides that the insured agrees to reimburse the company for any payment made by the company on account of any accident, claim, or suit involving a breach of the terms of the policy, and for any payment that the company would not have been obligated to make under the provisions of the policy except for the agreement contained in this endorsement.).}

This misrepresentation can occur by a trucker understating the num-
ber of vehicles or by establishing an affiliated, captive corporation whose sole purpose is to own the vehicles and then "lease" them to the insured under highly favorable terms. In the latter scenario, the captive corporation does not obtain separate insurance for the fleet, leases the vehicles only to the affiliated trucker, and gets the benefit of the affiliated trucker's liability insurance.\(^{12}\) If the leases continuously rollover (either by their own terms or as a matter of course), they are effectively long-term leases, and the vehicles should be scheduled onto the policy. Because there normally is no interpretation or judgment in identifying owned or long-term leased vehicles, this is the easiest and perhaps, in terms of evidentiary value, the most persuasive source of fraud to identify.

Counsel can obtain a rough estimate of how many vehicles a trucker operates by using the rule of thumb in the industry that each tractor (power unit) in full-time use should generate approximately $100,000 in revenue.\(^{13}\) Thus, transportation revenue divided by $100,000 should approximate the number of tractors in operation, which can be compared to the number specified on the application and endorsed during the policy period.

Documents relevant to identifying the true number of vehicles include: equipment lists; vehicle schedules attached to physical damage (PD) insurance applications and policies,\(^ {14}\) depreciation schedules, equipment leases, driver lists, audits by the insurer, applications to and policies issued by other liability carriers, and forms filed with federal and state governments for fuel and highway use taxes.

C. COST OF HIRE

Third, a trucker may misrepresent its cost of hire, which is defined as the total cost of hiring vehicles a trucker does not own. In the absence of specific language to the contrary in the rating rule, all costs of hiring a vehicle, including the driver's wages, must be used. The cost of hire premium is expressed as a dollar amount per $100 of revenue, which then is


\(^{13}\) To be conservative, counsel may want to use $125,000, which is the estimate used by some truckers.

\(^{14}\) A trucker needs both liability insurance, which covers personal injury claims, and property damage insurance, which covers damage to the vehicle itself. Vehicles normally are scheduled on property damage insurance policies, so these provide an excellent source of information on vehicles in operation. In a case involving affiliated companies engaging in sweetheart leasing, counsel may find that the named insured on the property damage policy is the insured on the liability policy and not the affiliated company that technically owns the vehicles.
An applicant can misrepresent cost of hire either by misrepresenting the total amount of hired car costs or by including only its out-of-pocket costs for the leased vehicle rather than all costs incurred in hiring the vehicle, including fuel and tolls. Counsel should closely examine the expenses in the trucker's financial statements to determine the true cost of hire. Those expenses may be included in accounts with names such as purchased transportation, owner-operators, vehicle expense, leasing costs, or general and administrative.

Cost of hire also may be misrepresented if the insured pays below market rents for the hire of vehicles, which may occur when the leasing company is an affiliate of the insured trucker. The below-market lease payments reduce the number used to calculate premium appropriate to the exposure under the policy. This utilization of less than fair market value leases is equivalent to hiding vehicles from the insurer.

Although cost of hire encompasses all costs associated with operating leased vehicles whether or not paid by the trucker (lessee), some truckers and producers may claim that they did not know what their cost of hire would be for the coming year and simply gave their best guess, or may dispute the expenses properly included in calculating cost of hire. Fraud claims involving understated cost of hire tend to be more difficult to prove unless there is evidence of sweetheart leasing or of a prior history of consistent costs for hiring leased vehicles over a multi-year period and then a dramatic departure in the insurance application.

Documents relevant to identifying the true cost of hire include: the hired vehicle expense that is included in tax returns and financial statements, general ledgers and check registers, Form 1099s, vehicle leases, driver lists, and any regulatory filings that set forth the trucker's expenses.

D. Radius of Operations

Fourth, a trucker may misrepresent its radius of operations, which is where the vehicles regularly operate on a straight-line basis. There are three different radii: local radii (0 to 50 miles); intermediate radii (51 to 200 miles); and long or zone radii (more than 200 miles). Intermediate generally is the most expensive radius, followed by local and then long distance. When vehicles operate in long distance, the trucker must iden-
tify the zone (such as eastern or southeastern) in which its vehicles operate. Some zones, such as those in more heavily traveled areas like the Baltimore-Washington zone, are more expensive. False insurance applications typically list long distance as the only radius of operations for all vehicles.

For truckers whose vehicles do not always follow regular routes, there may be some judgment involved in what constitutes “regular operation” in a particular radius or zone, and this may be a more difficult basis for a fraud claim. Consequently, counsel needs to gather as much evidence as possible concerning each vehicle’s operations. Vehicle logs and bills of lading, although voluminous, will identify exactly where each vehicle traveled. There is nothing in the CAIP rules that precludes the use of an audit of the bills of lading to determine radius, but any audit should evaluate every bill of lading for each vehicle for a sufficient period of time so that all trips on each day are captured. This should avoid defense arguments that additional trips were made that were not considered or that each vehicle was not separately evaluated. Deposition testimony by principals of the trucker, the dispatcher and the drivers concerning where the vehicles regularly operate is also an effective way to prove the radius of operations.

Other documents also assist in identifying the radius. Some physical damage applications require the trucker to identify each vehicle’s radius of operations. In addition, regulatory filings may describe where the insured intends to operate. The trucker may need to file a fuel tax report in states where it operates, and those reports identify the total miles traveled in that state, which provides some insight into operations. Another method is to analyze accidents to determine where they occurred in relation to the principal garage location. Counsel further can obtain through interrogatories a list of the trucker’s largest clients (in terms of revenue) and addresses and use a software program (such as Automap) or website (such as Mapquest.Com) to determine with reasonable accuracy the distance between the insured’s garage and the client’s location.

E. Loss History

Finally, a trucker may misrepresent its loss history because an insurer can surcharge the policy for accidents when the trucker was at fault. Depending on the dollar value of the claim paid, each accident is assigned a certain number of points. The points are added, and there are a maximum number of points assessed against each vehicle. A trucker with a significant loss history will be subject to huge surcharges that may make the cost of insurance prohibitive.

Other than failing to report or understating loss history, a trucker
may incorporate under a new name or transfer the business to a family member to mask the loss history. The insurer should run motor vehicle reports on each of the scheduled drivers and vehicles and identify the officers of the corporation to see if they were associated with a previous insurer.

Loss information is relatively easy to locate. Insurance companies maintain loss runs showing claims paid under the policy, and loss runs should be obtained from any previous insurer within the preceding three-year period. (The insurance application requests the identity of the previous insurer.) In addition, once the insured provides a list of its drivers, an insurer can obtain a motor vehicle report ("MVR") for each of the drivers from the relevant state's Department of Motor Vehicles that will identify each accident reported to the police in which the insuree was involved. Although the MVR does not identify whether the driver was at fault, the insuree has the burden of proving that its driver was not at fault. Finally, an insuree may have a safety department that keeps track of the accidents in which its vehicles and drivers are involved, and interrogatories should be able to obtain the information.

VI. DISCOVERY AND INVESTIGATION

As with every fraud claim, a plaintiff proves the fraud with both direct and circumstantial evidence. There are a number of sources the insurer can use to determine the true scope and extent of a trucker's operations.

A. DOCUMENT REQUEST TO TRUCKER

Depending on the issues in the case, the insurer should serve a document request on the trucker seeking the following categories of documents, as appropriate, covering a time period from the present to five years before the inception of the insurance policy:

—Operating information: equipment lists (tractors, trucks, trailers, etc.); vehicle leases, lease-purchase agreements, the bills of lading for shipments under a trucker's motor carrier authority, dispatch records, trip reports, mileage reports and driver daily logs for all shipments under the trucker's motor carrier authority or another carrier's authority for owned and leased vehicles;

—Financial information: financial statements, balance sheets, income statements, general ledgers, sales journals, disbursement journals (both cash and check), and check registers, financing agreements for purchased vehicles, depreciation schedules, Forms W-2 and 1099 showing wages of all operators of owned and leased vehicles, invoices for all shipments under the trucker's motor carrier authority reflecting gross amount of
billings by month, federal and state income tax returns with supporting schedules, fuel tax filings, vehicle use tax filings;

—Loss information: accident reports and related documents for vehicles operating under the trucker's motor carrier authority, motor vehicle reports (MVRs) on all drivers who have hauled freight under the trucker's motor carrier authority, loss runs prepared by the trucker's insurer or safety department;

—Insurance information: the trucker's insurance file, including correspondence with its insurance producer, prior insurance applications and policies for both liability and physical damage insurance, certificates of insurance issued to agents, shippers or any other entity or person;

—Regulatory filings by the trucker at the federal and state levels, including articles of incorporation.

B. INTERROGATORIES

Because of their tendency to draw objections and evasive answers, interrogatories should be fairly specific and focus mostly on identification of witnesses and documents. Counsel should serve interrogatories asking the defendants to identify:

—The trucker's officers, stockholders, dispatchers, safety manager, drivers, insurance producer, bookkeeper, and accountant;

—The liability insurance carriers and physical damage carriers for the five years preceding the application;

—The vehicles operated during the policy period and in the year preceding the application, including whether the vehicle was owned or leased (and if leased, from whom);

—All documents showing leased vehicles and the expenses associated with operating those vehicles;

—The number of accidents in the three-year period preceding the policy and the driver involved in each accident;

—The routes where the trucker's vehicles regularly operated;

—The terminals operated by the trucker;

—The trucker's twenty largest clients, including the revenue associated with each.

C. SUBPOENAS

The insurer should subpoena documents from the following:

—The trucker's insurance producer. Truckers generally communicate with their insurers through a producer, and the producer is responsible for requesting information from the trucker and submitting that information to the insurer. The producer thus will have documentation
concerning the trucker’s operations, including vehicle lists, equipment leases, certificates of insurance issued to equipment lessors, and file memoranda concerning conversations with the trucker. If the producer has worked for the trucker over a period of time, the producer will have historical information about prior insurance policies, such as applications, endorsements showing scheduled vehicles or hired vehicle costs, loss runs, and audit reports. This information is especially useful when a trucker previously sought insurance in the voluntary market, where the insurer seeks and receives substantial operating information before agreeing to issue a policy. This historical insurance information may disclose such things as significant loss history or increased premium costs, which explain why a trucker may have submitted a false application to the involuntary market.

If the producer is not a party, subpoenaing the producer’s files also may demonstrate that the producer is at fault and provide another potential source of recovery, especially if the producer carries errors and omissions (“E&O”) insurance that can satisfy a judgment or settlement. The producer may have failed to request appropriate information from the trucker or may have failed to submit information the producer in fact received. Another possibility is that the trucker and producer conspired together to understate the true exposure on the policy, with the producer receiving, for example, a percentage of the insurance savings. Because E&O policies normally exclude coverage for fraudulent conduct, counsel should include a negligence theory against the producer or encourage the trucker to assert a third-party claim on that basis.

—The trucker’s accountant. The accountant likely has a number of documents that assist in determining whether the trucker misrepresented the information on the application. For example, the accountant may have, among other things: (1) equipment lists identifying tractors and trailers that he or she used to calculate depreciation; (2) specific and general ledgers identifying revenue and expenses relevant to calculating cost of hire and estimating the number of vehicles used by the trucker; (3) tax returns signed by the trucker’s principals verifying the amount of revenue and expenses; (4) Form 1099s that identify the compensation paid to independent contractors, which is relevant to cost of hire; (5) articles of incorporation, by-laws and correspondence relevant to the trucker’s principal garage; (6) state fuel tax reports, heavy vehicle use tax and other state tax reports, which are relevant to number of vehicles and radius of operation; (7) equipment agreements relating to vehicles purchased and leased; and, (8) information relating to loss history.

—Governmental entities regulating truckers, such as a department of transportation or a public utility commission. The insurer should ask an interrogatory requesting identification of all filings made by the trucker
with governmental entities from the present time to five years preceding the inception of the insurance policy.

D. DEPOSITIONS

Depending on the litigation budget, there are many deposition targets available. Before deposing the principals of the trucker, counsel should consider deposing lower-level individuals involved in the day-to-day operations of the trucker. Truckers use dispatchers to schedule and monitor the trucks on the road, and the dispatchers typically know the number of trucks in operation, the number of owned and leased vehicles, routes traveled, number of accidents, significant customers, and the names of drivers. Truckers also frequently have safety managers who are involved with loss control for the truckers by training drivers and maintaining information on drivers, vehicles and accidents. Many large truckers have in-house financial personnel who can testify concerning revenues and expenses, number of vehicles, and vehicle leasing costs. If the trucker has entered a large number of leases, counsel should depose the individual who signed the leases on behalf of the trucker.

An excellent source of information, which frequently is overlooked in litigation, are the drivers. A trucker must identify drivers on the insurance application, and those drivers can provide extremely useful information concerning the trucker's overall scope of operations, including garage location, radius of operation (i.e., regularly traveled routes), and number of vehicles. For a trucker with multiple terminals, a driver can identify where the terminals are located and the approximate number of vehicles at each terminal. If the driver is an owner-operator, he can provide the lease rates and a copy of the lease, as well information on radius of operations. In cases where affiliated corporations or mail drops are used, the driver typically knows the name of the true beneficiary of the insurance and the principal garage and thus provides compelling testimony in support of the fraudulent scheme. For example, we have had cases where the drivers listed on the application were unfamiliar with the trucking company named as the insured on the application; did not drive the vehicle assigned to them on the application; and had never been to (or heard of) the address shown as the principal garage location. The drivers in fact drove for the co-defendant affiliated trucking company and always believed their services were provided for that company, which was named on the bills of lading as the company providing the trucking service.

For the reasons set forth above, counsel also should consider deposing the trucker's accountant and insurance producer.
E. Experts

Like any complex case, counsel likely will need expert witnesses to explain and prove the fraudulent scheme. Counsel should consider three types of witnesses. First, counsel should consider retaining an insurance expert, such as a producer experienced in submitting applications to assigned risk plans, to testify concerning the information sought by the application, the materiality of that information to the premium, and whether the trucker misrepresented material information on the application. Although an in-house underwriter can provide the first two categories concerning the underwriting of the file, it is the expert's ability to testify regarding misrepresentations on the application that gives his or her testimony the most significance. The expert also can confirm that the insurer properly underwrote the file and assessed premium.

Second, counsel should consider retaining an accountant who can express an opinion concerning the trucker's true scope and extent of operations after evaluating all the information counsel has generated in discovery about the trucker's operations. Although an in-house underwriter will have gathered some information during the course of underwriting the file and investigating the suspicion of fraud, the underwriter will not have first-hand knowledge of much of the material discovered in litigation. The accountant, however, can analyze and present a coherent picture of the trucker's operations which will be used both for liability purposes in proving that the information on the application did not reflect the true operations and for damages in showing what the premium should be based on the true operations.

Third, if the case involves significant leasing activity, and it is believed that the leases do not reflect market terms and provisions, counsel should consider retaining a trucking expert, such as a manager from Penske Truck Leasing or Rollins Leasing Corporation, to review the leases and compare them to market leases to show that the trucker did not follow market leasing practices and that the lease rates were below market rates. The trucking expert can explain how the leases, although perhaps containing some of the basic terms used in market leases, ultimately structure the leasing costs in a way to significantly reduce the lease rates that the trucker should pay, causing the rates to be significantly below market rates.

VII. Fraud Claims versus RICO Claims

Depending on the number of truckers and insurance policies and the amount of damages involved, counsel should consider whether to include
RICO claims in addition to fraud. While providing significant benefits such as treble damages and attorneys’ fees, RICO claims also tend to increase both the cost and complexity of litigation and thus should be carefully considered before they are asserted.

If there is only one trucker and a single insurance policy, counsel likely should pursue only fraud and breach of contract claims to keep the case as simple as possible, with a request for punitive damages as well. Counsel then needs only to match up the representations in the insurance application with the trucker’s true operations, allowing for a more streamlined presentation and reducing the likelihood of extensive briefing of RICO issues and confusion of the jury at trial with RICO concepts.

Conversely, if there are multiple truckers (or one trucker using affiliated companies to execute a scheme to misrepresent operations) and multiple insurance policies, RICO claims are an attractive means to combine all parties and policies in one litigation, particularly if the potential defendants have the means to satisfy a judgment that would include treble damages and attorneys’ fees.

Of the claims available under RICO, Section 1962(c) is the one most suitable for redressing trucking fraud because it addresses the operation of an existing business—trucking—through criminal activity, which here is fraud. Section 1962(c) makes it unlawful for any person employed by or associated with an enterprise to conduct or participate, directly or indirectly, in the conduct of the enterprise’s affairs through a pattern of racketeering activity. 18 U.S.C. §1962(c). Set forth below are considerations in alleging a RICO enterprise and a pattern of racketeering activity based on fraudulent representations in insurance applications.

A. THE ENTERPRISE

There are various alternatives in selecting the RICO enterprise, which may be any individual, partnership, corporation, association, or other legal entity, and any union or group of individuals associated in fact although not a legal entity. Counsel may plead an association-in-fact enterprise consisting of the affiliated trucking companies involved in each scheme and/or their principals. In addition, the trucking company applying for insurance may itself be the enterprise, although counsel must be-

16. Counsel also would assert breach of contract claims against the insured-truckers for failing to pay the true earned premium under their respective insurance policies, as well as unjust enrichment claims against the individual defendants and affiliated truckers who were not named insureds under the policies.

17. In contrast, Section 1962(a) pertains to the acquisition of legitimate businesses through criminally obtained money, while Section 1962(b) focuses on maintaining or acquiring businesses through criminal acts.

ware of the enterprise-person rule, which requires that the enterprise be distinct from the defendant-person. Alternatively, if the producer is involved in the fraudulent scheme, the producer's company can be the enterprise either by itself or in an association-in-fact enterprise with the trucker. Finally, the insurance carrier may be the enterprise, although this enterprise may be more suitable for claims in the voluntary market where the insurer is known at the time the application for insurance is submitted. In identifying the enterprise, counsel should keep in mind that the enterprise can be lawful or unlawful, culpable or non-culpable.

In identifying the defendant persons who are employed by or associated with the enterprise, counsel must identify individuals who participated in the operation or management of the enterprise. Although ARICO liability is not limited to those with primary responsibility for the enterprise's affairs, some part in directing the enterprise's affairs is required. Where a defendant merely conducts its own affairs, there can be no liability. Counsel thus should consider naming the principals of the insured trucker, the principals of any affiliates involved in the scheme, the parties involved in any fraudulent leasing activities, and the individuals involved with obtaining insurance, including the individual who signed the insurance application. Establishing RICO liability will

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20. See Aetna Casualty Surety Co. v. P&B Autobody, 43 F.3d 1546, 1559 (1st Cir. 1994) (plaintiff insurer was enterprise: [b]y acting with purpose to cause Aetna to make payments on false claims[,] . . . [the defendants'] activities caused Aetna employees having authority to do so to direct that other employees make payments Aetna otherwise would not have made).
24. Id. at 185 (liability depends on showing that the defendants conducted or participated in the conduct of the enterprise's affairs, not just their own affairs).
25. See 131 Main Street Assoc. v. Mango, 897 F. Supp. 1507, 1526-27 (S.D.N.Y. 1995) (individual participated in RICO enterprise by permitting his corporation to be used to conduct the racketeering activity); American Arbitration Ass'n, Inc. v. DeFonseca, No. 93 CIV.2424 (CSH), 1996 WL 363128, at *5 (S.D.N.Y. June 28, 1996) (individual faced RICO liability for his role in forming corporations to accept fraudulent checks and corporate accounts in which to deposit them; that he and [another defendant] exerted joint control over these accounts; and that together they distributed a percentage of the proceeds to [another defendant]).
27. Cf. MCM Partners v. Andrews Bartlett & Assoc., 62 F.3d 967, 979 (7th Cir. 1995) (Even if [defendants] may have been reluctant participants in a scheme devised by upper management, they still knowingly implemented management's decisions, thereby enabling the enterprise to adhere to its goal.); United States v. Gabrielle, 63 F.3d 61, 68 (1st Cir. 1995) (even employees not
be very fact-intensive, and counsel must consistently seek facts demonstrating a defendant-person's operation or management of the enterprise, which is more difficult than simply showing participation in the scheme to defraud.

B. PATTERN OF RACKETEERING ACTIVITY

In order to establish a pattern of racketeering activity, counsel must establish a relationship among the predicate acts, which most likely will involve mail or wire fraud, and a threat that they will continue.\(^{28}\) Predicate acts are related, and thus part of a pattern, if they have the same or similar purposes, results, participants, victims, or methods of commission, or otherwise are interrelated by distinguishing characteristics and are not isolated events.\(^{29}\) As to the threat of the predicate acts continuing, counsel may allege a closed period of repeated conduct, or past conduct that by its nature projects into the future with a threat of repetition.\(^{30}\) The pattern of racketeering activity revolves around the submission of fraudulent insurance applications and the issuance of insurance policies so that a trucking company can obtain liability insurance at a fraction of its true cost. It is an open-ended scheme because the defendants submitted the fraudulent application in the regular course of the trucker's business, and the insurance will remain in place at reduced cost unless the insurer discovers the misrepresentations.\(^{31}\) Conduct occurring during the policy to conceal the trucker's true operations, such as delaying or obstructing attempts by the insurer to audit the trucker or otherwise gain information about the trucker's operations, provide further predicate acts and proof of pattern, including the threat that fraudulent conduct will continue. Although each application and policy period may constitute a distinct scheme, all applications by a trucker ultimately are part of the same pattern because of the common purpose, results, participants, and method of commission. Counsel should look for the same types of misrepresentations appearing on each fraudulent application or for substantially similar leasing schemes among affiliated entities.

To establish a basis for the predicate acts of wire or mail fraud, counsel must allege that the defendants acted either pursuant to a scheme or artifice to defraud or acted by means of false or fraudulent pretenses,

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29. *Id.* at 240.
30. *Id.* at 242.
31. Open-ended continuity is established by demonstrating that the commission of the predicate acts is a regular way of conducting defendant's ongoing legitimate business. *H.J., Inc.*, 492 U.S. at 243.
representations or promises and that the United States mail or interstate wire communications were utilized to transmit matter integral to the scheme.\textsuperscript{32} The predicate acts primarily will involve mail fraud, such as the trucker's sending the fraudulent application, premium checks, or loss claims through the United States mail.\textsuperscript{33} Each mailing from a trucker to an insurer will be a predicate act, as would those documents sent by an insurer to a trucker, such as the policy or requests for information. There also may be a basis for asserting wire fraud based on telephone conversations or facsimiles between a trucker and an insurer, which could involve attempts by a trucker to mislead an insurer about the true scope and extent of operations or to obstruct an audit attempt.\textsuperscript{34} Counsel should analyze all communications between trucker, producer and insurer to ensure that there are at least two (and preferably numerous) predicate acts in a ten-year period.\textsuperscript{35}

C. HYPOTHETICAL SCHEME TO DEFRAUD

Assume that Penn Trucking has a principal garage location in Pennsylvania, operates 100 tractors, regularly incurs annual costs of $1 million for short-term leasing of additional tractors, operates primarily in the intermediate radius of operations, and had 20 surchargeable accidents in the three years preceding the application. Owen Owner is the owner of Penn Trucking and is actively involved in the day-to-day trucking operations. Paul President is the president of Penn Trucking, and along with Owner participates both in running the company and in obtaining liability insurance. Penn Trucking uses an insurance producer named Peter Producer of ABC Insurance Agency (ABC), which has represented Penn Trucking for years and has intimate knowledge of Penn Trucking's operations from first-hand inspection of the operations, conversations with


\textsuperscript{33} 18 U.S.C. § 1341 (1994). To establish mail fraud, counsel must prove the following elements: (1) the defendants engaged in a scheme to defraud; (2) the defendants or someone associated with the scheme used the mails for the scheme; and (3) the use of the mails was for the purpose of effectuating the scheme. See, e.g., Prudential Ins. Co. Of America v. U.S. Gypsum Co., 828 F. Supp. 287, 295 (D.N.J. 1993) (citing Armco Indust. Credit Corp. v. SLT Warehouse Co., 782 F.2d 475, 481-82 (5th Cir. 1986)). The use of the mails need not be an essential element of the fraudulent scheme. Tabas v. Tabas, 47 F.3d 1280, 1295 (3d Cir. 1995).

\textsuperscript{34} 18 U.S.C. § 1343 (1994). The elements of the wire fraud statute are identical to the mail fraud statute except that the defendant must cause the use of interstate wire communications rather than the mails. United States v. Lemire, 720 F.2d 1327, 1334 n.6 (D.C. Cir. 1984), cert. denied, 467 U.S. 1226 (1984); United States v. Perlstein, 576 F.2d 531, 534 (3d Cir. 1978) (culpable participation by the defendant is required) United States v. Klein, 515 F.2d 751, 754 (3d Cir. 1975) (the requisite mens rea of the defendant is specific intent to defraud).

Owner and President, and vehicle lists and other documents Producer received.

In anticipation of applying for insurance to the Pennsylvania Plan, Producer recommends that Penn Trucking establish Affiliated Trucking to own the trucks and then lease them back to Penn Trucking using below-market leases. Owner and President would have the same roles with Affiliated Trucking as they have with Penn Trucking, and Affiliated Trucking would be captive to Penn Trucking. All of Affiliated Trucking's vehicles would be leased to Penn Trucking; Affiliated Trucking would not lease vehicles to third parties. The leases would purport to be short-term (e.g., monthly) and would automatically renew. The lease costs are intentionally structured in such a way that the leasing costs are minimized. The intent behind the leases is to avoid disclosing vehicles on the insurance application and to minimize cost of hire in the event there is an audit. ABC would receive a percentage of the savings in the cost of insurance through the Pennsylvania Plan rather than through the voluntary market.

Although Penn Trucking was able to obtain insurance in the voluntary market, Producer, Owner and President decide to apply to the Pennsylvania Plan based on the increasingly expensive cost of the insurance premiums, which were elevated due to accidents involving Penn Trucking's vehicles. Producer completes the application for Penn Trucking after discussions with Owner and President, and President signs the application, which Producer mails to the Pennsylvania Plan. According to the application, Penn Trucking owns and/or long-term leases 15 tractors, has cost of hire of $100,000, no loss history, and a long-distance radius of operations. The Plan assigns the application to a servicing carrier, which issues a policy as a result of the completed application by a Pennsylvania trucker and the inclusion of a deposit check in the appropriate amount. During the time the policy is in effect, Penn Trucking mailed checks for premium (calculated based on the representations in the application) to the insurer, which resulted in significant savings compared to the premium in the voluntary market that was based on the trucker's true operations.

Within the first two months of the policy, ABC mails the insurer loss notices for fifteen (15) separate accidents, five of which involved leased vehicles that did not appear on the application. The underwriter responsible for the file learns from publicly available information that the trucker has gross revenues in excess of $10 million. The underwriter schedules an audit to determine the true exposure, and contacts President and Producer, each of whom has telephone calls with, and send faxes to, the underwriter, including a copy of the below-market lease to prove that the vehicles are short-term leased from a third-party. President and Pro-
ducer seek to mislead the underwriter about the trucker’s operations and to postpone the audit. The audit eventually occurs due to the insurer’s persistence, and the true scope of operations is discovered. The insurer issues endorsements for the exposure and an invoice with a significantly increased premium. Penn Trucking fails to pay the premium when due, and the policy is canceled by the insurer.

After receiving the notice of cancellation from the insurer, Owner and President (in consultation with Producer) form NJ Trucking, which is a Pennsylvania company that claims to be located at a truck stop in New Jersey, where NJ Trucking has a post office box and a telephone. NJ Trucking, though, is run by the same individuals as Penn Trucking and uses the same vehicles and drivers, who operate from Penn Trucking’s principal garage in Pennsylvania. NJ Trucking mails an application to the New Jersey Plan, showing ten tractors, cost of hire of $50,000, no accidents, and a long-distance radius of operations. NJ Trucking claims to be a new company with no prior history. President signed the application, which was completed and mailed by Producer. The application seeks insurance coverage beginning the day after the Penn Trucking policy canceled (although there is no reference to Penn Trucking). NJ Trucking leased vehicles from Affiliated Trucking under the same form lease that Penn Trucking used, and NJ Trucking’s bills of lading include Penn Trucking’s name, which had an established reputation in the industry. Penn Trucking thus continued its operations under NJ Trucking’s insurance. After the New Jersey Plan assigned the application to a servicing carrier, the servicing carrier schedules an audit, which uncovers the relationship between Penn Trucking and NJ Trucking and the true scope of trucking operations.

Under those facts, counsel can assert RICO claims in addition to fraud claims, even if a different insurer was assigned the application to the New Jersey Plan. Penn Trucking and NJ Trucking each could be the enterprise, or together they could constitute an association-in-fact enterprise. Another alternative is to have ABC as the enterprise or part of an association-in-fact enterprise with the two trucking companies. Regardless of which of these enterprises is selected, Al Owner, Paul President, and Peter Producer are defendant persons employed by or associated with that enterprise. Because of the enterprise-person rule, the trucking companies would not be defendants under a RICO claim to the extent each alone was the enterprise. However, to the extent each is part of an association-in-fact enterprise, they could be defendant persons.36

The pattern of racketeering activity involves the fraudulent insurance applications to the Pennsylvania and New Jersey Plans, which were designed to obtain reduced insurance premiums using misrepresented operating information (e.g., owned vehicles, cost of hire, radius of operations, and loss history) and the leasing scheme. The predicate acts are mail fraud based on the fraudulent insurance applications, premium checks, and loss notices being mailed as part of obtaining and maintaining the insurance, and wire fraud based on the telephone calls and facsimiles. The pattern is open-ended, as evidenced by the fact that the applications were submitted in the regular course of business, there was no disclosure of true operations and in fact were attempts to deceive the insurer, and the defendants submitted another application to a different plan after their misrepresentations to the Pennsylvania Plan were discovered.

VIII. Conclusion

Trucking fraud is a serious problem in the insurance industry. The potential schemes to defraud are virtually limitless, and counsel should scrutinize the applications and the trucker’s conduct to identify similarities among insurance applications to determine whether there is a basis for asserting racketeering claims. With a focused approach to pleading claims and conducting discovery, counsel will successfully prosecute both fraud and RICO claims.

_E.F. Hutton Group, Inc.,_ 885 F.2d 1162, 1165-66 (3d Cir. 1989) (three corporate defendants, alleged to be persons under RICO, also together form an association-in-fact).
ADDENDUM

POTENTIAL FRAUD INDICATORS FOR COMMERCIAL TRUCKING APPLICATIONS AND POLICIES

Policy Application Factors
* Use of a trade name, doing business as or name of the subsidiaries, which may obscure the identity of the true named insured.
* A trucker whose primary address is a post office box, suite number, room number or whose address differs from state incorporation records.
* Many truckers with the same address, especially if a post office box only.
  * Trucker has moved or changed address since policy inception.
  * Trucker adds a large number of vehicles after policy inception.
  * Indications that the trucker has changed address frequently.
  * Applicant address is same as producer or does not match address listed on the deposit check.
* Listing less than five vehicles and requesting state operating rights for all states.
  * Indications that trucker is a new venture or has no previous insurance history yet has an older ICC number. ICC numbers issued beginning in 1992 are about 240000.
  * Establishing a storefront location in a state with low rates while physical plants and/or operations actually take place in other states with higher rates.

Ownership Information Factors
* A change in ownership which diverts the ownership of a company to other family members without effectively changing the control of the company.
  * Several changes in name or ownership within the last three to five years.
  * A leasing company with its true parent as the only client.

Claim Information Factors
* A minimum or low premium policy which early in policy period begins to generate many claims.
  * A pattern where losses have considerably exceeded the premium, especially if the number of claims is greater than the number of vehicles would allow.
  * Claim experience from a wider geographic area than one would expect from a few vehicles.
* A policy which remains “loss free” for a time and then suddenly begins to generate a large number of losses. This could occur when closely affiliated corporations with substantially the same ownership have two or more concurrent automobile policies.

* Claims for non-owned vehicles when the application or policy did not request or identify non-owned vehicles and/or non-owned vehicle coverage.

* Insured driver states his/her employer is other than that listed on claim form.

* Insured driver disputes information supplied by employer/named insured on first report of loss.

* Trucker refuses to cooperate during claim investigation.

* Inability to contact either the trucker or driver at principal location.

**Premium Audit Factors**

* An insistence by the agent or insured that the audit be conducted off-site.

* Refusal to allow audits or attempts to delay the audit procedures.

* Audit records provided are altered, incomplete, or incorrect.

* Business name and/or logo are not present at location.

* Location visited is the same address previously visited for a different risk.

**NOTE:** The existence of a single indicator or a combination of indicators is not conclusive proof that a fraud has been committed. However, the presence of indicators may suggest that the representations on the application warrant further investigation.
Cybercarriage of Goods:
Implications for the Trucking Industry

Robert T. Gabor, Q.C.*

Year old partnership between Ford, UPS Logistics
shakes 4 days from transport time, saves $1 billion.

“Sometimes it takes new thinking in the middle, coupled with web technology, to pull inefficiencies out of a supply chain. That is what the year-old alliance between Ford Motor Co. and UPS Logistics Group is demonstrating. The partnership has clipped four days off vehicle transport time and achieved annualized savings of $1 billion and more than $125 million in vehicle inventory and inventory carrying costs, respectively.”

This short news story reflects the impact of the marriage of transportation and technology in an era when the transmission of information has become the centerpiece of supply chain management and transportation has become the means to deliver the goods. In the past few years, much of the North American trucking industry has gone online in order to respond to ever-increasing demands for greater efficiency of service as well as accuracy and speed of information to the customer. Customers are now demanding the ability to track and trace cargo, book freight and

* Robert T. Gabor, Q.C. is an attorney with the law firm Aikins, MacAulay & Thorvaldson in Winnipeg, Manitoba. He may be contacted at rtg@aikins.com.
check on cargo and equipment availability – all through one web site, in a real-time manner. This is being provided not only by trucking companies that communicate with their customers over the Internet but also by new Cybertransport entities. These entities offer a variety of transportation services, from freight matching web exchanges for the purchase and sale of goods and transportation services, sophisticated logistics software, to an Internet-based transportation logistics company. Many of these new entities integrate procurement, supply chain management, logistics and specialized service and use web-enabled applications to offer a seamless service to a myriad of truckers, shippers and other businesses. This trend will become even more significant if the prediction of Deloitte Consulting is accurate, that by 2002 the number of companies buying most of their goods and services electronically will grow to 91% from 31% in October, 2000.

The increasing competition within the transportation industry among all sizes of carriers has caused companies to move swiftly to offer services over the Internet, often without fully understanding the legal implications of their actions. This article will identify some of the legal issues facing motor carriers today, which plan to use the Internet either to complement their existing services or to start an Internet-based transportation company. Part I of the article will deal with legal issues related to protecting intellectual property. Part II will identify some fundamental legal issues for software license agreements. Part III will set out some specific legal issues for application service providers, which are being used as part of online exchanges, auctions, co-ops or other entities specifically created to manage transportation needs over the Internet. Part IV of the article will deal with contracting for services over the Internet, and Part V will provide a brief summary.

**PART I PROTECTING INTELLECTUAL PROPERTY**

**1.1 Ownership**

The first question for a company which intends to offer services over the Internet is, whether it wishes to develop a software program in-house and use its own hardware, license a software package from a third-party supplier but operate and manage the system in-house with its own hardware, or out-source all aspects of the service to an application services

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provider (ASP) which will be responsible for handling all aspects of the
information processing system. There are business advantages and disad-
vantages to each option. The internal development of software and man-
gagement of the system offers the company ownership and control, but
likely at a very high cost. Licensing software will reduce the cost signifi-
cantly, but the company does not own it. An ASP results in even greater
savings, as a result of its turn-key nature, but the operations of the truck-
ing company could be seriously damaged if the ASP fails and the com-
pany is unable to access its data or if the ASP fails to deliver on its service
level agreements to the detriment of the trucking company's reputation
with its customers.

If the company decides to own its software rather than license the
software from a third-party supplier or out-source to an ASP, it will have
to take the necessary steps to ensure that no other party can claim an
interest in the creation or modification of the software. A company may
do this in two ways: it may either hire a software developer as an em-
ployee and stipulate in the terms and conditions of employment that the
company owns all rights in the product, and the employee assigns all
rights and waives all moral rights in the products being developed in
favor of the company; or the company may retain an independent con-
tractor and stipulate clearly in the terms of the contract that the intellec-
tual property rights in all source code, object code and all proprietary
information relating to the software program are owned by the company,
and the contractor must assign its rights and waive its moral rights to the
product in favor of the company.

1.2 Copyright

A company may believe that it owns the rights to software if it has
paid, often a very substantial sum, for the development of software or a
web site by an independent contractor. However, it would be gravely
mistaken. As under existing Canadian and American copyright laws the
person who originally creates the work holds copyright to it unless those
rights are assigned in writing to the company. The assignment of copy-
right and waiver of moral rights should be clearly set out in the terms of
the service agreement. In addition, while there is no requirement in Ca-
nada to register copyright under the Copyright Act, a company may wish
to do so as it provides a presumption that copyright exists in the work, a
presumption of ownership and entitlement to statutory damages.\(^4\) While
such presumptions may be rebutted, the registration of copyright puts the
onus upon the defendant in any action for infringement. Registration
may be done through the Copyright Branch of the Canadian Copyright

\(^4\) Copyright Act, R.S.C. ch. C-42 (1985) (Can.).
1.3 Business Method Patents

1.3.1 United States

American patent law has continually expanded in scope, culminating with the decision of the U.S. Patent Office to grant a patent for computer-implemented business methods in *State Street Bank & Trust Co. v. Signature Financial Group Inc.*7 Prior to that case the U.S. Supreme Court would not permit business methods to be patented for laws of nature, natural phenomena or abstract ideas.8 In *State Street*, the invention claimed related to a data processing system which allowed mutual funds (the "spokes") to pool their assets together into a single investment portfolio (the "hub").9 The system calculated the hub's daily income, expenses, and gains or losses, and allocated these on a daily basis to each spoke so that the net value of each spoke could be determined and a share price established.10 This new process provided a number of benefits, including savings in administrative costs and tax advantages to the limited partnership.11 The Court in *State Street* distinguished earlier cases, which had rejected attempts to establish business method patents

10. *Id.*
based upon mathematical algorithms. It found that the practical application of the algorithm in State Street by the business process “transform[ed] data, representing discrete dollar amounts, . . . into a final share price.” This final share price was deemed by the court to be a “useful, concrete and tangible result” and, thus, created a new test for determining whether the claimed subject should be considered a practical application instead of an abstract idea. The case has been interpreted to mean that a computer-implemented method of doing business should be patentable in the United States.

State Street has dramatically changed U.S. patent law by:

(a) increasing the scope of patentable subject matter now capable of patent protection in the United States;

(b) removing potential defenses to claims of patent infringement which increases the value of patents for business methods; and

(c) increasing the number of businesses affected by claims of infringement by patent holders.

Within 1½ years of the State Street decision, the number of business method patents issued by the U.S. Patent Office increased from 39 in 1997 to 301 in 1999. There were also 2600 patent applications filed for computer-related business methods in 1999. Included in those are business method patents of a questionable nature.

Examples of business method patents, which are now used as part of the Internet mainstream include: Amazon.com’s patent for a one-click method for purchasing items on-line, Doubleclick.com’s patent for Internet banners, Priceline.com’s patent for a reverse auction system and Netcentive’s patent for an on-line loyalty or rewards program. The validity of many of these patents is now being challenged in litigation, either by companies which seek to declare the patent invalid or by the patent holders suing competitors, claiming patent infringement for the use of a patented business method.

A problem that could be faced by transportation companies which may be introducing one or more new business methods as part of their enhanced or new services is that they may be unknowingly infringing an-
other party's patent. The U.S. Patent Office permits a party to file a provisiona l patent application, with an estimated cost of USD $1-2,000, which establishes a priority date. The applicant then has a further year to complete and file its full patent application. If the applicant is eventually granted the patent (which could take at least another year, possibly longer), the grant will be retroactive to the priority date. The patent holder may then attempt to pursue a claim of infringement against a party that developed its business methods without any knowledge of the patent because of the delay in the issuance of the patent by the Patent Office. Under these circumstances, a transportation company could realistically spend hundreds of thousands if not millions of dollars to develop its own system, and then one day receive a letter claiming patent infringement and demanding licensing fees for a business process the company never knew existed.

In order to counter this apparent anomaly as well as the precedent established by State Street, the U.S. Congress included a provision in the American Inventors' Protection Act (AIPA) that provides a “prior use” defense to a claim of infringement.18 However, the defense provided is significantly limited as a defendant must meet all of the following tests: (i) the method used by the defendant must have been in working form; (ii) it must have been used internally and externally at least one year before the effective filing date of the patent; and (iii) its commercial use must have taken place in the United States.19 This last ground means that companies doing business in Canada which wish to operate in the United States may not rely upon the defense.

1.3.2 Canada

Canada does not yet recognize business method patents, although the recent decision by the Federal Court of Canada in the Harvard College case20 may have a significant impact on whether software and business methods will be patentable in Canada as in the United States. The only previous Canadian case that focussed on patentability of computer software was Schlumberger Canada Ltd. v. Commissioner of Patents, where measurements from boreholes drilled through geological formations were recorded on magnetic tape and transmitted to a computer which converted the information into charts, graphs and tables.21 In rejecting the application for patent, the Federal Court of Appeal viewed the mathematical formula used to convert the information as a “mere scien-

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19. id.
tific principle or abstract theorem” and therefore not patentable.\textsuperscript{22} The decision was reflected in guidelines established by the Canadian Patent Office in 1995 which state:

1. Unapplied mathematical formulae are considered equivalent to mere scientific principles or abstract theorems which are not patentable under Section 27(8) of the \textit{Patent Act}.

2. The presence of a programmed general-purpose computer or a program for such computer does not lend patentability to, nor subtract from, an apparatus or process.

3. It follows from 2, that new and useful processes incorporating a computer program, and apparatus incorporating a programmed computer, are directed to patentable subject matter if the computer-related matter has been integrated with another practical system that falls within an area which is traditionally patentable. This principle is illustrative of what types of computer-related applications may be patentable, and is not intended to exclude other computer-related applications from patentability. Claims beginning with the phrase “A program” or “A program for” are unpatentable for failure to adhere to Section 2 of the \textit{Patent Act} as not falling into a useful art, process, machine, manufacture or composition of matter.\textsuperscript{23}

In \textit{Harvard College}, the Federal Court of Appeal approved the patentability of Harvard’s transgenic mouse, adopting the reasoning of the U.S. Supreme Court in \textit{Diamond v. Chakrabarty}.\textsuperscript{24} one of the leading American decisions which formed the basis of the reasoning in \textit{State Street}. By relying heavily on the majority interpretation of “invention” in \textit{Chakrabarty} and construing it broadly, the Federal Court of Appeal appears to have adopted the test in \textit{State Street} in distinguishing practical applications from abstract theorems. In so doing, the Court may have laid the groundwork for permitting computer software and business methods to be patented in Canada. Leave to appeal the \textit{Harvard College} decision has been granted by the Supreme Court of Canada, and the Canadian Patent Office is not processing any applications which could be affected by the decision until the Supreme Court issues its ruling.

1.3.3 United Kingdom

At the time of writing this article the U.K. Patent Office has released a report that concludes that software should only be patentable where

\begin{itemize}
\item \textsuperscript{22} \textit{Id.}
\item \textsuperscript{23} CAN. INTELLECTUAL PROP. OFFICE, \textit{MANUAL OF PATENT OFFICE PRACTICE} ch. 16.08 (1998).
\item \textsuperscript{24} \textit{Diamond v. Chakrabarty}, 447 U.S. 303, 308 (1980).
\end{itemize}
there is technological innovation and it rejects the business method patent approach.

PART II  SOFTWARE LICENSE AGREEMENTS

2.1 Purpose of Software License

A license agreement will be required where the company (the "licen­see") intends to use software developed by a third-party supplier (the "licensor"). Under the software license, the licensor grants the licensee the right to use the software without transferring any ownership or property interest in the intellectual property inherent in the software. Licensing software has become the dominant approach adopted by companies: for the licensor it is a means to maximize the market value of the software product, and for the licensee it provides access to a product for considerably less than it would cost to develop or purchase its own product.

To a great degree the ability of an end-user to negotiate the terms of the license agreement will depend upon its respective bargaining position vis-à-vis that of the licensor. For example, a small transportation company which licenses a standard commercial off-the-shelf (COTS) software package will have virtually no bargaining position with the licensor, especially if it is a computer giant like Microsoft, Oracle or SAP. However, a large company, which may be an early licensee that would provide the licensor with credibility in the market place for subsequent licensing transactions, may be able to negotiate much more favourable terms.

2.2 Types of Software License Agreements

There are several different types of software licensing agreements, notably "standard form," "shrinkwrap" and "clickthrough" (or "clickwrap"). Each of these is discussed below.

2.2.1 Standard Form

A standard form licensing agreement is typically used for software which is generally not mass-produced and is developed for a specific purpose. It is often on paper and requires signatures because the cost of the service or product is usually quite significant. It is also the type of agreement where there may be true negotiations between the licensor and licensee. It would be governed by the standard rules of contract law.

2.2.2 Shrinkwrap

The shrinkwrap software licensing agreement is used for mass-produced software which is sold on diskettes or CD ROM. The shrinkwrap agreements are not signed and are non-negotiable. The package containing the diskette or CD ROM is covered by shrinkwrap cellophane, be-
neath which there is normally standard wording that provides that tearing the cellophane or opening the package binds the user to the terms and conditions of use. However, to be enforceable, the owner of the software must provide the user, who has not had an opportunity to review the terms and conditions before opening the package, an opportunity to return the software if the contractual terms are unacceptable. The courts would likely not enforce a contract where the licensee is unable to return the software after reviewing the terms and conditions inside the package.

2.2.3 Clickthrough or Clickwrap

These agreements are used to license software which is downloaded from or used on the Internet. They are similar to the shrinkwrap agreement as they are for wide usage, not signed by the parties and non-negotiable. The user is normally required to agree to the terms and conditions set out in the license by clicking on the “I Agree,” “I Accept” or “Submit” box. Some clickthrough contracts force the user to scroll through the agreement before clicking their acceptance while other web sites put the onus upon the user to first click on the “Terms and Conditions” box.

2.3 Checklist of Issues26

The following are some of the issues that should be considered by counsel required to review a software license agreement of any type, to negotiate amendments to a standard form software license agreement, or to draft a software license agreement:

(a) Description of the Software

- Software should be thoroughly and clearly described (including reference to release or version) so as to leave no doubt as to what is the subject matter of the license.
- Description should specify whether the license applies to the object code alone or to both the object code and source code versions of the software. Source code is typically not provided.
- If the license is limited to object code, then the licensee should consider entering into a source code escrow arrangement.
- If the source code remains with the licensor, then the licensee should consider the inclusion of maintenance and support provisions in the software license agreement or in a separate agreement. Maintenance


26. This checklist came from an article written by my colleague, Graham Robson, of Aikins, MacAulay & Thorvaldson. See Graham Robson, License and Purchase Agreements in Technology Transactions, The Law Society of Manitoba (Feb. 2000).
and support may be critical to the licensee, and may over time exceed the cost of the license itself, so careful attention should be given to the needs of the licensee in this regard.

- All operating manuals and related documentation required for the effective use of the software should be thoroughly and clearly described. The licensee should receive updated documentation if it receives updates to the software.

(b) Grant of License and Restrictions

- A bundle of rights granted to the licensee, and restrictions thereon, is an integral part of the license. The licensee must carefully consider whether the permitted uses granted will allow the licensee’s intended use of the software.
- A license may be non-transferrable or transferrable, non-exclusive or exclusive, indefinite or definite, fully paid or ongoing license fees, and otherwise limited or full rights.
- If the license is limited to a definite term, the licensee must ensure that the term is sufficient for it to make full and effective use of the software.
- Unlimited license is rare. Some rights of use and restrictions include the following:
  - Right to use software only in object code format.
  - Right to make one copy of the software only for back-up purposes.
  - Right to use the software for internal business purposes only.
  - No right to assign the license or sublicense the software.
  - No right to modify the software.
  - No right to reverse engineer, decompile or disassemble the software.
  - No right to use the software on a network.
- The licensee should consider modifying restrictions on use to allow it to make modifications to the software (i.e., to allow it to make “minor” custom modifications as its needs change), and to permit it to assign the license to affiliates.

(c) Pricing

- Pricing and payment terms can be as creative as the parties require and agree to.
- It is often advantageous to carve up the license fee into payments upon the successful occurrence of specified milestones (e.g., upon execution of the agreement, upon delivery of the software, and upon final acceptance of the software).
- Maintenance and support, if included in the software license agreement, should similarly address fees and payment. If maintenance and support is for a longer term, then the licensee should consider restricting the licensor's ability to freely increase maintenance and support fees.

(d) Representations, Warranties and Limitation of Liability

- Generally software is licensed on an "as is" basis with extensive exclusions and limitations of liability for all types of losses.
- The licensee should request the following representations and warranties:
  - The licensor is the owner of the intellectual property rights in the software and/or has the right to license the software to the licensee.
  - The software does not infringe the intellectual property rights of any third party.
  - The software will perform in all material respects with its performance and functional specifications for at least 90 days from the date of final acceptance.
  - The licensor has used all commercially reasonable efforts to ensure that the software is free from computer viruses.
  - The software does not contain any clocks, timers, counters, or other limiting or disabling devices.
  - The media on which the software is recorded shall be free from material defects upon delivery and for a period of 90 days from the date of final acceptance.
  - The licensor normally will seek extensive limitations on its liability, but it should be responsible for at least direct damages in an amount equal to the license fee for the software. There should be no limits on liability for claims regarding intellectual property, unauthorized disclosure of the licensee's confidential information or personal injury or property damage.

(e) Confidentiality

- Although the software constitutes the confidential information of the licensor, the agreement should include an obligation on the licensor to keep confidential any of the licensee's confidential information provided to the licensor. Typically both parties agree to keep the confidential information of the other confidential.
- The licensor may include a clause whereby the licensee agrees to the granting of an injunction in the event it breaches the confidentiality covenant.
- The licensee may want to include an obligation on the licensor to
obtain the licensee's permission to use its name in promotional materials and in other publicity.

(f) Delivery and Installation

- It is beneficial for both parties to designate a project manager who is responsible for delivery and installation and can make decisions about the rights and obligations of that party.
- Ideally, delivery and installation of the software should be carried out in accordance with an implementation schedule agreed to by the parties. The licensee should carefully consider the ramifications to it if the software is not delivered and installed on time. The agreement should clearly indicate who is responsible for installation.
- The implementation schedule should specify a date for the completion of each key milestone. If the licensor fails to meet any of the milestones, the licensee may be provided with remedies (e.g., license fee reduction, liquidated damages, termination and refund).
- Milestones commonly include successful completion of acceptance testing.
- Acceptance testing is a critical checkpoint for the licensee as it permits the licensee to satisfy itself that the software functions and performs according to agreed to specifications. Acceptance testing generally provides the licensee with a limited time to test and identify problems with the software and time for the licensor to rectify problems brought to its attention.
- If the licensee’s data needs to be converted to make use of the new software, then the agreement should set out details as to who does what and the associated costs.

(g) Training

- The licensee’s initial and ongoing training requirements for its personnel to effectively use the software should be carefully considered and clearly described.
- Cost of initial training should be set out, as well as limits on the cost of future training.

(h) Dispute Resolution

- Given the continuing and possibly long-term relationship between the parties, a dispute resolution mechanism, typically an arbitration provision, should be included in the agreement for the benefit of the parties.
(i) Termination

- It is typical for the agreement to permit termination on breach of the other party's obligations, and possibly on change in control.
- The licensee should seek to limit termination by the licensor only for "material" breaches by the licensee, and provided the licensee received written notice of the breach and a period of time to cure same prior to any termination.
- Upon termination, the licensee is typically required to cease using the software and to return or destroy all copies of it. Parties would be required to return the confidential information of the other.

PART III Application Service Providers

Transportation companies which provide services over the Internet generally fall into several categories of service providers: single source providers which have brought their offline services online; auctions and exchanges, the majority of which serve primarily one mode of transport; third party logistic providers which provide outsourcing services to shippers and carriers which seek transactions; and marketplaces which provide online transportation procurement and a marketplace to match services. Many of these service providers consist of strategic alliances of transportation companies, logistic providers and software and hardware companies (such as Microsoft, Oracle, Sun Microsystems, Commerce One and SAP).

Most of the alliances have chosen to use an ASP to rent access to outsourced customized software in a hosted application environment. The advantages of using an ASP include significant cost savings (the Gartner Group estimates 50% savings) and highly specialized software which is customized to service a wide range of locations. While ASPs have required enormous amounts of capital to license or create (and then integrate) the software and to build the enormous data centers required to offer their services, the Gartner Group has predicted that the worldwide market for ASPs will reach more than $25B by 2004.

Unlike earlier models, such as enterprise resource planning (ERP) software, which are used to handle all company functions, from sales and procurement to finance and marketing, and which reside internally, an ASP provides compiling, ordering, managing, storing and reporting services and resides online. This allows the data to be available over the Internet anywhere in the world at the same time.

27. See Jim Kerstetter, Software Stakeout: Application service providers promised to transform the way business is done. What happened?, Bus. Wk., Mar. 5, 2001, at 72 (US Internetworking Inc. received $500M in venture capital and had a "burn rate" of $80M a quarter).
However, there is a major concern with using an ASP. The Gartner Group predicts that 60% of the ASPs presently operating will be out of business by the spring of 2002 by virtue of consolidation within the industry or lack of funding. There are examples of ASPs which have already ceased to operate: Red Gorilla, which had 33,000 active clients and went out of business with little notice to those clients, hotoffice.com and Pandesic, which were jointly owned by Intel and SAP.

3.1 Things to Consider Before Proceeding With an ASP

Any transportation company considering a relationship with an ASP must first undertake a serious due diligence exercise with a focus on who owns and controls the data that is generated, and what guaranteed access rights will there be. For example, one existing exchange states on its web site that the data may be shared with its subsidiaries and joint venturers. It also provides that all of the exchange members may access other users' contact information and licenses them to use the information for related exchange communications services and member interaction. It does not indicate how it will enforce these. Other exchanges do not disclose customer transaction-specific data. Before a trucking company enters into this kind of relationship, it must determine how much of its (and its customers') information it wishes to disclose to a potential competitor.

The company should also ensure that it will regularly receive copies of data files, and a copy of the source code for the application should be put into escrow in the event the ASP ceases to operate.

The next issue which must be addressed, is the nature and extent of service level commitments. How frequently will the data be backed up? Will the ASP provide training and in what form? Will the ASP also provide maintenance and support functions or will the company be required to do that? What is the anticipated response time in the event that the system does not function properly? Will the service be offered 24 hours a day on a year round basis? Is the ASP capable of providing complete service during peak periods? Will there be a back up on a regular basis? Does the ASP offer insurance if there are service interruptions? What is the ASP's disaster recovery plan? Finally, the contract should stipulate whether the company has the rights to terminate the agreement with the ASP early if certain events occur.

The ASP will be working with other software which will be continually upgraded. It is important that the service level agreement include the upgraded software and the ability to integrate the software capabilities.

28. Id.
29. Id.
The agreement must specify all of these performance levels as well as all of the related costs.

The company must also determine who else will be utilizing the services of a particular ASP before proceeding with that ASP. This is an important consideration from the perspective of minimizing inadvertent commingling of information between or among competitors.

As well, the company must determine whether or not the application that will be utilized by the ASP can be customized to provide the company with the functionality that it requires and, if so, who will own the customizations. The agreement must also address whether there will be upgrades and enhancements available throughout the term of the agreement and, if so, the cost and who will control the product after it is released.

Finally, the company must have a back-up plan should its ASP suddenly go out of business or be otherwise incapable of providing the services required by the company in order to survive. Such a plan is critical to ensure that the company can operate and move its information in-house or to a different service provider without affecting the service it provides to its shipping customers. This plan may include a back-up host with compatible expertise, equipment and the necessary systems to provide the services. The company should also determine what rights it will have to the software, including the source code, in the event that the ASP ceases to operate or goes bankrupt.

PART IV CONTRACTING ON THE INTERNET

4.1 Electronic Agreements

Both the Canadian and American governments recently introduced legislation to establish the legal validity and enforceability of electronic agreements created over the Internet and to permit the use of electronic signatures. In Canada, the work of the Uniform Law Conference on Electronic Agreements has been the model of Canada's Personal Information Protection and Electronic Documents Act,30 which came into effect January 1, 2001, and similar provincial legislation, introduced to date in Saskatchewan, Ontario, Manitoba and Quebec. The Manitoba E-commerce Act specifically contemplates the use of electronic commerce for carriage of goods.31

In the United States, the Electronic Signatures in Global and Na-
tional Commerce Act, effective as of October 1, 2000, provides that a signature, contract or other record relating to a transaction cannot be denied legal effect, validity or enforceability solely because it is in electronic form. In addition, a contract relating to a transaction cannot be denied legal effect, validity or enforceability solely because it contains an electronic signature. The “E-Sign Act” also provides that if a transaction must legally be in writing, the electronic record must be in a form that is capable of being retained and accurately reproduced for later reference. There are also provisions in the Act to force states to apply uniform standards for any commercial transactions which may transcend state boundaries.

4.2 Form of Web Site Agreements

There are two ways to contract on the Internet, either through a clickthrough (or clickwrap) agreement or reverse unilateral agreements. In addition to being used to download licensed software, the clickthrough agreement is used to sell goods and services over the Internet. The reverse unilateral contract is also used to contract over the Internet. However, this form of agreement does not require the user to click his/her acceptance on any box. Instead, the user is deemed, by continuing to use the web site, to have read and accepted the terms and conditions set out in it. Recent case law indicates that the courts may be reluctant to enforce a contract where a user is not required to confirm acceptance by clicking the “I Agree” or “I Accept” icon.

4.3 Terms and Conditions of Use

Every web site should contain the fundamental terms and conditions governing its use, thereby limiting the liability of the web site owner. The amount of protection that the owner can expect may depend upon a number of factors:

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33. Id.
34. Id. at 466.
35. See Specht et al. v. Netscape Communications Corp. and America Online Inc., No. 00 Civ. 4871 (S.D.N.Y. 2001) at http://www.nysd.uscourts.gov/courtweb/pdf/D02NYSC/01-07482. PDF (The Netscape website featured a link which read “Please review and agree to the terms of the Netscape Smart Download software license agreement before downloading and using the software. The judge cited the following deficiencies in rejecting Netscape’s motion to enforce the provisions of the agreement: 1) the link did not require visitors to affirmatively indicate their assent; 2) the permissive wording of the link was a mere invitation rather than an obligatory condition; and 3) the link was located before the area of the site where visitors could download the software and was not visible without further scrolling.).
4.3.1 General terms – same as off-line contracts

- parties to the agreement
- identification of the products and/or service
- payment
- delivery
- risk of loss allocation
- returns
- currency
- warranties
- termination
- liability
- governing law

4.3.2 Additional terms

- specifics of the transaction
- the parties who are permitted/or not permitted to use the site
- details of when an offer will be deemed to be accepted
- the set of symbols or codes that constitute an electronic signature
- acknowledgement that the parties intend to be bound by the terms of the electronic transaction and that they will not later challenge the transaction on the basis of its electronic nature
- security procedures to be followed
- privacy statements and permitted use of the information
- warnings about misuse of proprietary information
- who bears the risk in the event of an error in transmission, and procedures to correct
- dispute resolution
- limitations of liability
- hyperlink disclaimers
- other industry specific terms

4.3.3 Checklist

- make the users (truck companies and shippers) register and accept the terms by clicking on “I Accept” or “I Agree” box before permitting a transaction
- retain record of registration and all transactions
- post notices for protection (copyright, trade-mark, privacy and hyperlink policy)
- ensure terms are in clear, unambiguous language
- key, unusual or onerous terms including disclaimers (e.g. payment,
PART V · SUMMARY

The demand for more efficient and cheaper transportation services will continue to force trucking companies to use the Internet to communicate with clients and to consider offering new web-based services. There are tremendous opportunities to compete effectively and, in certain cases, to integrate a wide variety of services through new web-based applications. However, there are a number of legal issues which must be identified and addressed relating to the ownership and control of the data that has now become so essential and so valuable, and to doing business in an electronic environment. A significantly greater understanding of these issues must be obtained before the tires hit the cyber-highway. Carriers which race into this new arena without first considering the legal implications face the possibility that their reliance on these new systems, without the proper precaution and planning, could be their undoing.
An Optimal Model For Reforming COGSA In The United States: Australia’s COGSA Compromise

Sean R. Thornton*

1. INTRODUCTION

"[W]ould it not have been better to have gone the route of Australia ... and to have adopted changes to COGSA, which were compatible with Hague/Visby and Hamburg, thus placing the United States in a position to accept new international legislation in the future, while leaving it with a regime that is not out of step internationally?"

— William Tetley, Q.C., The Proposed New US COGSA¹

Reform of the U.S. Carriage of Goods by Sea Act has recently been the subject of debate both domestically and internationally. Efforts in the last ten years to win congressional approval of a newly redesigned COGSA have been resisted and stalled numerous times, most recently by

* Sean R. Thornton, LL.B. (Honors), Bond University School of Law, Australia; P.G. Diploma in Legal Practice, Bond University School of Law, Australia; LL.M., Georgetown University Law School, Washington, DC. Mr. Thornton is a dual Australian/U.S. citizen. While studying law he clerked with Baker McKenzie at its Sydney office. The following year he attended Georgetown Law School, where he earned his Masters Degree. He will soon conclude a research & litigation support position and is assessing future legal career opportunities in the United States. He would be pleased to hear from interested readers at thorntsnack@att.net. Dedicated to Fred & Judy Thornton.

foreign interests. Powerful influence, wielded by organizations on either side of this debate have to date been sufficient to deter Congress from taking measures to bring the United States into uniformity with the international shipping community. At the center of this debate are several stumbling blocks that continually prevent a Congressionally acceptable solution from being reached.

In the considered opinion of this author, these obstacles are: The desire for international compatibility or uniformity in the regime; the need to incorporate elements from several conventions and the apparent mutual exclusivity of those conventions; and agenda-driven demands by shipping interests for inclusion or non-inclusion of individual provisions that comprise the convention.

One potential solution to the current COGSA dilemma has received very little attention in the atmosphere of inflexibility and intransigent posturing being adopted by various shipping interests. The compromise reached by the Australian government was made under much less internationally controversial circumstances than those facing the U.S. Congress in this debate. Perhaps that aided the drafters of the Australian Carriage of Goods Act of 1991 (Australian COGSA) in overcoming the stumbling blocks currently menacing U.S. COGSA reform.

The result of Australia's novel approach is an international regime that appears to satisfy the majority of domestic and international shipping interests, while purporting to retain uniformity with the regime adopted by a majority of large trading nations. This approach has won praise from at least one respected maritime authority, but seems to have been largely unmentioned by the large interests debating the matter before the U.S. Congress.

It is proposed in this paper that the Australian COGSA resolution could be readily adapted to meet the needs of U.S. lawmakers in finding an appropriate and universally attractive vehicle for modernizing U.S. COGSA. While not every component of Australia's COGSA would be appropriate for the United States, the overall approach and structure would appear to meet the needs voiced by all sides of the U.S. debate. An analysis follows, examining the development of both the Maritime Law Association's proposed COGSA and Australia's newly amended COGSA.

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5. See Tetley, supra note 1.
COGSA, with a comparative analysis of the components of the Australian COGSA that might be applied in the United States.

2. Background of the U.S. COGSA Debate

American maritime law has influenced the shape of ensuing international maritime conventions from the outset. The U.S. Harter Act of 1893 contributed to the structure used by the Comité Maritime International (CMI) in its subsequent draft of the International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading (the "Hague Rules"). The Hague Rules were subsequently ratified by the United States, after allowing for 15 years of contemplation. The minimally modified Carriage of Goods by Sea Act (COGSA, or "the act") was adopted domestically in 1936.\(^6\) Such reluctance to commit to a foreign-initiated convention would come to typify the U.S. approach to treaty law in the twentieth century.\(^9\)

COGSA provides a means of governing the international relationship between parties to a bill of lading (issued in cargo transport).\(^10\) Its original purpose was to facilitate uniformity in international cargo shipping, and for many years it was the sole international regime applied by the majority of the world's shipping countries. As the years passed, technology, commercial practices and worldwide economics all underwent considerable change.\(^11\) Shipping parties attached to nations that remained bound by the Hague Rules increasingly noted their dissatisfaction with its outdated provisions.\(^12\)

2.1 Shortcomings of the U.S. COGSA

The United States is in an increasingly unique position, being a nation at the global center of international commerce, and yet operating under a nearly century-old cargo regime that the vast majority of its international trading partners have abandoned or amended.\(^13\) This is a cause of great concern for both American and international shipping interests, as those

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9. As is further evinced by the subsequent U.S. reluctance to update its maritime cargo regime; see also Letter, supra note 2, at 15.
10. See Schoenbaum, supra note 8, at 537.
11. See id. at 548-49.
12. See id. at 524.
having any commercial maritime cargo dealings with the United States are ultimately bound by COGSA as well.

Objections are often voiced from across the shipping industry to specific provisions of the long-standing U.S. COGSA. Those objections include:

The inadequacy of the limitation of $500 per package / customary freight unit, which has become entirely unpractical and inadequate as a realistic means of balancing compensation and liability;14

The uncertainty created by the outdated definition of “package”, as modes of shipping have come to embrace the use of containers;15

The span of the carrier’s liability lasts only so long as the cargo is on or within the vessel. Thus, while sitting at dock or in storage at dock, prior to or after shipping, the stevedores and freight consolidators can potentially attract liability for damage to such cargo;16

That deficiency, in turn, gives rise to the commercial requirement of a “Himalaya Clause”, which is a contractual mechanism that extends the convention’s liability limits to dockside agents of the carrier;17

Carriers may escape liability for damage to cargo under the “navigational fault exception” by demonstrating negligence of the carrier’s agents in navigating or managing the vessel. Many oppose the continuance of this defense, as it is felt to no longer be a realistic ground for the exoneration of liability. It is argued that advances in communication technology, vessel navigation and safety, and employee education and training provide the carrier with a higher degree of control of the vessel and cargo than was available when this defense was adopted;18

The act fails to allow for modern commercial reality with respect to bills of lading. Widespread use of electronic communication and data transfer systems are not within the scope of COGSA’s recognized forms


17. See Schoenbaum, supra note 8, at 501.

of sea-carriage documentation;\(^\text{19}\)

Deck cargo is excluded from the subject matter for which the carrier may be held liable. This reflects the reality of a time when such on-deck stowage was much more prone to damage or loss at sea than is the case today;\(^\text{20}\)

The bill of lading may not be structured by agreement between the parties such that the carrier's liability is decreased below those levels set forth in COGSA, thus eliminating flexibility in certain commercial situations. At the time of COGSA’s adoption, it was thought that the bargaining power of the parties to bills of lading strongly favored the carrier;\(^\text{21}\)

Until the recent decision in \textit{Vimar Seguros Y Reaseguros, S.A. v. M/V Sky Reefer};\(^\text{22}\) COGSA was interpreted to afford U.S. courts the jurisdiction to hear matters arising under the act, irrespective of any foreign forum selection clauses. Since the \textit{Sky Reefer} decision, it is feared that the inability of cargo owners to negotiate the contents of a bill of lading will result in foreign ship owners unilaterally depriving American cargo owners of an option to pursue claims for damage or loss in a U.S. court.\(^\text{23}\) It is also felt that costs of pursuing such actions in foreign jurisdictions can be prohibitive, and that the outcome of such litigation would often be unpredictable or disappointing.\(^\text{24}\)

\subsection*{2.2 Alternative International Regimes}

After half a century of global change, there was at last an international movement to modernize the Hague Rules, culminating in an amended modification being drafted at an international convention in Brussels.\(^\text{25}\) The 1968 Hague-Visby Amendments retained the underlying structure of the long-enduring Hague Rules in order to present as little disruption to the established laws and procedures that had grown up internationally under Hague. The amended convention featured a number of central modifications to its predecessor. One was the new weight-based package limitation that allowed a formulaic increase, based on Special Drawing Rights, ranging from roughly $900 per package upward, as compared with a flat $500 limitation per package under COGSA.\(^\text{26}\) Hague-Visby also in-

\begin{itemize}
  \item 46 U.S.C. § 1301(b) (1994).
  \item See Schoenbaum, \textit{supra} note 8, at 547.
  \item Id. at 603, 604.
  \item See Hearings: Kramer, \textit{supra} note 14.
  \item See Schoenbaum, \textit{supra} note 8, at 524.
  \item See Alan I. Mendelsohn, \textit{The Best Way To Update Cargo-Damage Limits}, J. OF COMM., August 3, 1999, at 8; see also Schoenbaum, \textit{supra} note 8, at 524, 525.
\end{itemize}
There was originally great support for this regime among shippers in the Sea Carriage of Goods Under the Hague, COGSA, Visby and Hamburg Conventions. A sign of its times, Hague-Visby also enacted a container clause, in recognition of the new cargo packaging techniques adopted throughout the industry.28

Internationally, there has been a gradual movement toward this amended convention. Currently, approximately 80% of the United States' principal maritime trade partners operate under Hague-Visby.29 There was originally great support for this regime among shippers in the United States, but with the vigorous opposition posed by the U.S. carrier interests, the U.S. government did not take action to adopt it.30 Opposition to this convention by carriers would later be dropped, in light of the greater perceived threat of the Hamburg Rules.

The Hamburg Rules were the product of the U.N. Convention on the Carriage of Goods by Sea, held in 1978. Its purpose was to achieve a modernized international regime that would govern ocean cargo carriage liability.31 This conference was attended by cargo and carriage interests worldwide. A central theme supported throughout the conference by cargo owners was the abolition of the "nautical fault" defense of the Hague Rules. The modifications agreed to in this conference were integrated into the Hamburg Rules.32

When compared to either the Hague Rules or the Hague-Visby amendments, the Hamburg Rules further tipped the scales of protection in favor of the shipper.33 Specifically, Hamburg provides higher financial limits of carrier liability and eliminates the controversial "navigational fault" exception, as described below. In recognition of the necessity to update its international maritime cargo carriage regime, the U.S. government deliberated means by which the improvements of the Hamburg Rules could be adopted. The U.S. Department of Transport proposed the use of a "trigger mechanism", whereby the Hamburg Rules would be ratified by the United States once a threshold number of U.S. trade partners had adopted it.34 This approach was met with great opposition in the United States and it was nonetheless soon apparent that Hamburg was

28. Id. art. 2(c).
29. See Letter, supra note 2, at 12.
31. See Schoenbaum, supra note 8, at 528, 529.
32. Id. at 531.
33. Id.
34. See Mandelbaum, supra note 30, at 484.
not widely favored by the international community either. This new convention has not been ratified in the United States, nor by most of its trade partners. To date, only 22 countries have adopted Hamburg, a significant number of which have no coastline.35 It now appears extremely unlikely that Hamburg will become a prevalent international regime.

The Hamburg Rules have, however, had a significant impact on the U.S. COGSA debate. Shortly after their adoption in 1978, organizations representing the interests of cargo owners realized that this convention would greatly benefit them, and promptly dropped their support of the Hague-Visby Convention in favor of Hamburg.36 Defensively, the opposing carrier interests took up support of the Hague-Visby Rules, for fear that a continued lack of willingness to modify carrier liabilities might result in a congressional move toward Hamburg.37 By supporting Hague-Visby, carriers hoped to demonstrate a willingness to compromise, and thus to "bend" rather than to be "broken". This balance of interests remained largely static until the recent Sky Reefer38 decision brought home the urgency of maritime cargo reform through compromise, as is explained in the following part.

3. THE U.S. COGSA REFORM PROPOSAL: DISAGREEMENT AND STALEMATE

The Maritime Law Association of the United States initiated a series of conferences, beginning in 1992, which were part of a commendable effort to promote productive dialogue among the conflicting American interests in international cargo shipping. The M.L.A. working group brought representatives from numerous areas of the maritime transportation industry together and attempted to find areas of compromise for a period of three years.39 At that time, the U.S. Supreme Court issued its ruling in the Sky Reefer case.40 The perceived threat to U.S. shipping interests represented by this decision produced a galvanizing effect on both sides of the debate. Both shippers and carriers recognized the necessity of asserting control over the national regime, and now seemed more willing to compromise in order to achieve that control.

Thus, after further consideration and negotiation, the working group presented its final proposal to the M.L.A. in 1996.41 The recommenda-

35. Id.
37. Id.
41. See Hearings: Hooper, supra note 13.
tions contained in that report formed the basis of the M.L.A.'s proposed Carriage of Goods by Sea Act, which was drafted as a bill for congressional submission. The proposed regime bore no structural resemblance to either the Hague, the Hague-Visby, or the Hamburg Conventions, having borrowed elements from each and been rearranged in an entirely new format. This was presented as a bill before the Senate's Sub-Committee on Surface Transportation and Merchant Marine on April 21, 1998. During this presentation, a number of representatives from different areas of the U.S. maritime shipping industry also testified before Congress. Their testimonies largely advocated the adoption of various provisions of the M.L.A.'s COGSA which had been borrowed from the Hague-Visby or Hamburg Rules. The matter of the M.L.A. bill's non-conformity with any existing international convention was not specifically addressed by the testifying industry representatives.

Despite such support, the Senate declined the COGSA draft and the Maritime Law Association worked for another year on a version that Congress would find acceptable. The M.L.A.'s latest COGSA draft was finalized on September 24, 1999. However, a number of ensuing congressional priorities have emerged, taking precedence over COGSA reform in the U.S. Senate. Furthermore, the former Chairperson of the Senate Sub-Committee, Senator Hutchison, has been reassigned to chair another committee. The Senator was a supporter of U.S. COGSA reform, well-versed in maritime cargo shipping concerns and not easily replaceable in such matters. As of this writing, the bill is still awaiting congressional attention. It seems unlikely that this bill will be of congressional priority in the near future.

4. THE AUSTRALIAN COGSA COMPROMISE

Australia, a young nation whose existence depended on seagoing trade for most of its early years, followed the lead of the United States in 1904 by enacting its own Sea Carriage of Goods Act, having been directly modeled on the U.S. Harter Act. However, despite domestic implementation of the Hague Rules in 1924, accession to the international convention did not take place for some 50 years. As a result of this extremely

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42. Id.
43. See Hearings: Roethke, supra note 14; see also Hearings: Kramer, supra note 15; see also Hearings: Augello, supra note 18.
44. See Tetley, supra note 1.
47. See Letter, supra note 2.
late ratification of the Hague Rules, Australia's industry and government were not as firmly attached to this regime as perhaps was the case in the United States. That being the case, there was somewhat less resistance from members of the shipping industry when, inevitably, the government looked to modernization of its cargo shipping regime. Thus, in 1988, Australia was able to ratify the Hague-Visby Rules, enacted as the Carriage of Goods by Sea Act 1991.49

After enacting the Australian COGSA in 1991, a debate took place that largely paralleled the recent COGSA debate in the United States. Maritime interests divided into two camps: the carriers, who supported the continuation of the Hague-Visby model, and the shippers, who supported ratification of the Hamburg Rules.50 The lines were drawn along much the same lines as those between carriers and shippers in the United States, although with somewhat less urgency and controversy, as the "first step" of Hague-Visby ratification had already taken place.

As was the case in the United States, the Australian government considered the use of a "trigger mechanism" to automatically implement the Hamburg Rules when sufficiently adopted by Australia's trading partners, or at the end of three years if that threshold had not been reached.51 This mechanism was actually included as a Schedule in the Australian COGSA, and was therefore set to automatically activate in October 1994.

Prior to that deadline, due to the internationally cool response to the Hamburg Rules, the Australian government considered alternative options for modernization of its COGSA.52 Toward that end, the Australian government conducted a series of consultations with members of the shipping industry. Subsequently, the Australian Minister for Transport announced that Australia would "defer" adoption of the Hamburg Rules. The Minister then directed that a new series of discussions should be held "with a view to developing a [cargo liability] regime which provides fair and reasonable protection for both shippers and carriers."53

In much the same fashion as the U.S. Maritime Law Association's working group meetings, the Australian Department of Transport gathered expert representatives from both the cargo and carrier factions, as well as from maritime insurance and legal bodies.54 The 1995 Working

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50. Id.
53. See Introduction, supra note 51.
54. See Carriage of Goods by Sea, supra note 49.
Group’s objective was to “identify areas of agreement or possible compromise” on a range of related issues, and to put forward proposals for addressing them. These discussions resulted in a report that contained a “Package of Measures” recommended by the attending representatives. This report was presented to the Australian government and was endorsed by the Minister for Transport.

The government’s deferral of the Hamburg Rules Trigger bought only a short span of breathing room before it was next set to become active, in October 1997. With the foundation of an alternative regime in hand, endorsed by both industry and government, timely removal of the Hamburg Rules trigger became critical. As in the United States, the process of enacting federal legislation is complicated, fickle and slow. Drafters began work on a bill that would give effect to the Working Group’s Package and correspondingly remove the Hamburg trigger. The new bill was only at the earliest stages of drafting by April, 1997. It was clear that a satisfactorily completed bill could not be drafted in time to beat the deadline presented by the Hamburg trigger.

A parliamentary drafter conceived of a solution, which provided a means of both overcoming the deadline and ensuring that the Working Group’s Report was given full effect. This would be achieved by introducing a regulation-making power into the bill, which would allow the current Australian COGSA to be modified by those regulations and subsequently give effect to the Report’s Package. This solution overcame a central obstacle faced in the United States and doubtlessly elsewhere; that of unilaterally incorporating the provisions required by modern industry into an existing international convention, without being required to denounce the convention.

Australia thus passed the Carriage of Goods by Sea Amendment Act in 1997, and Carriage of Goods by Sea Regulations in December, 1998. Australia’s position is that it has remained within the internationally popular framework of Hague-Visby Rules, while satisfying the bulk of its national maritime shipping industry’s priorities. The Regulations are empowered in Part 2 of the act, which states, “[A]mendments made by regulations for the purposes of this section are to be treated as if they had been made by an Act.” The Regulations themselves are set out in Schedule 1A of the act. The New Australian COGSA further mandates that periodic reviews be made by the government of the international

55. Id.
56. Id.
57. Id.
58. See Introduction, supra note 51, which sets out the Working Group’s broad purposes of international compliance; see also Carriage of Goods by Sea, supra note 49.
state of affairs regarding the adoption of a subsequent international convention.60 This ensures that Australia’s regime will in the future stay abreast of the current global standards.

5. THE M.L.A.’S PROPOSED CHANGES, ANALYZED AND CONTRASTED WITH THE AUSTRALIAN COGSA ALTERNATIVE

In addition to the sheer weight of the argument against adoption of a new unilateral regime on the basis of international uniformity, there are a number of areas in which both Australia’s and the M.L.A.’s proposed COGSA either share commonalties or diverge widely. In presenting a complete alternative to the M.L.A.’s COGSA proposal, it is useful to review the means by which the same objects can be achieved through incorporation of a model similar to the Australian COGSA.

5.1 COMPATIBILITY WITH EXISTING INTERNATIONAL REGIMES

The Maritime Law Association’s stated purpose underlying its draft COGSA is “to bring the U.S. into unity with the rest of maritime nations.”61 It has been argued that in effect, by unilaterally adopting a regime that is outside of mainstream international law, the M.L.A.’s COGSA bill flies in the face of international uniformity.62 The M.L.A.’s bill is not affiliated in any way with the existing international maritime regimes. It represents an attempt to unilaterally adopt an international regime which, it is argued, will inevitably have adverse consequences for all U.S. trade partners. In response to the M.L.A.’s bill, the Canadian Maritime Law Association stated, “The CMLA believes that any such legislation must be introduced on a multi-lateral basis and not imposed on the world unilaterally.”63 Canada is the United States’ largest international trade partner.64

There is further evidence that the M.L.A.’s COGSA might well adversely affect the United States’ trade relations with our principal maritime trading partners. Eighty percent of U.S. oceangoing trade is conducted with nations operating under the Hague-Visby Rules.65 A harbinger of the potential for international trade problems that the M.L.A.’s regime represents may be found in the current Australian COGSA. Section 7(2)(b) sets forth that regardless of the regime adopted in the ship-

60. Id, ¶ 3(2)(b).
61. See Hearings: Hooper, supra note 13; see also Tetley, supra note 1.
62. See Tetley, supra note 1; see also Letter, supra note 2, at 12.
64. See Tetley, supra note 1.
65. See Letter, supra note 2, at 12.
per or carrier's nation, the Australian COGSA will apply to carriage of goods by sea from countries that are not parties to "relevant" international conventions! "Relevant" is defined therein as the Hague, Hague-Visby, or Hamburg Conventions. Yet, it is held by those who oppose the M.L.A. draft that this new bill would be even more likely to derail the existing jurisprudence on interpretation and application of maritime cargo shipping law. Arguments have been made by numerous authorities in U.S. maritime law, that the new language, structure and objects of the M.L.A.'s COGSA bill would lead to both international and domestic confusion. The judiciary would find itself heavily burdened by the removal of such well-established precedents as established under Hague-Visby, and by the requirement to "find its way" through the new regime. Litigants would also face difficulty, as any predictability they might have relied on would be eliminated, inevitably resulting in higher attorney fees and litigation. Stated concisely, the M.L.A.'s bill would be a "nightmare" for all operating under it. Authorities also point out that the adoption of the M.L.A.'s COGSA would require formal denunciation by the U.S. government of the Hague Rules.

It is the submission of this author that the application of a modified Hague-Visby Convention, as demonstrated by the Australian COGSA 1991, would effectively overcome all of the controversial drawbacks described above. By ratifying the Hague-Visby Convention in the United States, America's international maritime relationships would at least be maintained, if not improved. With the introduction of a regulation-making power into the U.S. COGSA, the stipulations of the domestic shipping community, as ascertained by the M.L.A.'s working group, could

67. See Tetley, supra note 1; see also Hearings: Hooper, supra note 13.
68. See Tetley, supra note 1.
69. Id.
70. Id.
71. Id.; see also Alan I. Mendelsohn, US should join trade partners on cargo-damage limits, J. Of COMM., November 17, 1998.
then be given effect. Denunciation would be unnecessary, American case law would be largely preserved, the international community would largely be assuaged, and even the M.L.A.'s stated objectives would be realized.

5.2 Forum Selection

The M.L.A.'s 1999 COGSA bill would overturn the Supreme Court's Sky Reefer decision, setting forth that foreign forum and arbitration clauses would be invalid unless agreed to after the claim has arisen.72 Although a controversial topic, it appears that the majority of U.S. shipping interests largely considered this a restoration of the law as it should be.73 However, in the opinions of some maritime authorities, due to pecularities of its drafting, there is the possibility that this will result in an international conflict of laws situation.74 This criticism originates mainly from non-American shipping interests, rather than those in the United States.75 At issue is the M.L.A.'s COGSA § 7(i)(2)(A) & (D), “Foreign Forum Provision.” These subsections specify that the party may dismiss a foreign arbitration or jurisdiction clause, where the defendant's principal place of business or habitual residence is in the United States, or where the contract was made in the United States. The following concern is that certain foreign claimants operating between non-American ports could potentially disregard a foreign claim clause and instead opt for suit or arbitration in the United States. It is stated that this amounts to a violation of the rules of comity and of private international law respecting national laws. These "worrisome... extraterritorial implications of the MLA proposal"76 would, however, seem to be problems primarily advanced by the foreign community, as a number of U.S. shipping interests have made statements supporting the legislative reversal of Sky Reefer.77 Such a reversion is further supported by U.S. marine insurance interests.78

Recent statements issued by Maersk Sealand and American President Lines echo the sentiments of the foreign interests above in condemning this provision.79 It is interesting to note however, that both these organizations formerly supported the reversal of Sky Reefer and have

72. See Tetley supra note 1; see also Taylor, supra note 16, at 36.
73. Id.
74. See Felsted, supra note 2.
75. Id.
76. See Letter, supra note 2.
77. See Hearings: Roethke, supra note 14; see also Hearings: Kramer, supra note 15; see also Hearings: Augello, supra note 18; see also Taylor, supra note 16, at 36, 37.
78. See Hearings: Kramer, supra note 15.
79. See Speares, supra note 45.
only reversed their positions since being sold to non-American companies, as was exemplified by the 1998 Senate testimony in support of the M.L.A. draft. The Australian COGSA contains provisions that would apply similarly to overturn the Sky Reefer decision. Article 10 essentially states that the Australian COGSA will apply to goods carried by sea from ports in Australia outward, and conditionally to carriage of goods from outside of Australia homeward. As stated earlier, the Australia-bound cargo will only come within the Australian COGSA where the country from which the cargo originates operates under a “non-relevant” cargo convention. This is an approach that might bear some consideration by the U.S. shipping industry, should there be an interest in maintaining friendly and cooperative relationships with international trading partners.

5.3 Period of Carrier’s Liability

The current U.S. COGSA provides at §1301(e) and §1302 that the carrier’s liability under the act only effectively applies from the time when the goods are loaded onto the ship to the time they are discharged from the ship, a period known as “tackle to tackle.” The continued application of this provision has long been widely opposed by non-carrier interests. This sentiment seems to have become more generally popular. During the M.L.A.’s negotiations with industry, there was even some willingness among carrier interests to accept an increased span of liability for goods.

As a result, the M.L.A. COGSA draft emulates one of the advances made at Article 4 of the Hamburg Rules, by extending the carrier’s liability to a period beginning upon receipt of the goods by the carrier and lasting until the goods are delivered to the recipient authorized under the bill of lading. The practical effect of this is that certain dock-side workers would enjoy limits of liability under the act, from damage or loss occurring to cargo on the dock, or in storage at dock. The use of “Himalaya Clauses” would thus become unnecessary. While there has been some comment made by foreign freight interests, the provision

80. For a demonstration of the pro-M.L.A. Bill position adopted by Sea-Land prior to its
sale to foreign interests, see Hearings: Roethke, supra note 14; see also Bonney, supra note 3.
82. See Schoenbaum, supra note 4, at 529.
83. For an illustration of carrier interests giving way to the stipulations set forth in the
M.L.A.’s Bill, see Hearings: Roethke, supra note 14.
84. See Tetley, supra note 1; see also Maritime Law Association of America’s Draft
COGSA of 1999, § 2(a)(8) & 5(a), (b) & (c)(1), at http://tetley.law.mcgill.ca/cogsa99.htm (last
85. See Taylor, supra note 8, at 34.
86. See Taylor, supra note 16, at 38.
has generally been favored by U.S. interests.

The international opposition voiced with regard to this provision refer to the use of the term “delivery of goods”, which it is feared, could be interpreted to extend the definition of “carrier” to include those involved in subsequent periods of delivery, far beyond the dock. The Australian COGSA, like the M.L.A. draft, does away with the Hague shipboard period of carrier liability, in favor of an extended period.

However, unlike the M.L.A. draft, the Australian COGSA provides for liability for the “time during which the carrier is in charge of the goods.” That is defined in the act to begin when the goods are delivered to the carrier at the wharf, and terminate when delivered to the consignee at the wharf. It thereby clearly restricts the application of the act to the intended parties. Such drafting would potentially be suitable to an updated U.S. COGSA.

5.4 Deck Cargo

Both the proposed M.L.A. draft and the Australian COGSA provide that the acts now apply to cargo properly stowed on deck. Modern shipping techniques and equipment have made deck stowage the preferable alternative in certain circumstances. There have nonetheless been misgivings voiced over the lack of restrictions placed on such stowage in the M.L.A. draft. Specifically, where the M.L.A. draft simply includes deck cargo in its definition of “goods”, the Australian COGSA provides a level of further protection to the shipper, as are also found in the Hamburg Rules. Article 2, Sections 2, 3 & 4 allow the shipper to provide the carrier with any special requirements for deck-stowed cargo in writing, and stipulate that any deviation from such instructions will result in loss of liability limitation for the carrier. Such clarification of the specific duties of parties in deck cargo transportation may be attractive to parties in the United States.

5.5 Electronic Documentation

The M.L.A. draft does make some concession to the use of modern electronic business practice by allowing electronic bills of lading (or con-
vised several portions of its draft, largely due to congressional input. One such revision is found in the definitions of "carrier" under Section 2(a).

The current draft features three separate classes of carrier; the "Contracting Carrier", the "Performing Carrier", and the "Ocean Carrier". While the "Contracting Carrier" (essentially the ship owner) and the "Ocean Carrier" (essentially the charter party) are defined clearly, the definition of "Performing Carrier" is extremely complicated, listing exhaustively those to whom the classification does NOT apply, and failing to clearly indicate the party to whom it DOES apply. The M.L.A. has offered an explanation for this arcane drafting, but has failed to redraft it. It is feared that the new and complicated drafting style typified by this provision will wreak havoc with both industrial compliance and judicial application.

The Australian model being submitted in this paper makes no such unusual distinctions, retaining the standard Hague-Visby definition of "carrier" at Article 1. Should greater specificity be desired, the Hamburg Convention provides for two classes of carrier. In recognition of the M.L.A.'s desire for "international uniformity", not to mention the need to keep legislation from presenting an interpretive nightmare, it is proposed that the United States adopt a definition in accordance with one of these internationally accepted conventions.

5.7 The "Error in Navigation" Defense

Once again, this issue appears to be one in which American interests have reached a level of consensus, whereas some minimal evidence of

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95. See Tetley, supra note 1.
96. Id.
99. See Tetley, supra note 1.
international opposition still exists. In its proposed bill, the U.S. Maritime Law Association eliminated the “error in navigation” defense, which has long been criticized as an outmoded Hague-era relic. This defense had previously been eliminated in the Hamburg Convention. Of those members of the U.S. shipping industry that have made public their support of the discontinuance of the navigational fault exception, one major U.S. carrier testified to that effect before the U.S. Senate, comparing the old Hague provision to an exemption of liability for a trucker who falls asleep at the wheel. U.S. shippers, of course, also support the abolition of this defense.

The principal thrust of opposition to the elimination of this defense appears to have come from a coalition of foreign shipping interests. The group’s position includes the claims that the elimination of this defense would end a longstanding tradition in shipping. That apparently being the extent of persuasive force behind the foreign coalition’s argument, it is submitted that the defense is likely to be eliminated when the U.S. act is updated. Toward that end, individual provisions of the Australian act can be of no assistance in providing a model for this provision. The Australian Working Group submitted that the defense should be retained and it remains in the Australian act presently. Nonetheless, this serves as a demonstration that where the U.S. shipping community speaks with one voice on a given issue, the regulation-making power recommended in this paper would enable modification of the U.S. COGSA in accordance with that consensus.

5.8 FREEDOM OF PARTIES TO AGREE ON REDUCED LIABILITY

The M.L.A.’s COGSA draft departs from the current regime by permitting parties to contractually reduce the liabilities of the carrier below the
The provision also contains similar safeguards to those in the M.L.A. longer a common menace in this industry, it is widely believed that such a restriction is no longer appropriate. There are, however, safeguards built in which purport to protect unsuspecting third parties to the contract.

In very similar language, the Australian COGSA allows that the carrier and shipper may enter into a special agreement that reduces the carrier’s responsibilities and liabilities for goods and vessel seaworthiness. The provision also contains similar safeguards to those in the M.L.A. draft. One such stipulation restricts application of this provision to shipments other than “ordinary commercial shipments made in the ordinary course of trade”, where they are justified by special circumstances and not antagonistic to public policy.

The Australian version provides an additional noteworthy departure. Article 6A states that the carrier and shipper may enter into agreement that the Carriage of Goods Act of 1991 does NOT APPLY. By so providing, parties would have available the full freedom of contract to make such arrangements as they may deem necessary, unrestricted by the regime. This freedom to contract, however, is restricted to agreements where the shipment does not involve container goods, the goods are being carried on deck, and where the special character of the contract justifies special treatment. Such carriage documents, moreover, must be endorsed by both parties on their face, thus demonstrating actual consent.

Article 6A was a last-minute addition to the Australian COGSA, inserted when the contributing parties to the Working Group voiced a late dissatisfaction with their inability to “break free” of the convention under special circumstances. It is possible that such an additional option could be a means of providing greater accord between U.S. shipping interests, when the act is next examined by Congress.

108. See Tetley, supra note 1.
110. Carriage of Goods by Sea Act, (1991), Schedule 1A, Art. 6A (Austl.). (The circumstances referred to include that the goods not include containerized goods, that they be carried on deck, and that they include breakbulk cargo.)
5.9 Further Hague-Visby and Australian COGSA Provisions for Consideration

The M.L.A. draft adopted several Hague-Visby improvements outright. These are also found in the Hague-Visby structured Australian COGSA. Their inclusion in the M.L.A. draft is further evidence that a modified version of the Hague-Visby model can provide an optimal means of achieving the working group’s purposes.

Provisions directly borrowed by the M.L.A. from the Hague-Visby Rules include the reversal of the $500 Hague limitation on package liability value and the use of a weight-based liability algorithm, as described above. This provision attracted broad support in the U.S.112 Another transplant is the Hague-Visby container clause, defining “package”, which makes allowance for modern containerization of cargo.113 Once again, there was widespread support among U.S. interests for this change.114

The Australian Working Group proposed another interesting improvement over the Hague model that is not found in the standard Hague-Visby Rules. The Australian COGSA has introduced, through its modifying regulation, a ground for holding the carrier liable for delay of goods causing loss to the shipper.115 The carrier may avoid liability by demonstrating that the delay was “excusable”, a term defined by a subsequent list of nautical mishaps that essentially arise despite the carrier’s competence and diligence. The quantum of liability is limited to the amount of the shipper’s loss, or according to a floating formula where the amount of loss is unspecified.116 Again, this modification may be of interest to shipping interests in the U.S.

6. Conclusion

The recent Sky Reefer decision introduced an element of urgency in the need for legislative changes to the U.S. COGSA. In the aftermath of that ruling, a great degree of consensus was reached in the United States between both the shipping and carrier interests toward the adoption of an updated regime. Compromise was once close at hand with regard to the growing acceptance of the M.L.A.’s COGSA draft. Its greatest shortcoming, however, is its lack of conformity with established international maritime regulation.

112. See Hearings: Augello, supra note 18; see also Hearings: Roethke, supra note 14; see also Hearings: Kramer, supra note 15.
116. Id.
That drawback has attracted criticism from America's trading partners\(^{117}\) and has made the adoption of the M.L.A.'s COGSA model unlikely. Despite congressional recognition of the many improvements this bill proposes, Senator Hutchison, while Chairperson of the Senate Subcommittee on Surface Transportation and Merchant Marine, has expressed anxiety that some maritime interests might find the changes proposed by the M.L.A. inequitable.\(^{118}\)

Regardless of one's position regarding shipper's interests, carrier's interests, third party interests or insurance interests, the adoption of the M.L.A.'s proposed act would inevitably cause chaos throughout the industry.\(^{119}\) Well-established trade customs and practices would break down, just as international trade barriers were being created. The entire framework of American jurisprudence in the area of maritime cargo shipment would need to be "junked".\(^{120}\) The potential for resulting costs, disagreements, and disruption to international trade generally should be weighed very carefully in the minds of all interests supporting legislative change.

And yet, the question remains to be answered: If the same legislative purpose can be achieved in accordance with established international legal framework, why hasn't that approach been taken?

This paper has sought to provide an insight into a process by which the United States can achieve its legislative goals, retain the goodwill and cooperation of the international shipping community, and leave its options open for the future adoption of any legal framework that comes to the forefront of international shipping. It is the submission of this author that the COGSA model adopted in Australia would be ideal in meeting the needs of COGSA reform in the United States.

\(^{117}\) See Oland, supra note 63.


\(^{119}\) See Tetley, supra note 1; see also Oland, supra note 63.

\(^{120}\) See Tetley, supra note 1.
1. **INTRODUCTION**

A "bird strike" is deemed to have occurred whenever a pilot reports a bird having impacted his aircraft; aircraft maintenance personnel identify some damage to an aircraft which they can attribute to a bird strike; ground personnel report seeing an aircraft hit one or more birds in flight; or bird remains, whether in full or part, are found on an airside pavement area or within 200 feet of a runway, unless another reason for the bird's death is identified. The first fatal aircraft accident involving a bird strike is reported to have occurred in 1912.¹ The Bird Strike Committee of the United States reports that, since 1960, about 400 aircraft have been destroyed and over 370 people killed in the United States as a result of bird or other wildlife strikes.² It is also reported that more than half of bird strike accidents occur at less than 100 feet (30 meters) above the ground,

¹ HANS BLOKPOEL, BIRD HAZARDS TO AIRCRAFT xiii (1976).
² Bird Strike Committee USA, *Understanding and Reducing Bird Hazards to Aircraft* (statistics from the Federal Aviation Administration (FAA) estimate that there were over 33,000
although strikes have been reported as high as 37,000 feet above ground, and the highest recorded bird sighting was at 54,000 feet. The Civil Aviation Administration (CAA) of the United Kingdom has estimated that U.K.-registered aircraft of over 12,500 pounds (5,700 kgs.) strike a bird about once every 1,000 flights. The International Civil Aviation Organization (ICAO), which, through its Bird Strike Information System, provides an analysis of bird strike reports that are received from different countries, has recorded that there were over 25,000 bird strikes reported by civil aircraft from 1988 to 1992.

Bird strikes are therefore by no means rare occurrences in civil aviation. They can cause serious damage to aircraft, as is evidenced by the fact that, since 1975, in the United States alone, five large jet aircraft have encountered major accidents caused by bird strikes which, in one instance, resulted in the death of nearly three dozen people. A popular misconception, that a minor accident caused by a bird strike would not have serious financial implications, has prompted the publication of several informational papers by commentators, focusing on the fact that even minor damage can lead to significant costs. Even if a pair of fan blades have to be replaced as a result of such incidents, the add-on costs, in addition to replacement costs and labor such as costs involving the grounding of the aircraft for repair and redirection of passengers, would be considerable. The Federal Aviation Administration (FAA) has estimated that during the 1990-2001 decade, bird strikes cost civil aviation over $470 million per year in the United States. Additionally, minor damage to aircraft may come within deductible limits of standard aircraft insurance coverage, or may not be covered in the insurance policy, necessitating the airline concerned to absorb the direct and indirect costs of such damage.

Industry experts have issued a serious warning that flocks of birds, particularly migrating flocks of large Canada geese, could be the cause of aircraft accidents and passenger fatalities if preventive measures are not
Bird Strikes Against Aircraft – Issues of Liability

Two major U.S. air carriers, Northwest and United, have reported 200 to 300 bird strikes a year on an average. A notable incident presented in this report is the $23 million damage sustained by a Northwest Airlines aircraft when birds were ingested into one of its engines.

The issue of bird strikes takes on an added dimension of affecting social and policy issues which are not strictly linked with air transport. The key area of environmental protection, particularly in the fields of wildlife policy and habitat management, bears on issues of state responsibility for national policy as well as a commitment toward maintaining the bio-diversity of the ecosystem. An example of the dire consequences of a bird strike is the instance of a Boeing 747 aircraft departing Los Angeles Airport in late August, 2000, which had to dump 83 tons of fuel to land safely after a bird strike.

All of this raises the question of accountability: who is responsible for preventing bird strikes against aircraft? The initial answer to the question lies in the element of control exercised in a particular jurisdiction in the vicinity of the site of the accident. The airport is a key player in this equation, as would be an air traffic control authority, although to a lesser extent particularly in instances of failure to warn aircraft of possible bird hazards. The state in whose territory the accident takes place should be called upon to answer whether it had a successful wildlife program in place. However, in the ultimate analysis, the airport authorities should be held liable; they owe aircraft operators the common duty of care of ensuring that the latter’s aircraft are afforded basic safety from bird hazards. Therefore, the onus of responsibility to avoid bird strikes depends very much on the airport authorities, as a few significant instances of adjudication show, which focus on exculpation of any airport that shows bird control systems in operation and trained staff to deal with the problem of wildlife hazards.

Issues of liability, which primarily fall within the purview of the airport concerned, can be viewed in two ways. The first is state liability and responsibility when the airport concerned is an instrumentality of state or is government-owned and controlled. The second is the liability of the airport itself when such airport is an autonomous entity, either through the process of privatization (which is increasing in popularity at the present time), or through some other measure that accords independent fi-

11. Id.
12. Id.
nancial ownership to the airport. This article will address liability issues within those two broad areas of control.

2. Regulatory Initiatives of ICAO

At its Sixth European-Mediterranean Regional Air Navigation Meeting, held in Geneva from the 2nd to 27th of November, 1971, ICAO considered bird hazards to aircraft operations, particularly in the context of possible measures that could be taken to minimize the risk of collision in all phases of flight between aircraft and birds. Consequently, the Air Navigation Commission of ICAO requested the Secretary General of ICAO to examine the issue further and submit recommendations to the Commission. Consequently, in 1973, at the ICAO Asia/Pacific Regional Air Navigation Meeting held in Honolulu, Hawaii the meeting adopted Recommendation 6/5 which requested:

a) that each state organize a national bird strike committee to investigate the measures to be taken at the aerodromes within the state to reduce the bird hazards;

b) that the states within a region join together in the formation of a regional bird strike committee with the objective of providing assistance and guidance to each other in reducing the bird hazard; and,

c) that ICAO lend its support to the formation and activities of the regional bird strike committee.

Although this recommendation was pro-active, it was a bit ahead of its time. It was later found by the Air Navigation Committee, after ICAO had held a workshop for contracting states establishing national bird strike committees, that it did not appear at that time that measures to reduce bird strikes, particularly in the Asia/Pacific region, could be sustained.

ICAO's efforts at regulation in this particular field dates back to May 29, 1951, when the Council of ICAO first adopted Standards and Recommended Practices for Aerodromes, adopting Annex 14 (Aerodromes) to the Convention on International Civil Aviation, signed at Chicago on December 7, 1944. This Convention, in Article 37, requires that each contracting state undertakes to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures and organization in relation to aircraft, personnel, airways and auxiliary services and guidance to each other in reducing the bird hazar; and,

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15. Id. Recommendations 16/16 and 16/17. See also AN-WP/4390 (Feb. 10, 1975).
17. Id.
in all matters in which such uniformity will facilitate and improve air navigation. To this end, ICAO is mandated by Article 37 to adopt and amend from time to time, as may be necessary, international standards and recommended practices pertaining to eleven key areas of civil aviation, one of which pertains to characteristics of airports and landing areas.\textsuperscript{19}

Accordingly, Annex 14 on Aerodromes, in Chapter 9, contains three recommendations pertaining to bird strike reduction. The first recommendation calls for a bird strike hazard on or in the vicinity of an aerodrome to be assessed through the establishment of a national procedure for recording and reporting bird strikes to aircraft and the collection of information from aircraft operators, airport personnel, etc. on the presence of birds on or around an aerodrome.\textsuperscript{20} The Annex also recommends that when a bird strike hazard is identified at an aerodrome, the appropriate authority should take action to decrease the number of birds constituting a potential hazard to aircraft operators by adopting measures for discouraging their presence on or in the vicinity of an aerodrome.\textsuperscript{21} The final recommendation of the Annex urges that garbage disposal dumps or any such other source attracting birds on or in the vicinity of an aerodrome be eliminated or their establishment prevented, unless studies indicate that such disposal units are unlikely to be conducive to bird activity and a bird hazard problem.\textsuperscript{22}

Recommendation 9.5.2, which encourages measures to be taken toward discouraging bird activity within the vicinity of an aerodrome, is recognized in guidance material formulated by ICAO in the form of provisions in the \textit{Airport Services Manual}, Part Three of which is dedicated to bird control and reduction.\textsuperscript{23} The manual gives detailed guidance to states on how to organize a national committee and lays out the roles and responsibilities of a control program. Chapter Four of the manual is particularly significant in that it gives a detailed breakdown on how to organize an airport bird strike control program. This calls for a very integrated approach to be developed to control bird activity at airports. Communications between field personnel and air traffic controllers, allocation of monies for bird control and assistance to aircraft operators in coordinating a concerted effort are some recommended measures. There is also a separate chapter on environmental management and site modification, together with segments on dispersal methods, incompatible land use around airports, evaluation of wildlife control programs, and staffing air-

\textsuperscript{19} Id. at article 37(b).
\textsuperscript{21} Id. note 18, Recommendation 9.5.2.
\textsuperscript{22} Id. Recommendation 9.5.3.
port bird control programs, which are given special treatment in a chapter. Another ICAO document which lends itself to alleviating bird hazards at airports is the Airport Planning Manual which contains, inter alia, an appendix reflecting a land use table for bird hazard considerations.  

There are also other compelling factors that airport administrations should take into account when planning for additional aircraft capacity. These factors include the responses of the international community in the form of Standards and Recommended Practices as promulgated by ICAO, in order that international civil aviation retains a certain consistency and uniformity in its global activity. For instance, ICAO has in use, as mentioned earlier, an Airport Planning Manual in two parts, setting out in detail all aspects of airport planning. In this document, ICAO has developed a master planning process that involves the plans, programs and stringent policy that go into making a viable airport. The document serves as a basis for providing for the orderly and timely development of an airport that is adequate to meet the present and future air transportation needs of an area or state. The manual starts with the fact that early aviation history recognized the need for some public control of land in the vicinity of an airport and bifurcates this need to reflect airport needs, i.e., obstacle limitation areas and future airport development, etc., and the need to ensure minimal interference with the environment and the public. By this dual approach ICAO has introduced a whole new area of thought into airport development. While it was once a concern to merely provide facilities for the fluid movement of air traffic, increasingly there are ecological concerns as well. Because of this, airport development now falls into three main areas:

a) the development of airport capacity and facilities;

b) the balancing of airport development with necessary security measures; and,

c) the balancing of airport development with ecology, i.e., city planning, noise pollution avoidance, etc.

The ICAO Airport Planning Manual ensures a balance between airport development and ecological considerations.

On an examination of the foregoing discussions, no one could say that the problem has not been recognized so far, and no one could even say that those responsible for the alleviation of the problem have not

25. Id. at Parts 1 & 2.
26. Id. at Part 1, 2.9.1 (a).
27. Id. at Part 2, 1.3.1.
28. Id. at Part 2, 1.3.2.
attempted to solve it. What now remains to be done is to examine the most proper manner in which to approach the problem of bird hazards. There is no doubt that the planners can take off from where we are at present. However, any future planning by individual states on the expansion of their airport programs would have to be done with the primary consideration that in the future air transportation will demand new forms of international collaboration on technical and economic issues.29

The collaboration referred to would have to be expanded to include safety and ecological factors in the technical field and all economic research in city planning and infrastructure development in the economic field. These studies would have to be done in the form of committed and in-depth country studies by individual states, taking into consideration future studies of a country’s outlook and the financial outlay that the country would be prepared to make for an airport expansion program. The outcome of these studies could then form the basis for legislation concerning the planning of airports. Such legislation would present, for the first time, a cohesive and enforceable set of laws that would deal with the airport congestion problem.

Although the concept of airport planning laws can be summed up as easily as above, the three broad areas of ecology, safety and infrastructure planning need a sustained approach of study before they are incorporated into laws. For a start, ICAO’s Airport Planning Manual is geared to provide information and guidance to those responsible for airport planning,30 where information on a comprehensive list of planning subjects, such as sizes and types of projects,31 task identification,32 preparation of manpower and cost budgets,33 selection of consultants,34 and standard contract provisions35 is given. With these guidelines each state can start its planning process.

3. LEGAL ISSUES

ICAO’s extensive regulatory guidance impels contracting states to take adequate measures to adopt clear and cogent national policies toward a bird strike control program and also assume responsibility for liability arising out of accidents if they are responsible for providing

31. Id. at Part 2.1.3.1-1.3.5.
32. Id. at Part 2.2.1.
33. Id. at Part 2.4.
34. Id. at Part 3.1.
35. Id. at Appendix.
Aeronautical and airport services to aircraft operations. Principles of state responsibility, *inter se*, are now clearly entrenched in public international law.

### A. State Liability

The fundamental postulate which establishes a global legal basis for the provision of airports is contained in Article 28 of the Convention on International Civil Aviation, which provides that each contracting state undertakes, as far as practicable, to provide, in its territory, airports, radio services, meteorological services and other air navigational facilities to facilitate international air navigation in accordance with the standards and practices recommended or established from time to time and pursuant to the Convention. In addition, the Chicago Convention also stipulates, *inter alia*, that every aircraft which enters the territory of a state shall, if the regulations of that state so dictate, land at an airport designated by that State for purposes of customs and other examination. Each contracting state to the Chicago Convention could also, subject to the provisions of the Convention, designate a route and available airports to an aircraft which passes through the airspace of the state from another state.

An airport, whether publicly, or privately, owned and operated, has to follow a prescribed policy with regard to the recovery of costs incurred in providing airport and air navigation services. This policy is enshrined in Article 15 of the Chicago Convention which requires that a state is obligated not to impose higher charges on aircraft of another state engaged in international operations than those paid by its national aircraft engaged in similar international operations. This policy is a universal one applying to any type of airport whether public or private since the regulation of airports within the territory of a state is usually the responsibility of that state concerned.

The United Nations General Assembly, at its 93rd Plenary Session in December 1992 endorsed privatization in the context of economic restructuring, economic growth and sustainable development by passing Assembly Resolution A 47/171. The General Assembly, having noted, *inter alia*, that many countries were attaching growing importance to the privatization of state-owned enterprises, urged member states to support the national efforts of fellow states in implementing privatization. In 1993, the General Assembly followed up on its stance on privatization by

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37. *Id.* at art. 10.
38. *Id.* at art. 68.
adoption of Resolution A 48/180, which, *inter alia*, requested the Secretary General to strengthen the activities of the United Nations system related to the promotion of entrepreneurship and to the implementation of privatization programs.

On the specific issue of airport privatization, the Latin American Civil Aviation Commission (LACAC), at its Thirteenth Ordinary Assembly held in Chile in July, 1998, adopted Recommendation A 13-4 which recognized, *inter alia*, that airport privatization was becoming more prevalent in the Latin American region and that the process of privatization involves a detailed analysis of different factors. Accordingly, the Assembly recommended that the LACAC member States consider the following issues in order to obtain the best results from the privatization process:

a) Define the role of the state and the responsibilities it must fulfill in order to guarantee the rights of users, as well as airport security and operational safety, in accordance with international standards in force;

b) Consider the convenience of maintaining public ownership of airports, granting concessions for suitable periods of time in keeping with investments made;

c) Clearly establish the required infrastructure, which costs the state and/or the users will be willing to recognize, avoiding surpluses or deficiencies which may be detrimental to them;

d) Determine the services to be transferred to the private sector and those which will remain in the hands of the state, describing the standards to be used in defining the quality of the services provided;

e) As much as possible, aim at establishing a competitive environment for providers of the various services, seeking mechanisms such as public tenders. Maximum allowable rates should be established for monopolistic services;

f) Define the financing of the air transport sector, deciding whether higher-income airports should economically support the less profitable ones or those working at a loss, in order to maintain a self-financed airport network compatible with national civil aviation needs;

g) The contract between the state and private airport service operators must be the result of an open public tender where the required conditions, evaluation formulae and criteria to be used to award the contract must be clearly established and made known to all interested parties, in an absolutely transparent way;

h) Reserve the right to implement the relevant measures to follow up on and maintain operational control over the concession contract;

i) Pay special attention to the contract termination clause for its timely enforcement in case of non-compliance and recovery of the relevant value;
j) The Civil Aviation Administrations should actively participate in all privatization processes.

The privatization process would usually involve a sustained consultation period between the parties, particularly involving the fundamental issue of the exact mode of privatization involved. Some of the options which may be considered are the creation of a new corporation whereby existing assets could be vested in the new entity and be floated publicly. Privatization could also be partial; involving just some assets of the enterprise. Alternatively, there may be a full public share floatation of the enterprise or a management buy-out structure where a company could provide financial backing in order to take the airport concerned into the private sector. There could also be a joint venture arrangement in airport privatization where the private sector and government could share their equity involvements.

At the implementation stage of the privatization process a tremendous amount of information is usually exchanged, particularly from the owners of the enterprise to the investors. Such information should demonstrate the legal rights of the parties and stipulate the rights and liabilities that would remain as residual rights and obligations of the state. A privatization process, whether it be by concession or trade sale would also entail a complex series of negotiations and contractual wrangling. Competing companies would bid against each other for the enterprise being offered for privatization.

It is beyond question that the responsibility of the state is not extinguished merely because an airport is made subject to private ownership or private management control. In international air transportation the mere fact that the state has to provide airport services under Article 28 of the Chicago Convention imposes legal responsibility upon the state to be accountable at public international law for any liability incurred as a result of action on the part of airports within its territory.

The provisions of the Chicago Convention, which is an international treaty, are binding on contracting states to the Convention and therefore are principles of public international law. The International Court of Justice (ICJ), in the North Sea Continental Shelf case, held that legal principles which are incorporated in treaties become customary international law by virtue of Article 38 of the 1969 Vienna Convention on the Law of Treaties. Article 38 recognizes that a rule set forth in a treaty would become binding upon a third state as a customary rule of international law if it is generally recognized by the states concerned. Article 28 of the

Chicago Convention, which requires States to provide airports for purposes of air transport operations, therefore, becomes a principle of customary international law, or *jus cogens*. Obligations arising from *jus cogens* are considered applicable *erga omnes*, which would mean that states using space technology owe a duty of care to the world at large in the provision of such technology. The ICJ in the *Barcelona Traction* case held:

[A]n essential distinction should be drawn between the obligations of a State towards the international community as a whole, and those arising *vis-à-vis* another State in the field of diplomatic protection. By their very nature, the former are the concerns of all States. In view of the importance of the rights involved, all States can be held to have a legal interest in their protection; they are obligations *erga omnes*.\(^41\)

The International Law Commission has observed of the ICJ decision:

[I]n the Court’s view, there are in fact a number, albeit limited, of international obligations which, by reason of their importance to the international community as a whole, are - unlike others - obligations in respect of which all States have legal interest.\(^42\)

The views of the ICJ and the International Law Commission, which have supported the approach taken by the ICJ, give rise to two possible conclusions relating to *jus cogens* and its resultant obligations *erga omnes*:

a) obligations *erga omnes* affect all States and thus cannot be made inapplicable to a State or group of States by an exclusive clause in a treaty or other document reflecting legal obligations without the consent of the international community as a whole;

b) obligations *erga omnes* pre-empt other obligations which may be incompatible with them.

Some examples of obligations *erga omnes* cited by the ICJ are prohibition of acts of aggression, genocide, slavery and discrimination.\(^43\) It is indeed worthy of note that all these obligations are derivatives of norms which are *jus cogens* at international law.

International responsibility relates both to breaches of treaty provisions and other breaches of legal duty. In the *Spanish Zone of Morocco Claims* case, Justice Huber observed, “[R]esponsibility is the necessary corollary of a right. All rights of an international character involve international responsibility. If the obligation in question is not met, responsibility entails the duty to make reparation.”\(^44\)

\(^41\) *Barcelona Traction, Light and Power Company Limited*, I.C.J. Reports, 1974, 253, 269-270.


\(^43\) 1970 I.C.J. 32.

\(^44\) 1925 R.I.A.A. ii 615 at 641.
It is also now recognized as a principle of international law that the breach of a duty involves an obligation to make reparation appropriately and adequately. This reparation is regarded as the indispensable complement of a failure to apply a convention and is applied as an inarticulate premise that need not be stated in the breached convention itself. The ICJ affirmed this principle in 1949 in the *Corfu Channel* case by holding that Albania was responsible under international law to pay compensation to the United Kingdom for not warning that Albania had laid mines in its territorial waters which caused explosions, damaging U.K.-flagged ships. The liability and the general principles of international law complement each other in endorsing the liability of states to compensate for damage caused by space objects, thus there is no contention as to whether in the use of nuclear power sources in outer space, damage caused by the use of such space objects would not go uncompensated. The rationale for the award of compensation is explicitly included in Article XII of the Liability Convention, which requires that the person aggrieved or injured should be restored (by the award of compensation to him) to the condition in which he would have been if the damage had not occurred. Furthermore, under the principles of international law, moral damages based on pain, suffering and humiliation, as well as on other considerations, are considered recoverable.

The sense of international responsibility that the United Nations arrogated to itself had reached a heady stage at this point, where the role of international law in human conduct was perceived to be primary and above the authority of states. In its Report to the General Assembly, the International Law Commission recommended a draft provision which provided, “Every State has the duty to conduct its relations with other States in accordance with international law and with the principle that the sovereignty of each State is subject to the supremacy of international law.” This principle, which forms a cornerstone of international conduct by States, provides the basis for strengthening international comity and regulating the conduct of States both internally - within their territories - and externally towards other states. States are effectively precluded by this principle from pursuing their own interests untrammelled and with disregard to principles established by international law.

Liability of the State at common law is best exemplified by the legal process of the United Kingdom. At private law involving issues of state liability and responsibility, the perennial adage that “the King can do no

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46. The Corfu Channel Case, 1949 I.C.J. 4 at 23 (Feb. 5).
forces, there would be no Crown liability for acts committed officially by forces, there would be no Crown liability for acts committed officially by exposure to compensatory damages arising out of injury. There was, exposure to compensatory damages arising out of injury. There was, however, no bar to imposing personal liability on civil servants, and in however, no bar to imposing personal liability on civil servants, and in 1765, the British Government agreed to pay ex gratia, damages awarded against one of its servants. In the 1946 case of Adams v. Naylor, the principle of ex gratia payment was rejected, giving way to the enactment in Britain of the Crown Proceedings Act of 1947 which allowed a plaintiff the right to take up a matter involving Crown liability direct in the courts of law. The Act did not apply to members of the armed forces, which essentially meant that if an airport were to be manned by the armed forces, there would be no Crown liability for acts committed officially by the airport management concerned.

B. Liability of the Airport as an Autonomous Entity

Notwithstanding the responsibility of a State with regard to airports within its territories, which is founded both at customary international law and at private law for liability incurred by airports, a privately run airport may incur tortious liability on a private basis, as the occupier of the premises. Airports run by private entities would be liable to the users of airports including air carriers and to non-users, including those outside the premises of the airport, injured by the airport’s activities. A good example of the latter is damage caused by environmental pollution through noise within the vicinity of the airport.

In the instance of a privately managed airport where the entity charged with managing airport services is located within the airport premises, such an entity would be considered as a legal occupier for purposes of liability.

The leading case which expands the definition of “occupier” is the House of Lords decision in Wheat v. E. Lacon & Co. Ltd, where the defendants owned a public house of which Mr. R was their manager. Mr. R and his wife were allowed by agreement to live in the upper floor, access to which was by a door separate from the licensed premises. Mrs. R was allowed to take paying guests on the upper floor. An accident was sustained by a paying guest on the staircase leading to the upper floor. It was held that the defendants were occupiers of the upper floor. Mr. R was only a licensee of that part and the defendants had enough residuary

49. Entick v. Carrington, [1765] 19 St. Tr. 1030.
control to be treated as occupiers. In fact, the defendants, Mr. R and Mrs. R, were both occupiers.

The case recognizes three principles: that there may be two or more occupiers at one time,\textsuperscript{52} that exclusive occupation is not required, and that the test is whether a person has some degree of control associated with, and arising from, his presence in and use of, or activity in, the premises. The following principles were enunciated by earlier decisions, such as a case where a concessionaire without a lease in a fairground is an occupier;\textsuperscript{53} a contractor converting a ship into a troopship in dry dock occupies the ship;\textsuperscript{54} and, a local authority which has requisitioned a house\textsuperscript{55} is an occupier (even in respect of those parts of the house in which it is allowing homeless persons to live).\textsuperscript{56}

Although the Wheat case contains a decision on the meaning of “occupier” for the purposes of the Occupiers’ Liability Act 1957 of the United Kingdom, the judgments following the case show that it applies to all cases, whether at common law or under that Act, or the Occupiers’ Liability Act 1984 which now regulates occupiers’ duties to trespassers where it is necessary to determine the duty of care owed by occupiers to entrants.

The Occupiers’ Liability Act 1957 was enacted to give effect to the recommendations of the Law Reform Committee and to eliminate the confusion that had clouded the common law rules on liability to entrants on premises. The rules enacted by sections 2 and 3 of the Act “have effect, in place of the rules of the common law, to regulate the duty which an occupier of premises owes to his visitors in respect of dangers due to the state of the premises or to things done or omitted to be done on

\textsuperscript{52} See Fisher v. CHT Ltd. (No 2), [1966] 2 Q.B. 475, [1966] 2 W.L.R. 391 (CA), (the owners of a club and the defendants who ran a restaurant in the club under licence from the club were both held to be occupiers). See also AMF Int’l Ltd. v. Magnet Bowling Ltd. [1968] 1 W.L.R. 1028 (a contractor, as well as the owner, was an occupier of the whole building although part of the building was separated by a screen beyond which he went only to attend to heating and lighting). See also, Holden v. White [1982] Q.B. 679, [1982] 2 W.L.R. 1030 (CA). (It is doubtful whether someone who has granted a right of way occupies that right of way). See also Holmes v. Norfolk County Council, (1981) 131 N.L.J. 401 (A highway authority which owns the land but has not adopted the highway is not an occupier of the highway). See also Whiting v. Hillingdon London Borough Council (1970) 68 L.G.R. 437 (A highway authority does not occupy a footpath on land owned by another although it has a statutory obligation to maintain it.)

\textsuperscript{53} Humphreys v. Dreamland (Margate) Ltd., [1930] All E.R. 327.


At common law it was necessary to distinguish between invitees, licensees and other entrants on premises. The approximate distinction was that an invitee was requested to enter the premises in the interest of the occupier, whereas a licensee was merely permitted to enter. "Visitors" for the purposes of the Act are those persons who were invitees or licensees at common law:

The common duty of care of an occupier is a duty to take such care as in all the circumstances of the case is reasonable to see that the visitor will be reasonably safe in using the premises for the purposes for which he is invited or permitted by the occupier to be there.58

If the entrant does not use the premises for that purpose which entitles him to be there, no duty is owed to him under the 1957 Act and any remedy which he might have would be regulated by the 1984 Act on the duty owed to trespassers.

At common law an occupier discharged his duty to a visitor by a warning sufficient to convey to the visitor full knowledge of the nature and extent of the danger. That rule is changed by section 2(4)(a) of the Act59 which provides that where damage is caused to a visitor by a danger60 of which he had been warned by the occupier, the warning is not to be treated without more as absolving the occupier from liability, unless in all the circumstances it was enough to enable the visitor to be reasonably safe.

For example, the farmer who warns the veterinary surgeon whom he has summoned to the farm at night to attend a sick cow by saying, "Be careful how you go down there or you may fall into a tank," or the railway company which warns of the dangerous roof over what is the sole approach to the ticket office can no longer absolve themselves from liability by that warning alone. On the other hand, where a customer does not heed the warning of a shopkeeper not to go to the far end of the shop because there is a dangerous hole, it might presumably be held in all the circumstances that the common duty of care owed to him under the Act has been discharged. If the defendant does not know of the danger he cannot rely on section 2(4)(a), although he may still have a defence under section 2(1).61

57. Occupiers' Liability Act, 1957 5 & 6 Eliz. 2 ' 1 (Eng.).
58. Id. at ' 2(2).
60. Here it is valid to consider whether danger means the peril or the thing which creates the peril.
1) Assumption of risk

The common duty of care does not impose on an occupier any obligation to a visitor in respect of risks willingly accepted as his by the visitor (the question whether a risk is so accepted should be decided on the same principles as in other cases in which one person owes a duty of care to another). According to the ordinary principles of negligence, a defendant breaches no duty of care towards a plaintiff who has voluntarily assumed the risk.

At common law no duty of care was owed to a visitor who had full knowledge of the nature and extend of the danger. Knowledge is not specifically mentioned as a relevant circumstance in determining whether the common duty of care has been discharged. But since the Act expressly provides that voluntary assumption of a risk discharges the duty of care, its silence about the effect of mere knowledge of the risk makes it clear that knowledge on the part of the visitor in itself no longer serves to discharge the duty of care. Yet the visitor's knowledge of the danger remains relevant in deciding whether in all the circumstances it was enough to enable him to be reasonably safe.

2) Liability towards neighbors

The risk created by dangers caused by the defective state of premises is not confined to entrants to those premises. Slates falling from roofs, crumbling walls, and dangerous activities carried out on a premises are just a few examples of risks as likely to endanger passers-by on the highway, or persons on adjoining premises, as if to injure persons actually on the occupiers' premises. The circumstances in which a duty of care is owed to such persons by the occupier of a premises therefore warrant brief consideration.

An action in nuisance, derived from public nuisance, often is the central strategy of those injured on a highway as a result of harmful conditions on adjoining land. Because of this historical anomaly, in a large number of situations a plaintiff may now sue either in negligence or in nuisance, both of which were pleaded. Often, it

62. Occupiers' Liability Act, 1957 5 & 6 Eliz. 2 ' 2(5) (Eng.).
seems quite fortuitous which tort is relied upon: if, for instance, some act of negligent omission stands out, the claim will often be negligence. The 1948 decision in Holling v. Yorkshire Traction Co., Ltd. is a typical example of this ambivalence:

The defendants emitted so much steam and smoke on to the highway from their adjoining factory that the view was obscured and two vehicles collided, killing the plaintiff, who was on the highway. It was held to be negligence on the part of the defendant to fail to post a man at each end of the affected area. They were also held liable in nuisance.66

Accordingly, there is no room for doubt that the ordinary principles of negligence can be applied where highway users are injured because of harmful operations being carried out.67

Occupiers are also under a general duty to take reasonable care to prevent dangers existing on their premises from damaging persons or property on adjoining premises.68 This is so whether the danger arises from disrepair on the premises, or some natural or man-made hazard such as fire caused by lightning striking a tree.69 It has been held that where adjoining properties have mutual rights of support, an occupier who negligently allows property to fall into dereliction so as to damage the adjoining premises is liable in negligence as well as in nuisance.70 There are two issues of particular difficulty affecting the duties of care owed, inter se, by occupiers of adjoining premises.

First, where a plaintiff tenant sues his landlord for damage resulting from the defective state of repair of premises retained by the landlord the case-law is somewhat ambivalent. The facts in Cunard v. Antifyre, Ltd.71 were that some defective roofing and guttering, which formed part of the premises retained by the defendant landlord, fell into a part of the prem-

67. See, e.g., Hilder v. Associated Portland Cement Manufacturers Ltd., [1961] W.L.R. 1434, 1961 3 All E.R. 709 (In this case the defendant occupiers of field allowed children to play football in the field and were held liable to a motor-cyclist who, when driving along adjoining highway, was knocked off his machine by a ball kicked by the children from the field).
68. Hughes v. Percival, (1883) 8 App. Cas. 443 (the premises for the benefit of which the present rule applies are those in respect of which someone other than the defendant has a vested interest in possession). See also, Murphy v. Brentwood DC, [1991] 1 A.C. 398.
69. Goldman v. Hargrave, [1967] 1 A.C. 645, [1966] 3 W.L.R. 513 (PC) (Water normally percolates from the defendants land to the plaintiffs, and the defendant pumps out the water from his land, and by so stopping the subterranean flow causes settlement damage to the plaintiffs land, the plaintiff has no remedy, because the defendant has no duty to adjoining occupiers in respect of percolating water; Langbrook Properties Ltd. v. Surrey CC, [1970] 1 W.L.R. 161, [1969] 3 All E.R. 1424).
70. Bradburn v. Lindsay, [1983] 2 All E.R. 408.
71. [1933] 1 K.B. 551 (the principle on which this case was based was approved obiter by Parcq J in Bishop v. Consolidated London Properties Ltd., (1933) 102 L.J.K.B. 257, 262).
ises leased by him to the plaintiff-tenant. As a result, his wife was injured and his goods were damaged. Damages in general negligence were awarded to both the tenant and his wife.

However, in *Cheater v. Cater*, the Court of Appeal had held earlier that a landlord, who had leased a field to a tenant at a time when there was a yew tree on the adjoining premises retained by the landlord, was not liable in negligence when the tenant’s horse died by eating leaves from a tree which was then in the same state as the date of the lease. The Court of Appeal in *Shirvell v. Hackwood Estates Co., Ltd.*, a later case, questioned *Cunard v. Antifyre Ltd.* and held that a workman of a tenant could not recover in negligence from a landlord whose tree on adjoining land fell on him. In *Taylor v. Liverpool Corp.*, the plaintiff, the daughter of a tenant of one of the defendant landlord’s flats, was injured by the fall of a chimney stack, belonging to these flats, in the yard adjoining the premises. The landlords had negligently maintained this chimney, which formed part of the building retained by them.

The judge found for the plaintiff in negligence, following *Cunard v. Antifyre, Ltd.*, and distinguishing *Cheater v. Cater* on the grounds that the tenant had there impliedly agreed to take the risk in respect to the danger existing on the premises at that time. His Lordship treated the observations in *Shirvells* case as *obiter* on the ground that no negligence had in any event occurred. The above notwithstanding, the principle in the *Cunard* case is more plausible than one which gives the landlord blanket immunity.

### 4. Conclusion

The two leading aircraft manufacturers, Boeing and Airbus Industrie, have forecast explosive growth in air traffic, producing a steadily increasing need for capacity and services. While Airbus industry has estimated that 13,000 new aircraft will be needed, at a value of U.S. $1.2 trillion by the year 2020, Boeing has made a more liberal estimate of 18,406 new aircraft valued at U.S. $1.25 trillion over the same period. ICAO has forecast an annual growth rate in air transport in excess of 5%

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72. [1918] 1 K.B. 247 (CA) (not cited in *Cunard v. Antifyre Ltd.*).
73. [1939] 3 All E.R. 329.
74. [1939] 3 All E.R. 329.
76. *The Boeing Company, 1998 Current Market Outlook*, available at http://www.Boeing.com. (According to the Boeing forecast, the world fleet is expected to more than double by 2020, with total fleet size growing to 32,954 airplanes. Over the 20-year forecast period, 5,053 airplanes will be retired from active commercial service and will be replaced. An additional 18,406 airplanes will be needed to fill capacity demand.)
Bird Strikes Against Aircraft – Issues of Liability

2001

per cent over the next 10 years. This expected growth will involve larger investment requirements, \textit{inter alia}, in airport and aerodrome infrastructure, including infrastructural investment for ensuring safety of flight.

In terms of the post-accident economic, environmental and safety implications involved, bird strikes have numerous implications. From an economic perspective, where a bird strike damages an aircraft, apart from direct costs, such as repairs, which are not too difficult to quantify, there are indirect costs relating to delays, re-routing of passengers, non-productivity of an unserviceable aircraft, etc. As for environmental factors, such as those brought about by the jettisoning of fuel after an aircraft is debilitated by a bird strike, in view of the infrequent occurrences, they should primarily be viewed from a trade perspective. As to whether environmental concerns are sufficiently significant to be placed alongside economic and safety issues is a further question. The symbiosis of trade and the environment emerged as a critical issue for trade negotiators in the last stages of the Uruguay Round of discussions. At these discussions the focus remained on two approaches to the issue. The first approach was from the essentially pro-environment groups, who considered that those involved in international trade are primarily interested in the movement of their goods and therefore were not concerned about the environmental implications of their trading activities. The second approach was based on the belief that increased trading activity enhanced possibilities of solving environmental problems. This mode of thinking leaned toward sanctions being introduced against environmentally detrimental trading activity, using GATT (later WTO) as a tool of implementation. The official statement issued in support of the latter approach, which was not supported initially by the majority of States at the Uruguay Round, stated:

GATT Contracting Parties believe that the successful conclusion of the Uruguay Round was an important step towards creating the conditions for sustainable development. Trade liberalization and the maintenance of an open, non-discriminatory trading system are key elements of the follow up to UNCED (United Nations Conference on the Environment)

Developing countries, however, were reluctant to embrace the idea of using trade sanctions for the purpose of environmental protection


since their main priority was economic development, and they were not convinced that scarce resources should be deployed to protect the environment. Being a new challenge, environmental protection was viewed in the context of trade liberalization by the developing States in the following manner:

For developing countries, where poverty is the number one policy preoccupation and the most important obstacle to better environmental protection, global trade liberalization, coupled with financial and technological transfers, is essential for promoting sustainable development.80

Multilateral lending institutions such as the World Bank and the International Monetary Fund are beginning to place more emphasis on the environmental impact of projects funded by them. However, in the ultimate analysis, both international trade and environmental protection are key issues for development, and they should be viewed as tools that could result in a win-win situation for the parties concerned.

The most important issue, safety, calls for vigilance from the international community given the enormity of the threat to aviation safety posed by bird hazards, particularly in the face of encouraging forecasts for air transport demand in the future. Safety is the primary concern of the world aviation community at the present time. It is not only because the fundamental postulates of the Chicago Convention of 194481 call for the safe and orderly development of international civil aviation82 and mandate ICAO to ensure the safe and orderly growth of international civil aviation throughout the world,83 but also because the aviation world faces a critical era where, in the words of Dr. Assad Kotaite, President of the ICAO Council, “the international aviation community cannot afford to relax its vigilance . . . . ICAO would continue to take timely action to ensure safety and security standards are in effect, and that deficiencies are properly and efficiently addressed.”84

The most relevant provision in the Chicago Convention which affects the subject of safety, particularly in the context of bird strikes against aircraft, is Article 12, which requires each contracting state to maintain aviation regulations in conformity, to the greatest possible extent, with those established under the Convention. Indisputably, such a responsibility should fall on the entire world civil aviation community. As mentioned earlier, the methodology for this proposition is already in place, in the form of ICAO Standards and Recommended Practices (SARPs). The

80. Id.
82. Id. at Preamble.
83. Id. at art. 44 (a).
84. Dr. Assad Kotaite, President of the ICAO Council, ITA Press Release 284 at p. 10.
solution, however, is elusive, purely because ICAO SARPs do not have absolute powers of enforceability under international law.

ICAO promulgates its SARPs through its 18 Annexes to the Chicago Convention, one of which is Annex 14, containing key provisions on bird strike avoidance. Article 54(l) of the Chicago Convention prescribes the adoption of international standards and recommended practices and their designation in annexes to the Convention, while notifying all contracting states of the action taken. The fundamental question which has to be addressed in limine, in the consideration of the effectiveness of ICAO's SARPs, is whether SARPs are legislative in character. If the answer is in the affirmative then, at least theoretically, one can insist upon adherence to SARPs by states.

The adoption of SARPs was considered a priority by the ICAO Council in its Second Session (2 September-12 December 1947)\(^85\) which attempted to obviate any delays to the adoption of SARPs on air navigation as required by the First Assembly of ICAO.\(^86\) SARPs inevitably take two forms: a negative form (e.g., that states shall not impose more than certain maximum requirements) and a positive form (e.g., that states shall take certain steps as prescribed by the ICAO Annexes).\(^87\)

As has already been mentioned, Article 37 of the Convention mandates each contracting state to collaborate in securing the highest practical degree of uniformity in regulations, standards, procedures and organization in relation to international civil aviation in all matters in which such uniformity will facilitate and improve air navigation. Article 38 obligates all contracting States to the Convention to inform ICAO immediately if they are unable to comply with any such international standard or procedure and notify differences between their own practices and those prescribed by ICAO. In the case of amendments to international standards, any state which does not make the appropriate amendment to its own regulations or practices shall give notice to the Council of ICAO within 60 days of the adoption of the said amendment to the international standard or indicate the action which it proposes to take.

There is no room for doubt that the Annexes to the Convention or parts thereof lay down rules of conduct both directly and analogically. In fact, although there is a conception based on a foundation of practicality, ICAO's international standards that are identified by the words "contracting States shall" have a mandatory flavor while recommended practices identified by the words "contracting States may" have only an

\(^85\) Proceedings of the ICAO Council 2nd Session 2 September-12 December 1947, Doc 7248 - C/839 at 44-45.

\(^86\) ICAO Resolutions A-13 and A-33 which resolved that SARPs relating to the efficient and safe regulation of international air navigation be adopted.

advisory and recommendatory connotation. It is interesting that at least one ICAO document requires States under Article 38 of the Convention, to notify ICAO of all significant differences from both standards and recommended practices, thus making all SARPs regulatory in nature.88

Another indicia of the overall ability of the Council to prescribe civil rules of conduct on a strict interpretation of the word is Article 22 of the Convention, in which each contracting State agrees to adopt all practical measures through the issuance of special regulations to facilitate air navigation. This provision can be regarded as an absolute rule of conduct that responds to the requirement in Article 54(l) of the Convention. Furthermore, the mandatory nature of Article 90 of the Convention, that an Annex or amendment thereto shall become effective within three months after it is submitted by the ICAO Council to the contracting states, is yet another pronouncement on the power of the Council to prescribe rules of state conduct in matters of international civil aviation. A fortiori, it is arguable that the ICAO Council is seen not only to possess the attribute of the term “jurisdiction” (the power to make rules of conduct) but also the term “jurisdiction” (the power to enforce its own rules of conduct). The latter attribute can be seen where the Convention orders contracting States to not allow airlines to operate through their air space if the Council decides that the airline concerned is not conforming to a final decision rendered by the Council.89 This is applicable when such an airline is found not to conform to the provisions of Annex 2 to the Convention, which derives its validity from Article 12 of the Convention relating to rules of the air.90 Indeed, it is very relevant that Annex 2, the responsibility for the promulgation of which is given to the Council by virtue of Article 54(l), sets mandatory rules of the air, making the existence of the legislative powers of the Council an unequivocal and irrefutable fact.

Given ICAO’s interest and powerful regulatory base, it now behooves both national administrations and private autonomous entities responsible for aircraft and passenger safety to take action consistent with

88. Aeronautical Information Services Manual, ICAO Doc 8126 -0 AN/872/3. (ICAO Resolution A 1-31 defines a Standard as, “any specification for physical characteristics ... the uniform application of which is recognized as necessary ... and one that States will conform to.” The same resolution describes a Recommended Practice as, “any specification for physical characteristics ... which is recognized as desirable ... and one that States will endeavour to conform to ... “). T. Buergenthal, Law Making in the International Civil Aviation Organization, 1969, p.10 also cites the definitions given in ICAO’s Annex 9 of SARPs).


90. Id. at art. 12 (stipulates that over the high seas, the rules in force shall be those established under the Convention, and each contracting State undertakes to insure the prosecution of all persons violating the applicable regulations).
ICAO's guidelines to ensure an adequate response to the problem of bird strikes. In the absence of such a response, the issue of the liability of a state or entity, as the case may be, could be established if satisfactory preventive action is not taken, particularly in the face of the explicit guidance material that already exists.
Transportation Education at the University of Denver*

1. Introduction

Rising majestically west of downtown Denver stands Mount Evans, towering 14,264 feet above sea level. The mountain was named after John

* The authors would like to thank Prof. Royce Bowden of Mississippi State University, and Cathy Johnson of the University of Denver for their work in putting together some of the information contained herein describing the National Center for Intermodal Transportation. Johanna Kelly of the University of Denver also provided information describing the relationship between the University of Denver and the Transportation Lawyers Association. Former Dean Robert Yegge also provided insights as to how the relationship began.

* Paul Stephen Dempsey is Tomlinson Professor of Law & Director of the Institute of Air & Space Law at McGill University. From 1979-2002, he was Professor of Law and Director of the Transportation Law Program, at the University of Denver. He also served as Director of the National Center for Intermodal Transportation. A.B.J., University of Georgia, 1972; J.D., University of Georgia, 1975; L.L.M. (summa cum laude) National Law Center, George Washington University, 1978; D.C.L., McGill University, 1986. Interstate Commerce Commission (1975-1977); Civil Aeronautics Board (1977-1979). Prof. Dempsey is a member of the Bars of the State of Georgia and the District of Columbia.

** Andrew R. Goetz is Professor of Geography, University of Denver. B.A., Northwestern University, 1980; M.A., Kent State University, 1984; PhD, Ohio State University, 1987.

*** Joseph Szyliowicz is Professor of International Studies, University of Denver. B.A., University of Denver, 1953; M.A., School of Advanced International Studies, The Johns Hopkins University; PhD, Columbia University, 1961. He is the Founder of ITI and served as its director and director of NCIT until 1999.

87
Evans, a true renaissance man. Evans had made his fortune investing in railroads—the Chicago & Evanston Railroad and the Chicago & Fort Wayne Railroad. He founded the Illinois Republican Party, and was elected to Congress, where he became friends with Abraham Lincoln. A medical doctor, Evans helped found Mercy Hospital in Chicago, and in 1851 Northwestern University, chairing its Board of Trustees until his death in 1887. Today the city of Evanston bears his name.

President Abraham Lincoln asked Evans to leave Illinois, and become the second Territorial Governor of Colorado, then largely an unspoiled wilderness. In Colorado, John Evans founded a second great educational institution—the University of Denver (originally Colorado Seminary), in 1864. Today, the University of Denver (or DU, as it is affectionately known) remains one of the few major private universities between Chicago and the West Coast.

But Evans was not to leave his contribution to Colorado there. The first transcontinental railroads largely bypassed the Denver area, and only took in the corners of eastern Colorado. The Union Pacific cut north through Cheyenne, Wyoming, then west to Promontory Point, Utah, where the link was completed on 10 May 1869.1 Denver’s existence as a commercial center was threatened, as many anticipated that Cheyenne and other towns along the railroad would become the major regional cities. The vice president of the Union Pacific, Thomas Durant, described Denver as “too dead to bury.”

But Denver was full of pioneer spirit, and not about to lie down and die. Recognizing the vital importance the rail avenue would play in the economic growth and prosperity of his adopted city, in 1867, Evans founded the Denver and Pacific Railway & Telegraph Co., which built a spur line from Denver to Cheyenne. The first Denver and Pacific train roared into Denver in June 1870, quickly followed by trains from the Kansas Pacific Railroad and the Denver & Rio Grande Railway. Denver’s fortunes reversed, and the city again became the dominant commercial center of the Rocky Mountain West.

Evans had caught transportation fever, and it was now in his blood. In 1872, he founded the Denver, South Park and Pacific Railroad to serve the mining towns in the Colorado Rockies.2 In addition, he founded the Denver & New Orleans Railroad in 1881.3 His son, William Evans was also to become a rail baron, taking over the Denver, Northwestern, and Pacific Railroad, and supported development of the Moffat Tunnel (cut

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1. Similarly, the Atchison, Topeka & Santa Fe reached Pueblo in 1876, then turned south to lay track over Raton Pass into New Mexico in 1878.
2. This railroad was subsequently taken over by the Union Pacific.
3. This railroad was subsequently renamed the Denver, Texas and Gulf Railroad, and acquired by the Denver, Texas and Ft. Worth Railroad.
through the continental divide) that was to provide Denver with a solid east-west transcontinental link. His grandson was elected chairman of the Denver & Rio Grande Western (now part of the Union Pacific-Southern Pacific system).

During the ensuing years, Denver has become the dominant rail, highway, and aviation hub on the Front Range, and as a consequence the commercial, cultural and educational center for the Rocky Mountain region. Much of that we owe to John Evans—his profound insight into the vital importance of transportation and education, and his tenacious dedication to their growth.

2. The Transportation Challenges of the 21st Century

As we enter the 21st Century, it has become increasingly clear that the existing transportation system suffers from major deficiencies. Many of these were brought home vividly to Americans with stunning suddenness by the terrorist attacks of 11 September 2001. It became apparent that the security system required strengthening, that the United States is excessively reliant on aviation for intercity travel, that except for the North-East Corridor, intercity commercial passenger transportation alternatives are practically non-existent, that connectivity between the modes is very poor, and that transportation remains highly dependent on petroleum supplies imported from a volatile region. Nor can one overlook the degree to which the conventional transportation networks, built around the individual modes, have already reached service and capacity limits in many areas. Problems of congestion and pollution are commonplace, accidents resulting in deaths and injuries persist at troubling levels, inadequate land-side connections devalue the convenience of air travel, and rural areas continue to lose those critical transport connections that are the basis of their vitality and well-being.

These defects, which have been recognized by many transportation professionals for a number of years, reflect the fundamental fact that the U.S. transportation system remains a system of modes rather than an integrated transportation system that is characterized by efficient connections, choices for passengers and shippers, coordination between modes, and cooperation between government agencies at all levels and the private sector. It has become obvious in recent decades that this pattern no longer suffices, that it cannot meet the growing demands for greater personal mobility and the movement of ever larger amounts of freight. Furthermore, this system possesses severe bottlenecks and imposes heavy social and environmental costs upon populations everywhere. Accordingly there is a great need to pursue ways of developing mobility solutions that utilize each mode’s commercial and technical advantages so as
to create an intermodal system that minimizes negative impacts and enhances the productivity of local, regional, national, and international transportation systems. Such a system would benefit young and old alike, stimulate the economy, and promote sustainable development by enhancing efficiency, safety, mobility, and equity.

Many obstacles hinder the achievement of such a vision. Most importantly, each of the modes—air, marine, rail, and road transport—which have, through competitive endeavors, made possible the growth of the U.S. economy and the globalization of world trade to an unprecedented degree, has developed its own infrastructure, culture, and orientation over the years. Overcoming traditional patterns and replacing them with new ones is never a simple matter. In this case, such difficulties are enhanced by the complexity of the coordination and integration that is required, given the variety of public and private actors involved. Clearly the creation of new institutional arrangements will require significant developments in such areas as technology, policy, planning, law and regulation, infrastructure and human resources. Innovative educational and research programs are needed to address these important areas.

The University of Denver is stepping up to this challenge by offering several multidisciplinary educational programs in the transportation arena. In 1991, Chancellor Dan Ritchie announced the creation of an interdisciplinary Center for Transportation Studies at the University of Denver, which later became the Intermodal Transportation Institute. Northwestern University too, has been a major contributor to transportation education for decades. Both of John Evans' higher educational creations are now firmly committed to the same endeavor.

The Intermodal Transportation Institute (ITI) builds on a foundation of earlier transportation educational activities offered at the University of Denver. In the 1880s, engineering professor Sidney Short invented one of the early prototypes of the electric streetcar. In the late 1940s and 1950s, the University offered an educational program in aviation, including pilot training. University aviation researchers conducted an important study on the future of Stapleton Airport, recommending a major expansion in anticipation of booming air traffic in Denver. The transportation focus grew with the inauguration of the Transportation Law Institute in 1967, and the creation of the Transportation Law Program in 1976. The educational emphasis began in motor carrier law and regulation and has since expanded to embrace bus, rail and air transport. ITI broadened the University's focus by bringing together various perspec-

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The creation of NCIT has assisted ITI in its mission to establish educational, research, and technology transfer programs in the field of intermodal transportation. In 1998, ITI joined the Transportation Research Center at Mississippi State University in creating the National Center for Intermodal Transportation (NCIT), one of 33 University Transportation Centers supported by the U.S. Department of Transportation (DOT). The creation of NCIT has assisted ITI in its mission to establish educational, research, and technology transfer programs in the field of intermodal transportation. In 1999, ITI established the first-ever graduate degree program in intermodal transportation, the Master of Science in Intermodal Transportation Systems. One of the more important goals of the program is to encourage ‘out-of-the-box’ thinking about the future of transportation.

5. The Daniels College of Business includes faculty who focus on transportation logistics, customer service, air quality and transportation policy, alternative fuel production and distribution, and transportation economics and systems analysis. In 1999, the Daniels College of Business moved into a new $22 million building. The new facility is equipped with more than 2000 active Internet ports, allowing unparalleled access to information for both students and faculty. It is this advanced technology that allows collaboration between faculty, students, and members of the business community via online discussions, communication software, e-mail, chat rooms, and video conferencing.

Located in the technology core of the new Daniels College of Business building are also the Advanced Technology Center, the Educational Technology Center, and the Instructional Design Center. Each center is equipped with the most up-to-date technological equipment. The Educational Technology Center is equipped with the latest scanning and printing technology, graphic and web development tools, and video production equipment. The Advanced Technology Center is a part of the Daniels College that allows companies to display cutting-edge software and hardware that offers students accessibility to the latest software and equipment.

6. Transportation education and research is enhanced through the use of Geographic Information Systems (GIS) facilities available in the Department of Geography. These state-of-the-art facilities are housed in the newly renovated Keck Geosciences Center, and include a 20-seat GIS instructional lab, a 10-seat GIS research lab, Crime Mapping and Analysis lab, and Aerial Photography, Remote Sensing, and Cartography labs. The Geography Department enjoys a special relationship with the Environmental Systems Research Institute (ESRI), making all ESRI software products available, and maintains current licenses of AutoCAD Map, MapInfo, IDRISI, ERDAS Imagine, and other GIS, mapping, and image processing software.

7. Located in its newly renovated building, at a cost of over $1 million, the GIS enrolls over 300 graduate students, 25% of whom come from overseas. Several of these students have focused on transportation issues in the United States and abroad while pursuing M.A. and PhD degrees. Several courses also deal with transportation and related issues.
transportation that will stimulate development of the next generation of leaders in the intermodal industry.

All of these activities have laid a solid foundation for transportation studies at the University of Denver. This essay addresses the history of transportation education at the University, as well as how current programs are being fashioned to meet the challenging transportation needs of the 21st century.

3. The Transportation Law Program

This is an exceptionally challenging era for transportation, for the events of the past few decades have reached to the very core of the industry and its relationship with government. There are many who argue that, at least from a substantive standpoint, transportation is the most dynamic area in all of administrative law. It is precisely this powerful surge in regulatory and legislative interest and activity that gave birth to and insured the success of this academic program.

Transportation is the foundation infrastructure industry upon which the rest of commerce is built. It therefore serves as among the most important industries in any nation's economy. In 1887, it became the first industry to be regulated. And by the mid-1970s, it became the first to enjoy comprehensive regulatory reform.

Few areas of federal law have changed as rapidly and fundamentally as has transportation in the contemporary era. During the past decade, Congress has promulgated comprehensive regulatory reform legislation for each mode of transportation. These bills include:

- The Railroad Revitalization and Regulatory Reform Act of 1976
- The Air Cargo Deregulation Act of 1977
- The Airline Deregulation Act of 1978
- The International Transportation Air Competition Act of 1979
- The Motor Carrier Act of 1980
- The Staggers Rail Act of 1980
- The Household Goods Transportation Act of 1980
- The Bus Regulatory Reform Act of 1982
- The Shipping Act of 1984
- The Civil Aeronautics Board Sunset Act of 1984
- The Surface Freight Forwarder Deregulation Act of 1986
- The Negotiated Rates Act of 1993
- The Trucking Industry Regulatory Reform Act of 1994
- The ICC Termination Act of 1995

During this period, the Civil Aeronautics Board and Interstate Commerce Commission were "sunset," while their remaining regulatory re-
sponsibilities were transferred to the U.S. DOT and the Surface Transportation Board. The law has evolved rapidly and radically during this era, and economic regulation has been significantly constricted. This has, of course, enhanced the need for education in this field so as to understand the changes upon us. And reform has had a concomitant effect on law students. The competitive advantage of decades of regulatory experience is not as valuable as it once was. Our graduating law students begin the practice of transportation law on a nearly clean slate.

The Transportation Law Program at the University of Denver College of Law began in 1968 as a continuing legal education program for attorneys and practitioners—the Transportation Law Institute. Since its inception, the Institute has been jointly sponsored by the University of Denver and the Transportation Lawyers Association (TLA was formerly the Motor Carrier Lawyers Association). Ours has been a rich and rewarding relationship which over the ensuing years has matured into one of mutual admiration and common benefit in law and education. As former TLA President Richard Champlin wrote, “Education is clearly an important membership benefit that is provided by the Association through the Transportation Law Institute and a continuing key to increasing membership.”

In 1976, DU’s Transportation Law Program began to blossom with the injection of a series of annual economic contributions by TLA. This made possible the creation of a new faculty position devoted to the discipline of Transportation Law. The incumbent in that chair also serves as Faculty Editor of the Transportation Law Journal. In 1976, DU also assumed responsibility for publication of that periodical, which it shares with TLA’s Transportation Law Journal Board of Governors.

The Transportation Law Program was inaugurated in 1968 as a continuing legal education program for attorneys in transportation law—the Transportation Law Institute. It was expanded significantly in 1976 as a result of a generous series of annual grants by the Transportation Lawyers Association (formerly the Motor Carrier Lawyers Association [MCLA], a bar association comprised of attorneys who practiced before the Interstate Commerce Commission). As a result of this endowment,

8. In 1967, members of the Motor Carrier Lawyers Association (MCLA) and the association’s president determined that members of the transportation bar needed educational programs to keep current with the ever-changing nature of the transportation industry. Among those in the discussion were Alvin J. Meiklejohn, Jr. JD ’51 and John Thompson JD ’50. These gentlemen approached their alma mater, the University of Denver College of Law to propose a transportation law conference. Dean Robert B. Yegge met the idea with interest and enthusiasm. The first conference of the Transportation Law Institute (TLI) was held August 19-23, 1968. This annual Institute remained in Denver at the College of Law for seven years.

the law school was able to establish a chair in transportation law. The

10. Professor Paul Stephen Dempsey held the Transportation Law Chair from 1979-2002. Prior directors of this program have included Professor Andrew F. Popper (1976-1978) and visiting Professor Gale Norton (1978-1979), who subsequently became Secretary of the Interior in the administration of President George W. Bush. Both have made significant literary contributions in the field of transportation law. See, e.g., A. Popper, SHIPPER ANTITRUST LIABILITY IN A RATE-DEREGULATED MARKET: FUNDAMENTAL INQUIRIES AND ANALYSIS (1979); A. Popper, COLLECTIVE RATEMAKING: A CASE ANALYSIS OF THE EASTERN CENTRAL REGION AND A HYPOTHESIS FOR ANALYZING COMPETITIVE STRUCTURE, 10 Transp. L.J. 365 (1978); A. Popper & Beabout, Finance Transactions-Jurisdiction in Motor Carrier Finance Transactions, Substantive Law 1 (1977); J. Reed, EQUAL ACCESS TO MASS TRANSPORTATION FOR THE HANDICAPPED, 9 Transp. L.J. 167 (1977); Note, 1976 CONGRESSIONAL ACTION ON THE CLEAN AIR ACT: AUTOMOBILE AND TRUCK EMISSION STANDARDS, 8 Transp. L.J. 353 (1976). Andrew F. Popper was hired by the DU College of Law as the M.C.L.A. Professor of Law and commenced his tenure in September, 1976. In his first report to the program, he outlined his course work, research activity, work with the TU and his interactions with the MCLA. In the fall of 1977, Dean Yegge encouraged Popper in his activities with the Journal and MCLA, indicating that it was "crucial" for Professor Popper to create a thoughtful plan for the development of the Transportation Law Program at the College of Law. Additionally, they agreed that the program would be strengthened significantly with the infusion of scholarship funds to support students attending DU with an interest in transportation law.

Program has been expanding rapidly to match the vigorous development of law and economic regulation in this field, and now consists of five major components:

1. The Transportation Law Institute
2. The Academic Program
3. Transportation Law Journal
4. The Transportation Law Society
5. The Transportation Scholarship Fund

3.1 The Transportation Law Institute

The concept of a continuing legal education program for attorneys specializing in transportation originated with members of the TLA. They initially envisioned an intensive educational experience for attorneys and practitioners in the field of motor carrier economic regulation by the Interstate Commerce Commission. The University of Denver, as an entity with broad experience in continuing legal education, was approached as a

potential cosponsor. This union has since produced a plethora of excellent educational programs.

After several decades of growth and development, the annual Transportation Law Institute has established itself as among the premier programs in the University of Denver’s continuing education schedule. The Institute, begun in 1968, is a joint effort of the College of Law and the Transportation Lawyers Association.

The concept of a continuing legal education program in transportation originated with members of the Motor Carrier Lawyers Association.\textsuperscript{11} They envisioned an intensive educational experience that would offer training to attorneys and practitioners in the burgeoning area of motor carrier regulation. Implementation of such a program required the expertise of an entity experienced in continuing legal education. The University of Denver College of Law was approached as a potential cosponsor. From this initial meeting has come a union that has produced many excellent educational programs.

Prior to 1980, the subject matter emphasis of the Transportation Law Institute rotated on an annual basis, usually devoting an entire program to the issue of motor carrier entry, ratemaking, finance transactions or liability for loss and damage. With the challenges posed by deregulation in the contemporary era, the educational program was expanded to include the emerging legal problems in the fields of bankruptcy, labor-law, antitrust, environmental, and safety regulation, as well as intermodal and rail transportation issues.

The site of the Transportation Law Institute was at the University of Denver for its first seven years, followed by TLIs in the summer Rocky Mountain resorts of Colorado and Utah. The American Bar Association and the Association of Transportation Law, Logistics & Policy became co-sponsors of the TLI in the 1980s. The TLI then began to be held at locations throughout the United States, such as Scottsdale, Washington, D.C., San Francisco, and San Antonio.\textsuperscript{12}

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\textsuperscript{11} In particular, John Thompson, Al Meiklejohn, Jr., and then-MCLA President, Ewell Muse, Jr. \textit{Louis Smith & Richard Champlin, The Millennium History of the Transportation Lawyers Association} (2000).

\textsuperscript{12} In 1987, Dean Edward Dauer negotiated with the Association of Transportation Practitioners (ATP) for joint sponsorship of the TLI, starting with the conference in 1988. This agreement was announced to the TLA executive committee by then-president Richard H. Champlin in a memo on 14 December 1987. This co-sponsorship split the costs and profits between DU and ATP. In 1999, new protocols were agreed to on the joint sponsorship of the TLI between DU, TLA, the Association for Transportation Law, Logistics and Policy [ATLLP] and the ABA. For a history of the TLI, see \textit{Louis Smith & Richard Champlin, The Millennium History of the Transportation Lawyers Association} (2000).
3.2 The Academic Program

The University of Denver offers an advanced academic program in transportation law, including introductory courses, seminars, independent study, and clinical internships. In the aggregate, this educational structure provides a comprehensive review of the legal, regulatory, and economic problems confronting transportation. The courses include, but are not limited to, a review of the economic regulation of each mode of transportation (i.e., rail, motor, pipeline, maritime, and air carriers) by the relevant regulatory agencies (i.e., the U.S. DOT, the Federal Maritime Commission, the Surface Transportation Board, and to some extent the Departments of State, Energy and Justice). These courses also provide a review of the regulation of international transportation by the United States and foreign governments pursuant to a wide range of bilateral and multilateral agreements. Of course, within this broad framework, students are exposed to issues in urban mass transit, highway development, contracts of carriage, insurance and liability for loss and damage in transit, and the plethora of environmental, energy, antitrust and labor law issues which regularly arise in transportation.

In addition to the introductory courses, which review the economic regulation of rail, motor, water, air, and pipeline transportation, and the liability, environmental, and energy problems associated therewith, the Program also offers advanced courses and seminars in the fields of Aviation Law, Admiralty, and International and Intermodal Transportation. The law school also has offered a wide range of related courses, including Administrative Law, Administrative Practice, Antitrust Law, Labor and Employment Law, Law and Economics, Public Utility Law, and Regulated Industries.

The heart of any educational program is its curriculum. The University of Denver College of Law offers its students the opportunity to focus their education in one of several areas of specialization, including advocacy skills, business planning, international law, natural resources, tax and transportation. All J.D. candidates are required first to fulfill the educational obligations of the required curriculum, which consumes more than half of a student’s legal education at our law school. Included within the required curriculum are courses that serve as a foundation for that which follows, including the electives they may take in the various fields of government regulation. Among these is Administrative Law, a required course that offers a comprehensive overview of the practice and procedure of government agencies, with a particular emphasis on the ins and outs of the Administrative Procedure Act. Also of manifest importance is the required course of Constitutional Law.

The University of Denver offers a comprehensive academic program
in Transportation Law with a wide spectrum of introductory and advanced courses and seminars, as well as independent study and internship opportunities. These attempt to provide educational exposure to the legal, regulatory, economic and political developments in transportation.

The curriculum of the Transportation Law Program begins with the basic course in Transportation Law. This course offers the student an overview of all aspects of law and regulation of each of the several domestic transport modes (i.e., air, motor, rail and water carriers, pipelines, transit, freight forwarders and brokers). It also provides students with a survey of liability issues surrounding loss and damage to freight in transit, labor law issues in transportation, antitrust, safety regulation, environmental regulation, and the government's role in providing transport services (e.g., Amtrak, Conrail and urban mass transit).

Beyond the basic course in Transportation Law, students are free to take electives in Admiralty, Airline Business & Law, Antitrust, Aviation Law, Environmental Law, Labor & Employment Law, Law & Economics, Public Utilities Law, Space Law and Regulated Industries, as well as seminars in International Transportation Law.

Students in the Transportation Law Program have the opportunity to participate in externships in federal regulatory agencies or major transportation businesses. The University of Denver recognizes the educational value of this "hands-on" experience, and extends academic credit for it.

Students at the University of Denver also have the opportunity to develop their legal research and writing skills by participating as members of the Staff and Editorial Board of the nation's leading periodical in its field—the Transportation Law Journal. Ordinarily, students join the TLJ during their second year of law school. They perform one academic quarter as a candidate, during which they are given an examination that tests their familiarity with the "blue book" system of law review citation. They are also given a series of traditional law journal staff assignments, including "spading and critiquing" a manuscript submitted for publication, and "citing and sourcing" or "blue booking" footnotes. Upon successful completion of these tasks, at the end of the candidacy quarter, the student is elected to Staff.

Staff members are eligible to earn academic credit for their work on the Journal. They are expected to contribute 30 hours of work for each hour of academic credit earned. During their final year of law studies at the University of Denver, students may elect to serve as an Editor on the periodical. They must first submit a piece of scholarly research of publishable quality to the Faculty Editor of the Journal. If it is approved, the existing editors decide who shall be elected to fill vacancies on the Editorial Board. Editors are eligible to receive up to three hours of academic credit for it.
credit per quarter. Again, students are expected to put in 30 hours of work for each hour of academic credit earned. An overall ceiling of 6 hours of credit is imposed on Journal activities.

The DU law students who serve as editors and staff members of the TLJ review and edit a wide range of scholarly literary products submitted by attorneys, economists and government officials. They also have an opportunity to publish their own literary contributions as Notes, Comments, or Recent Decisions. The Journal works closely with all student authors in an effort to develop legal research and writing skills. Since the legal profession is, predominantly, a literary profession, the development of such skills is absolutely essential to the successful practice of law.

### 3.3 Transportation Law Journal

Because the legislative and regulatory events of the past several decades have been so significant, much of the legal literature in the field of transportation has been rendered virtually obsolete. As a result of the controversy surrounding the issue of regulatory reform in transportation, and the increased attention given this lively issue by the President, the Congress, the regulatory agencies themselves, and the media, the Journal has become an increasingly important forum for continuing debate, an important means of disseminating information, and an invaluable research tool for attorneys and practitioners attempting to comprehend the rapidly evolving regulatory structure.

From the subscribers' perspective, a legal periodical serves two primary functions: (1) as source of information; and (2) as a forum for the contemporary debate over pertinent legal, economic, and political issues. Many of the Journal's articles have surveyed the revolutionary developments in transportation. In addition, several distinguished attorneys,

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13. For example, the Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705 (1978), promulgated in October of 1978, is probably the most significant piece of legislation in the past 40 years of regulation, for it effectively reversed the traditional course of entry and pricing controls for domestic passenger transportation, and promises to abolish the Civil Aeronautics Board by 1985. Similarly, the Air Cargo Deregulation Act, Pub. L. No. 95-163, 92 Stat. 1278 (1977), created virtually unlimited pricing and entry freedom for air carriers engaged in the domestic transportation of commodities. See 49 U.S.C. § 1388 (1979). The Motor Carrier Act of 1980, Pub. L. No. 96-296, 94 Stat. 793, and the ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803, were also significant deregulation bills. Likewise, in rail transportation, fundamental changes in the traditional regulatory structure were made by the Railroad Revitalization and Regulatory Reform Act, Pub. L. No. 94-210, 90 Stat. 147 (1976), and the Rail Passenger Service Act, Pub. L. No. 95-421, the former attempting to improve the poor financial health of the rail freight industry (e.g., Conrail), and the latter establishing Amtrak as a corporation to provide national rail passenger service.

economists, and public officials have employed the Journal as a means of debating the strengths and weaknesses of the regulatory reform movements before a national audience of 'subscribers who will be directly affected by the outcome.15 Considering the magnitude of the legislative and regulatory proposals now before the Congress and the pertinent federal agencies, the events of the next decade will accentuate the importance of these two functions.

From the publisher's perspective, a legal periodical performs two separate functions: (1) to provide law students with an opportunity to enhance their essential literary skills; and (2) to improve the national notoriety and prestige of the educational facility or bar organization with which it is affiliated. The law students of the University of Denver who serve as editors and staff of the Journal have an opportunity to review and edit a wide range of scholarly literary products submitted by distinguished attorneys, economists, and public officials, and thereby to explore an exceptionally energetic and fascinating area of the law. Moreover, the students also have abundant opportunities to publish their own literary contributions as Notes, Comments, or Recent Decisions, in a highly respected legal journal.

The Journal reaches a vast national and international audience, with subscribers located throughout the United States, Canada, Europe, Japan, and Australia. The Journal is the only legal periodical that offers a comprehensive review of all aspects and modes of transportation.16 For

Terminal Areas: History, Development, Expansion, Deregulation, 10 TRANSP. L.J. 171 (1978); McFarland, Work in Progress - The Latest Solution to the Small Shipment Problem, 10 TRANSP. L.J. 201 (1978); Strasheim, The Scheduling and Route Impacts on Increased Fare Flexibility, 10 TRANSP. L.J. 269 (1978); O'Neal, Price Competition and the Role of Rate Bureaus in the Motor Carrier Industry, 10 TRANSP. L.J. 309 (1978); Erenberg & Kasson, The Case-in-Chief: Reform as Yet Unfulfilled, 9 TRANSP. L.J. 37 (1977); Gillick, Recent Developments in Airline Tariff Regulation: Procedural Due Process and Regulatory Reform, 9 TRANSP. L.J. 67 (1977); Ripplcy, Highway Rights of Way on Public Lands, 9 TRANSP. L.J. 121 (1977); Bober, Elimination of Gateways in Section 5(2) and 212(b) Proceedings, 9 TRANSP. L.J. 257 (1977).


that reason, and because this is such a rapidly developing area of the law, its audience is growing rapidly, and increasingly relying on the Journal as an essential research tool. As such, it strives to provide its national readership with the highest caliber of writing. It is a major source of information for the practicing bar as well as for scholars.

The substantive focus that defines the Journal's scope is diverse and includes all areas of transportation law. The following is a partial list of topics which have been dealt with in the past: land-use planning, labor law, commercial law, corporate law, civil rights, anti-trust and trade regulation, air, motor and rail carrier regulation, airport noise regulation, highway planning, auto emissions, coal slurry pipelines, shipping and deepwater ports, the transportation of hazardous materials, and environmental regulation.

Over the years, the Journal has been a lively forum for the debate over contemporary legal, political and economic issues confronting the industry. Major symposium issues have addressed the following topics:

International and Intermodal Transportation—Vol. 12(1)
Urban Mass Transportation—Vol. 12(2)
Transportation Regulation: Past, Present and Future—Vol. 13(1)
Transportation Deregulation—Vol. 13(2)
Intrastate Regulation—Vol. 14(2)
The ICC: The First 100 Years—Vol. 16(1)
Regulation of Intrastate Motor Carriers—Vol. 17(2)
Airlines & the Future of Aviation—Vol. 20(1)
International Transportation Law—Vol. 23(3)
Airline Safety & Security—Vol. 25(2)
North American Intermodal Transportation Summit—Vol. 25(3)
The State of the Law in the Railroad Industry—Vol. 26(3)
Intermodal Transportation—Vol. 27(3)
Aviation Issues in the Law—Vol. 28(2)
Intermodal Founding Fathers—Vol. 28(3)17


17. Beyond these significant symposia, the Journal has served as a soap box from which individuals have debated the virtues and sins of regulation and deregulation. On two occasions, vigorous debates on the wisdom of motor carrier ratemaking antitrust immunity were conducted between Washington transportation consultant Jesse J. Friedman and AEI Resident Scholar
The *Journal* has become a significant means of disseminating information and an important forum for the public policy debate over regulation and deregulation. It has an international audience of subscribers—from Canada to Yugoslavia, from Norway to Australia, from New Guinea to Japan, and from Tanzania to Thailand. Today, more than 1,500 individuals, law firms, government agencies, and libraries subscribe to the *Journal*. All members of the Transportation Lawyers Association receive the periodical as one of the perquisites of their membership.

The *Journal* was inaugurated in Fall 1968 under the direction of Professor David J. Baum of Osgood Hall University Law School of York University (Toronto, Canada), who published the Journal in conjunction with the Motor Carrier Lawyer’s Association (now the TLA) Board of Governors. Since 1976, it has been published by the University of Denver College of Law.

3.4 The Transportation Law Society

The Transportation Law Society is a student organization which provides a regular series of debates, speeches, and lectures on current issues in transportation. It was established in order to satisfy student interest in the exploration of current legal and economic issues in transportation, and to expand contact between students and outstanding authorities in the field of transportation. A number of distinguished individuals have spoken on topics as diverse as the “Airline Deregulation Act of 1978”, the “Rock Island Bankruptcy”, “Amtrak in the 1980s”, “The Future of U.S. Urban Mass Transit”, “Airline Labor Law”, “Predation and Competition in the Airline Industry”, and “Proposals for Legislative Reform of Surface Transport Regulation.”

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James C. Miller, in volumes 10(1) and 11(2) of the Journal. Mr. Miller went on to become President Reagan’s FTC Chairman, and David Stockman’s successor as Director of the Office of Management and Budget. And one will recall the infamous debate between Professors Dempsey and Hardaway in volumes 13(2) and 14(1) of the TLJ—the one in which Hardaway got it all wrong and Dempsey got it all right.

18. Over the years, the TLA Board of Governors has been chaired by a number of prominent transportation lawyers, including David Sutherland, Les Kehl, Rod Macdonald, and Mark Andrews.

19. Prior speakers have included Samuel Freeman (Vice President & General Counsel of the Rio Grande Railway), David Brichtson (Vice President & General Counsel of Frontier Airlines), William Thorns (Professor of Law, the University of North Dakota), Howard Beck (Executive Director of Denver’s urban mass transit administration, RTD), Randy Babbitt (President of the Air Line Pilots Association), Robert Britton (Vice President of American Airlines), Jim DeLong (Director of Denver International Airport), Jeff Potter (President and CEO of Frontier Airlines), Charles Hunnicut (U.S. DOT Assistant Secretary), and Michael Erenberg (Deputy Director of the Office of Proceedings, Interstate Commerce Commission).
3.5 The Transportation Scholarship Fund

The Marion F. Jones Scholarship and the TLA Scholarship were established at the University of Denver for students who seek to specialize in transportation law.20

3.6 Conclusion

Because this is such a rapidly developing field, it offers a marvelous opportunity for law students who would like to have a significant influence on the law early in their careers, for the regulators are grasping for innovative young attorneys to justify the application of regulatory philosophies which are radically different from those which have traditionally been applied. The unique educational opportunities available at the University of Denver in transportation law also enable students to gain exposure to administrative law and economic regulation, a field that now plays a significant role in virtually all of this nation's commercial activity. Attorneys and practitioners in this exciting area of the law seeking new associates, as well as transportation corporations seeking house counsel, recognizing the need for legal specialists to confront prudently the myriad of revolutionary regulatory demands imposed and opportunities offered by the Washington bureaucratic labyrinth, are recruiting our graduates.21

Before 1983, the College of Law was in downtown Denver, across the street from the City & County Building (city hall) and the art mu-

20. Among the requirements of this scholarship are:
(1) Any law student to be benefited shall have demonstrated financial need to the satisfaction of the Financial Assistance Committee; and (2) preference shall be given to junior and senior law students who have demonstrated past interest in Transportation Law, including such activities as participation on the Transportation Law Journal, past academic work, employment, writing, and current academic performance demonstrated by high scholastic achievement in Transportation Law courses.

21. The Placement Office of the University of Denver College of Law has compiled resumes and credentials on the students who are participating in the Transportation Law Program. As these students approach the end of their law school careers, we hope to have a specialized placement service for them. This service will only be of use if you, the potential employer, notify us of your needs in advance. We have several students who are interested in the practice of law in the transportation area as a fulltime profession. Additionally, we have a number of students who would be interested in working in the capacity of a law clerk or research assistant during our summer session. We also have the capacity to create internships in various private and public offices, and would be interested in knowing if you would like to have a transportation law clerk or intern working with you. Compensation and academic credit are arranged on an individual basis. Additional information concerning recruitment of the students in the Transportation Law Program may be obtained from:

Directors of Placement
College of Law
University of Denver
1900 Olive St.
Denver, CO 80220
The Intermodal Transportation Institute (ITI) was originally established in 1991 as the University of Denver’s Center for Transportation Studies to promote the vision of sustainable transportation systems worldwide. The Center brought together faculty members from international studies, geography, law, education, and business that were teaching and conducting research in the transportation field. It was felt that by providing an interdisciplinary umbrella organization for faculty and students interested in transportation, a critical mass could be attained, re-
sulting in a larger presence within and outside the University. This would give rise to more opportunities for expanded education and research. Much of the early focus was on aviation, security, and railroad safety, evidenced by faculty research projects, specific courses in transportation, and several conferences sponsored by the Center in the early and mid-1990s.22

In 1996, the name of the Center was changed to the Intermodal Transportation Institute to reflect more specifically its recognition of the close relationship between sustainable development and intermodal transportation—an integrated system that builds upon the strengths of each mode so that it is as efficient, environmentally benign and safe and secure as possible. It must incorporate new technologies, be subject to sound policies that recognize the interests of the different stakeholders, and be based on principles of equity and social justice. For us, intermodalism is the logical next step in the development of transportation.

The Intermodal Transportation Institute has filled a special niche. It met a local need because Denver lacked a comprehensive center of transportation studies. Nationally, many universities across the United States had established transportation centers but none focused on intermodalism and sustainable development. Each of these programs possessed considerable strengths but the great majority reflected either an engineering or a business/logistics orientation and had little interaction with other relevant disciplines or interest in the international dimensions of the subject (apart from supply chains). The ITI on the other hand, was committed to an interdisciplinary and international orientation from the outset, for its founding faculty recognized the degree to which globalization was transforming transportation networks, the importance of developments in other countries, and the degree to which the realization of an intermodal vision required insights and expertise from many disciplines.

Accordingly, ITI's faculty is truly interdisciplinary in terms of expertise and backgrounds. ITI is strongly linked to other academic units at the University of Denver including the Graduate School of International Studies, the Daniels College of Business, the Department of Geography and several conferences sponsored by the Center in the early and mid-1990s.22

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22. In 1991, the University sponsored two new major aviation conferences. The University's Graduate School of International Studies (GSIS), in cooperation with the Drug Enforcement Administration, sponsored a Conference on Drug Trafficking, Terrorism, and International Air Transportation. A second major transportation related conference, “Airlines and the Future of Aviation,” was organized by the College of Law, with help from the Westinghouse Corporation. Both were highly successful. In 1992, another major conference on “Airlines, Airports and Aviation,” cosponsored with the Smithsonian Institution's Air & Space Museum, was held in Washington, D.C. In 1993, the College of Law sponsored a major airport conference at the Denver Convention Center attended by several hundred experts from around the world. In 1996, a conference on Railroad Safety was held at the University, wherein former FRA Administrator Gil Carmichael delivered the keynote address.
with its GIS lab, the School of Education, the Department of Chemistry, and the College of Law which provides the only multimodal, and perhaps the most comprehensive, program in transportation law in the United States.

Given the critical role that infrastructure plays in transportation, ITI decided that, since its strengths lay in the social sciences, it should add to its expertise and enhance its impact by teaming with an institution that possessed strong engineering and computer resources. Accordingly, ITI partnered with Mississippi State University to form the National Center for Intermodal Transportation under the University Transportation Centers (UTC) Program of the U.S. DOT. The University of Denver and Mississippi State University were named as a center of excellence for Intermodal Transportation Systems Planning and Assessment in the 1998 Transportation Equity Act for the 21st Century (TEA-21).

From the outset, ITI was conceived as a “think and do” tank, committed to education, research, and service programs. Accordingly it established, under the leadership of Gilbert H. Carmichael, a former Federal Railroad Administrator and currently the Chair of the Amtrak Reform Council, a strong and effective Board of Directors whose members, leaders and pioneers in the intermodal transportation industry, passenger and freight, share an intermodal vision and are committed to building ITI into a national and international resource.

ITI has consistently been a leader in innovative thinking about transportation issues. Over a decade ago, it recognized the need for enhanced transportation security. It sponsored a workshop on this topic in the early 1990s and engaged in discussions with representatives of the U.S. DOT about the ways in which transportation education should be amended to include a security dimension. Subsequently ITI faculty participated in several meetings for that purpose, published papers dealing with national security, and helped organize workshops dealing with homeland defense and the role of transportation therein at the National Defense University and locally with the Denver Council on Foreign Relations.

Furthermore, ITI has taken the initiative in attempting to promote the concept of an ethical transportation system. At present there is no field of “transportation ethics” and few educational materials are available dealing with this issue, even though many transportation organizations have their own codes of ethics.23

ITI has also moved vigorously to promote its vision of an intermodal transportation system through its outreach, teaching and research activi-

23. In order to promote the concept, ITI faculty chaired panels at TRB and elsewhere on transportation ethics and ITI has consistently stressed this issue in all its activities.
ties. Most recently it published a “White Paper” entitled, “A New Transportation Agenda for America,” which summarized the lessons of 11 September 2001. It outlines the principles that should guide the transportation agenda and developed a framework for thinking about transportation, including twelve specific recommendations. This document was disseminated to the members of the Senate and House of Representatives, governors, government and state officials, and other interested parties.

The Faculty of the Intermodal Transportation Institute has identified the principal objectives of the Institute as follows:

1) to develop and implement significant research projects in the area of transportation involving students, faculty, and other professionals;

2) to develop and implement teaching programs at the graduate and undergraduate levels for students planning professional careers involving transportation;

3) to provide information to the local community about major issues in transportation through conferences, workshops, and other outreach activities;

4) to act as a focal point for transportation research, education, and communication in the region by identifying individual and group expertise, establishing coordinating mechanisms to enrich existing activities, and developing cooperative programs;

5) to provide a vehicle for dissemination of existing knowledge and new research findings to industry and government through consulting, conferences, seminars, and short courses for practitioners; and

6) to assist in the development of coherent transportation policies at local and national levels, both in the U.S. and abroad.

Such efforts are indicative of the many significant activities that ITI has undertaken in its effort to help bring a new kind of transportation system into being. Other teaching, research, and outreach activities that also deserve mention include:

1. Outreach

Recognizing the need to preserve the rich history of intermodalism should be preserved for posterity, research and educational purposes, ITI has sponsored two major activities. First, ITI collaborates with the National Freight Transportation Library to preserve personal and corporate collections. To date it has acquired the 60,000 volume historical collection of the ICC Library, the 3,500 volume U.S. Railway Association Collection, and the Stanton P. Sender Collection of Transportation
Legislative History. Second, ITI hosted the Intermodal Founding Fathers of North America Conference in July 1999. This historic conference provided an opportunity for over 40 industry pioneers to be interviewed as part of an oral history program. The proceedings of the Conference were published in the Transportation Law Journal (Summer 2001); the transcribed oral history interviews and the audio and video recordings are on deposit in the ITI Transportation Library Collections.

In keeping with its international orientation, ITI convened the first North American Intermodal Transportation Summit in October 1997. The U.S. Secretary of Transportation, the Secretary of Communications and Transportation of Mexico, and the Canadian Minister of Transport gathered to discuss intermodal transportation issues. They were joined by a roster of transportation executives from some of the preeminent companies of North America as well as leading academics. The Proceedings of the North American Intermodal Transportation Summit has been published by ITI as a separate volume and in the Transportation Law Journal (Summer 2000). Its success led to the organization of a second North American Summit but the events of 11 September and the 2002

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ITI has acquired library resources that are housed and maintained by Penrose Library. ITI has received three grants to augment the library’s holdings in the field of transportation. And, ITI acquired the 60,000-volume, unique, historical collection of the Interstate Commerce Commission (ICC) Library in August 1996. The nation's oldest regulatory agency, the ICC regulated the railroad, motor, bus, pipeline, and domestic water carrier industries from 1887-1995. The majority of the volumes in the collection pertain to the railroad industry, but the collection also contains important information on the history of the other modes as well. ITI also received the 3,500-volume US Railway Association Collection from Northwestern University in October 1997.

ITI has an alliance with the National Freight Transportation Library, Inc. (NFTL), whose mission is to preserve the archival, personal, and corporate collections of the freight and passenger transportation industries. With the assistance of NFTL, the ICC and US Railway collections were relocated to Denver with donated transportation and storage facilities. The Transportation Law Institute library resources are housed in Westminster Law Library at the University of Denver College of Law; the law library contains 271,000 volumes and 765 law journals.
U.S. Congressional elections forced its postponement to a Spring 2003 date.

ITI has also developed a close working relationship with the Chinese Academy of Transportation Sciences. Representatives of our organizations have exchanged several visits. An ITI delegation visited Beijing in 2000 and participated in the First Sino-American Intermodal Policy and Planning Symposium. This event attracted a large audience and involved meetings with high-level Chinese transportation officials. In June 2002, a CATS delegation paid a return visit to Denver and participated in the ITI/CATS Transportation Systems Conference which included speakers from academia, industry, and government officials, including representatives of the U.S. DOT.

2. Teaching

Following extensive research on the needed intermodal skills and content developed through several workshops involving its Board of Directors, ITI faculty established a rigorous, new, interdisciplinary Master of Science degree program in Intermodal Transportation Systems in Fall, 1999. The University of Denver thus became the first university to offer a graduate-level program specifically in intermodal transportation. The program embodies a global perspective, emphasizes an intermodal orientation, and actively involves Board members and industry professionals in its educational activities. Travel courses to visit intermodal facilities, such as in the Los Angeles/Long Beach area and the New York/New Jersey area, are important features of the curriculum. A capstone research project is required to complete the degree. Students have performed very well within this program (which will be discussed in greater detail below), and have obtained important positions within the intermodal industry. In 2000, a team of ITI students entered a national debate competition and won the first-place award.

Recognizing the need to provide professionals with distance learning opportunities, ITI has now redesigned this graduate program into an innovative interdisciplinary executive development program. This degree will be delivered through a combination of a concentrated onsite residency and an offsite delivery method to mid-level managers and executives.

ITI has also been concerned with the need to introduce high school students to intermodal transportation and the career potential. Accordingly, ITI, in cooperation with the Colorado Transportation Community, sponsored a career fair for high school and college students. It also organized and administered three tours in April 2001 at the Higher Education and Advanced Technologies Center in Denver; 65 students from three different high schools participated.
3. Research:

Numerous research projects have been conducted by ITI faculty and students. The following are highlighted to indicate the type of research that ITI has produced:

*Metropolitan Planning Organizations: An Assessment of the Transportation Planning Process.* This study was commissioned by the U.S. Congress in 1997 to improve the effectiveness of MPOs in meeting regional transportation needs. It examined transportation planning in Denver, Dallas/Ft. Worth, Phoenix and Seattle, focusing on such issues as need satisfaction, project prioritization, fiscal allocation, and equity and fairness of the MPO decisional process. A three-volume report was submitted to the U.S. Congress in March 2000.

*Identification of Needed Intermodal Skills and Development of Required Training Programs.* This comprehensive study was commissioned by Asia Pacific Economic Cooperation in January 2000. It involved workshops in Long Beach and Singapore, analyses of public and private sector skill requirements for intermodalism, and field research in Australia, Malaysia, and Japan including interviews with government officials, transportation professionals and academics. The final report was approved by the Asia Pacific Economic Cooperation (APEC) organization and published on its website. A summary was published in the *Transportation Law Journal.* On the basis of this work, the team was asked to conduct a workshop on intermodal skills at the APEC Transportation Working Group’s meeting in Manila, Philippines, March 2002.

*Treatise on Intermodal Passenger Transportation.* Generally speaking, there is a limited literature dealing with intermodalism. Although the freight side of intermodalism is covered in a useful volume, there is no similar work dealing with the passenger aspects. Accordingly research is presently underway to produce a volume that will be a useful text for students and a valuable reference for planners, industry executives, and public officials.

*Assessing Intermodal Transportation Planning in State Departments of Transportation.* Despite the growing concern with the need to create an intermodal system and the explicit legislative mandates contained in the Intermodal Surface Transportation Efficiency Act (ISTEA) and TEA-21 legislation that call for implementing intermodal planning initiatives, we presently have little information as to the degree to which the key agencies, i.e., the state DOTs, have moved in that direction. This project represents a preliminary effort to evaluate the progress that has been achieved in the ten years since ISTEA was enacted.

*Intermodal Transportation: Selected Essays.* Concerned with the need for educational reference materials dealing with intermodalism, ITI
faculty and other scholars joined to produce a volume dealing with important aspects of intermodalism including its problems and potentials, historical development, economic significance, and its legal dimensions. It was published by the NCIT as a separate volume in 2001 as well as in a special issue of the Transportation Law Journal (Summer 2000).

5. The National Center for Intermodal Transportation

TEA-21 created the National Center for Intermodal Transportation (NCIT), a partnership of DU and Mississippi State University (MSU). NCIT is among the youngest and least well funded of the University Transportation Centers (UTCs). Yet, by focusing its modest resources on an exceptionally important issue, we have achieved significant accomplishments in a remarkably short period of time.

Like the ITI, the NCIT’s focus on intermodal transportation reflects a primary policy objective of the nation’s transportation policy, as articulated by Congress in both the ISTEA of 1991 and the TEA-21 of 1998. The objective of both Congress and NCIT is to create a transportation environment that integrates all modes of transportation into a seamless, interconnected system, thereby relieving congestion and environmental pollution, while facilitating the expeditious, efficient, and economical movement of people and goods domestically and globally. If you consider the productivity improvements and the economic opportunities that have been created by the integration of the communications infrastructure via the internet, imagine the implications of integrating the nation’s transportation infrastructure. Working closely with ITI and its faculty, the NCIT has funded, at least in part, a wide range of ITI’s educational, research and outreach activities.

5.1 NCIT’s Educational Activities

NCIT seeks to establish viable education programs in intermodal transportation that incorporate its multidisciplinary nature, draw upon the resources of each university, utilize distance learning and other mod-

25. ISTEA signaled the beginning of a new era in transportation policy and planning through its explicit use of the word “intermodal” in the title. This usage was intended to “bring the need for intermodalism to the forefront of the nation’s transportation and economic debate.”

26. For example, in July 2000, NCIT was honored to invite industry and academic leaders to the University of Denver campus to participate in the FHWA vision session on “Transportation in the Year 2025” with USDOT FHWA Administrator Kenneth R. Wykle and FHWA Colorado Division Administrator Jim Daves. FHWA Administrator Wykle was holding “Visioning Sessions for Transportation 2025” in a number of states at the request of USDOT Secretary Rodney E. Slater and invited NCIT to organize a session in Denver. NCIT Director Dempsey chaired the session, which was joined by other DU transportation faculty.
ern technologies, and graduate effective professionals in intermodal transportation.

MASTER OF SCIENCE IN INTERMODAL TRANSPORTATION SYSTEMS

NCIT was instrumental in the development of the interdisciplinary curriculum for the new graduate degree at the University of Denver within the ITI—the Master of Science in Intermodal Transportation Systems. The designation of DU and MSU as a National University Transportation Center in the 1998 TEA-21 legislation brought the anticipation of grant support and provided ITI with the opportunity to accelerate the research and the development of the innovative, intermodal transportation curriculum.

Faculty from the DU Daniels College of Business, College of Law, Department of Geography, College of Education, and Graduate School of International Studies came together to research and to develop nine new courses and to modify six existing courses. Faculty held curriculum workshops with industry leaders and professionals representing both the passenger and freight systems, met in several faculty seminars, and made onsite visits to major transportation hubs. In developing the curriculum, the DU faculty consulted the ITI Board of Directors, comprised of “captains of industry” from all modes of transportation. The board provides a “reality check” for many NCIT activities. In addition, a survey assessing the needs in the transportation industry was prepared and administered.

With NCIT support, and working with industry executives and professionals in both freight and passenger transportation, the faculty developed this first-of-its-kind transportation graduate program that promotes a global, seamless intermodal transportation system that is ethical, safe,

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27. The ITI Board of Directors is, in effect, a “Who’s Who in Intermodal Transportation.” It is comprised of Senior Chairman Gil Carmichael (Amtrak Reform Council), Chairman Thomas Finkbiner (Quality Distribution), Vice Chairman-Education Clifford Hardt (Federal Express), Vice Chairman-Development Jeff McMorris (JEFFTAM Investments), Vice Chairman-Intermodal Passenger George Warrington (Amtrak), Vice Chairman-Intermodal Freight Ted Prince (Optimization Alternatives Limited, Inc.), Vice Chair Donna Wilson (DU), Samuel Addoms (Frontier Airlines), William Augello (Transportation Consumer Protection Council), Brooks Bentz (Accenture), William Berry (Canadian National Railway), John Betz (National Freight Transportation Library), Joanne Casey (Intermodal Association of North America), Jerry Davis (Retired, Union Pacific Railroad), Edward Hamberger (Association of American Railroad), Thomas Hardin (Hub Group), Dwight Johnson (OmniTRAX), Lawrence Kaufman (Transportation Writer), Peter Keller (NYK Line [North America] Inc.), Jack Lanigan, Sr. (Mi-Jack Products), Craig Lentzsch (Greyhound Group), Alan Lindsey (Burlington Northern Santa Fe Corp.), William Millar (American Public Transportation Association), John Nussrallah (Retired, Trinity Industries), Craig Philip (Ingram Barge Company), Charles Rowland (Retired, Canaveral Port Authority), Emilio Roy (Alstom Transporte S.A. de C.V.), Alan Stone (Stone Container Corp.), and George Woodward (Retired, ALK Technologies, Inc.).
secure, efficient, and environmentally benign. The courses embody a
global perspective, emphasize an intermodal orientation, and integrate
cutting-edge software technology applications.

**ITI Executive Master’s Program in Intermodal Transportation Management**

NCIT is supporting curriculum development for the ITI Executive Master’s Program in Intermodal Transportation Management; this graduate program is a redesign of the DU Master of Science in Intermodal Transportation Systems and will be delivered through a combination of a concentrated onsite residency and an offsite distance-delivery method, such as Blackboard. The new delivery method will accommodate the full-time working professional and will enable major transportation companies to send mid-level managers and executives to the program. The first class is tentatively scheduled to begin the program in Fall, 2002.

**NCIT Support for Students**

NCIT has provided various forms of support for students enrolled in transportation programs at DU. NCIT has awarded tuition scholarships to students pursuing the DU Master of Science in Intermodal Transportation Systems degree. A strategic goal of NCIT is to encourage students to participate in conferences related to intermodal transportation studies, and NCIT provided small grant awards to students to support their academic research in intermodal transportation and professional development toward a transportation career. Also, NCIT provided awards for Outstanding Student of the Year to ITI students.

**Faculty Participation in Educational Conferences**

ITI and NCIT faculty regularly participate in conferences devoted to transportation education, such as the Transportation Research Board (TRB) Annual Forum on Transportation Education and Training. They

28. NCIT faculty organized, chaired, and participated on two sessions at the 79th TRB Annual Meeting in January 2000. DU Associate Professor Andrew R. Goetz and NCIT Director Paul Dempsey participated on a panel on metropolitan transportation planning at which they disseminated the preliminary findings of the three-volume study, “Metropolitan Planning Organizations: An Assessment of the Transportation Planning Process.” Former NCIT Director Joseph Szyliowicz organized and chaired a TRB Session on Ethics in Transportation, which was well attended and commended as an area that needs greater attention from TRB. At the 80th TRB Annual Meeting in January 2001, NCIT Director Paul Dempsey organized a session, “Intermodal Access at US Airports: Planning, Financing, and Policy Impediments”. NCIT Director Dempsey moderated the session and the panel of experts included Gilbert E. Carmichael, former FRA Administrator, Chairman of the Amtrak Reform Council, and Senior Chairman of the Board of Directors of the DU Intermodal Transportation Institute; Craig R. Lentzsch, President and CEO of Greyhound Group; and Stephen Van Beek, PhD, Director of
are also active participants in the education panels of the TRB Annual Meetings, and testify before legislative bodies.\textsuperscript{29} Partly because of their previous work and involvement with intermodal education, Professors (and former ITI and NCIT Director) Joseph Szyliowicz and Patrick Sherry were commissioned by APEC to develop two workshops, one held in Long Beach, California, the other in Singapore, which were attended by public and private-sector transportation professionals who helped define the specific skills that are required for intermodalism. These were supplemented by analyses of transportation professional requirements and field research in Australia, Malaysia, and Japan, involving interviews with government officials, transportation professionals, and academics. The final report was approved by APEC and published on its website. On the basis of this work, the team was asked to hold a workshop on intermodalism at the APEC meeting in Manila, Philippines, in March 2002.\textsuperscript{30}

the USDOT Office of Intermodalism. This session attempted to analyze the financial, planning, institutional, and policy barriers to achieving seamless intermodalism at airports. It examined the role of the FHWA, Federal Transit Administration (FTA), Federal Aviation Administration (FAA), Federal Railroad Administration (FRA), Amtrak, state and local governments, and transit providers in the promotion of seamless transportation. Though ISTEA and TEA-21 mandated a federal policy of promoting seamless intermodalism, relatively little has been done to connect airports with surface modes other than the automobile. Better intermodal access could improve airfield congestion and alleviate the demand for new and expensive highways as well as new airport runways.

\textsuperscript{29} NCIT Director Paul Stephen Dempsey testified at the following hearings:

"The Social and Economic Consequences of Taxicab Deregulation," Hearings before the Colorado House of Representatives Transportation Committee, Denver, Colorado;

"Airport Monopolization: Barriers to Entry and Impediments to Competition," Hearings on the State of Competition in the Airline Industry before the Judiciary Committee of the US House of Representatives, Washington DC; and

"Airport Monopolization and Megacarrier Predation: Barriers to Entry and Impediments to Competition," Hearings before the Transportation Committee of the US House of Representatives, Washington DC.

\textsuperscript{30} In collaboration with the MSU College of Engineering and MSU College of Business and Industry, NCIT was honored to present Gilbert (Gil) E. Carmichael as the first speaker of the NCIT Lecture Series on Intermodal Transportation on 3 November 1999. Carmichael is a leading international authority on railroad and intermodal transportation policy. He served as the US DOT Federal Railroad Administrator in the administration of President George Bush from 1989 to 1993 and is currently Chairman of the Amtrak Reform Council. In the daylong visit to MSU, Carmichael met with students, faculty, and administrators to discuss intermodal transportation in North America. More than 60 attended the afternoon lecture and heard Carmichael's views on how the national economy of the 21st century will greatly depend on an efficient and reliable intermodal transportation infrastructure.

NCIT was also honored to present George A. Gates as the second speaker of the NCIT Lecture Series on Intermodal Transportation on 28 November 2000. Gates is director of the Supply Chain Group at Transcend. In a two-day visit at MSU, Gates met with students, faculty, and administrators to discuss intermodal transportation in North America. More than 45 attended his lectures and learned how he is using simulation to model transportation systems to help his clients save millions in transportation costs.
5.2 NCIT Outreach Activities

NCIT seeks to enhance the public's awareness, understanding, and appreciation of intermodalism and its role in the modern world, including career opportunities in the field.

NCIT joins key transportation organizations as one of the major sponsors of the ITI Second North American Intermodal Transportation Summit. U.S. DOT Secretary Norman Y. Mineta, Canadian Minister of Transport David M. Collenette, and Mexican Secretary of Communications and Transportation Pedro Cerisola y Weber as well as a number of prominent government and industry leaders accepted the invitation to participate in the summit at the University of Denver on 18 and 19 October 2001. Unfortunately, the tragic events of 11 September made it necessary to reschedule the summit until Spring, 2003. Such meetings with North American transportation leaders are far more important with the implementation of the North American Free Trade Agreement (NAFTA), and NCIT is proud to assist ITI and participate in hosting these events. NAFTA has been a significant stimulant for the transport sector, and NCIT is dedicated to facilitating the seamless flow of goods and people across borders.

NCIT Workshop on the “Impact of an Economic Slowdown on the Transportation Industry”

NCIT cosponsored a luncheon and workshop for the Colorado transportation community on 16 May 2001 in celebration of National Transportation Week. The workshop included NCIT faculty and industry leaders.

In collaboration with ITI and the DU Environment Institute, NCIT hosted Daniel Klein at an April 2001 brown-bag seminar on “Fencing the Airshed: Using Remote Sensing to Police Auto Emissions.” Daniel Klein has worked on urban transit, toll roads, and auto emissions as an associate professor of economics at Santa Clara University. He co-authored Curb Rights: A Foundation for Free Enterprise in Urban Transit, which proposes the privatization of bus stops and curb zones to create a property-rights foundation for free-enterprise transit. Klein’s emphasis on property rights is seen also in his work on auto emissions. He argues that, by using remote-sensing technologies developed by DU Professor of Chemistry Donald Stedman and others, the airshed can be safeguarded as a form of public property.

31. Nearly 70 transportation and logistics professionals, students, and faculty attended the four-hour event. NCIT hosted the event with four transportation organizations: The American Society of Transportation and Logistics, Delta Nu Alpha Transportation Fraternity, the Denver Transportation Club, and the Council of Logistics Management. These transportation organizations awarded their annual scholarships and recognized outstanding individuals for service in the transportation community.

32. The workshop, “Impact of an Economic Slowdown on the Transportation Industry,” was moderated by Carol Johnson, PhD, Assistant Professor in the DU Daniels College of Business; panelists included Samuel Addoms, President and CEO of Frontier Airlines, Inc.; Larry Kaufman, transportation writer and former rail industry executive; Stephanie McMahon, man-
Transportation Systems Conference

NCIT joined several transportation industry companies as a sponsor of the ITI/CATS Transportation Systems Conference on 20-21 June 2001. Speakers included academic, industry, and governmental leaders, including representatives of the U.S. DOT.33

NCIT Workshops and Career Expositions

In collaboration with the Colorado transportation community, NCIT has sponsored career fairs for high school and college students attended by nearly 200 students as well as many adults.34 Students representing seven area high schools and community colleges attended the first career fair. Following the NCIT Career Exposition, more than 60 members of the transportation community attended a NCIT luncheon35 and subsequent workshop36 that addressed the issues of ethics in the transportation

33. Moderated by NCIT Director Paul Dempsey, speakers included: NCIT Director Dempsey; Joseph S. Szylowicz (Founder of ITI, former Director of NCIT, Professor in the DU Graduate School of International Studies); Andrew R. Goetz (Associate Professor, DU Department of Geography); Donald Stedman (Professor, DU Department of Chemistry); Wang Yutian (Engineer, Soft Science Research Division, China Academy of Transportation Sciences (CATS), Ministry of Communications (MOC); Yang Hongyi (Deputy Director, CATS, specializing in research on transport policy, transport management system reform, and ship design); Zhou Xiaohang (Director and Associate Research Professor, CATS Soft Science Research Division, focusing on naval architecture and offshore engineering research); Pan Fengming (Engineer and Junior Research Fellow, CATS, focusing on statistical information analysis and management information systems); Xu Ping (Deputy Director and Associate Research Professor, CATS Soft Science Research Division); Ashish K. Sen, PhD (Director, U.S. DOT Bureau of Transportation Statistics (BTS), responsible for data collection programs to promote the effective use of transportation resources; Heinz (Ted) Krohn (Director, International Policy Staff of the U.S. DOT FRA, specializing in management analysis and information technology); Douglas Bennett (Assistant Division Administrator, Colorado Division, U.S. DOT FHWA); Richard M. Biter (Acting Associate Deputy Secretary, U.S. DOT Office of Intermodalism, serves as co-chair of the Intermodal Freight Technology Working Group, and participates on the intermodal panels of the OECD and the APEC); Steven R. Dimmeyer (Director, U.S. DOT FRA Office of Research and Development); and Maria P. Boile, PhD (Assistant Professor, Civil and Environmental Engineering Department, Rutgers University).

34. Twenty-six exhibitors, including FHWA and the Colorado Department of Transportation and many common carriers and community colleges, participated.

35. Former Colorado Governor Richard "Dick" D. Lamm challenged the audience during the luncheon with his speech on "Every Driver in a Traffic Jam Pleads Not Guilty." Lamm is the Director of the DU Center for Public Policy and Contemporary Issues.

36. The ethics workshop was moderated by John Betz (Betz and Associates, transport development coordinator for TRANSFORM (Transportation for the Relief of Mankind), member of the ITI Board of Directors, and Vice President of the National Freight Transportation Library, Inc.). Panelists included Andrew R. Goetz, PhD (Associate Professor, DU Department of Geography), Jenyce W. Houg-Brown (President and owner of Houg Enterprises, Inc.), Michelle M. Meyer (Program Manager, IBM's World Wide Distribution Group), Nick Nguyen
Cooperating again with the Colorado transportation community, NCIT organized and presented a workshop on the intermodal supply chain at Colorado's 19th annual transportation forum, Operation Stimulus: Challenging Your Link in the Supply Chain Process. This is one of several conferences in which NCIT has participated. NCIT also provides a number of educational programs for students not yet enrolled in college.

Of particular note is that the team of students from the new DU Master of Science in Intermodal Transportation Systems program participated in the Operation Stimulus college debate and won the 2000 Jerry R. Foster Annual Collegiate Logistics Competition, which was awarded to the University of Colorado at Boulder the previous two years. Also at this conference, the Colorado transportation community honored NCIT Director Paul Dempsey and ITI Founder and former NCIT Director Joseph Szymiowicz as “Educators of the Year” for their work in advancing transportation education in the region.

On 27 August 2001, NCIT participated in a teleconference on “North American Freight Transportation Issues and Trends: A Midcontinent Perspective,” organized by the Upper Great Plains Transportation Institute, with papers presented by the professors of the several participat­ing universities. Papers were presented on “Free Trade But Not Free Transport: The Mexican Standoff,” by NCIT Director Paul Dempsey, “Economics of Congestion at a Border Gateway: The Case of Laredo,” by Barry Prentice (University of Manitoba Transportation Institute), “Criteria and Design of a Model Border Crossing,” by Bill Stockton (Southwest University Transportation Center at Texas A&M University), “Barbarians at the Gate? The Issue of Mexican Truck Safety and the NAFTA,” by Rob Harrison (University of Texas and Southwest University Transportation Center), “Ensuring the Safety of North American Motor Carrier Operations,” by Brenda Lantz, (Upper Great Plains Transportation Institute at North Dakota State University), and “Canadian-US Rail Freight Flows Since NAFTA,” by Denver Tolliver (Upper Great Plains Transportation Institute at North Dakota State University).

Lynda Siegel, NCIT Outreach Coordinator, organized and administered three tours in April 2001 at the Higher Education and Advanced Technologies (HEAT) Center at Lowry in Denver, Colorado, for high-school students to enhance awareness of technology in transportation and of career opportunities in the transportation field. While touring the Manufacturing Academy at the HEAT Center, students were exposed to many of the skills required in the manufacturing process. It was impressed upon the students that a complex combination of trucks, trains, planes, and ships working together—intermodal transportation—brings together all of the materials necessary for the manufacturing process and provides the logistics of shipping a finished product to the customer. Sixty-five students from three different high schools participated.
NCIT Outreach Steering Committee

NCIT invited leaders in transportation from the public and the private sectors to participate on an NCIT Outreach Steering Committee to plan and implement programs and activities to facilitate the discussion of intermodal transportation issues and to enhance the general awareness of K-12 students of the business of intermodal transportation and the career opportunities in the transportation profession.40

5.3 NCIT Research Activities

NCIT has sponsored basic and applied research that addresses a variety of key intermodal transportation issues, making a substantial contribution to the body of knowledge and assisting both industry and government. NCIT also instituted a systematic process for engaging the academic community, transportation industry experts, and governmental officials in the evaluation and review of the merits of proposals requesting NCIT funding to conduct research to enhance the intermodal passen-

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40. Among the participants are the Regional Transportation District (Denver area transit agency), Denver International Airport, the AAR Transportation Technology Center, Inc., Federal Transit Administration, Fed Ex, Denver Regional Council of Governments (Denver area MPO), Jefferson County Public School District, Pueblo High School, Navajo Express, IBM, Colorado Division FHWA, Colorado Department of Transportation, Burlington Northern and Santa Fe Railway, Smith Railway Consulting, and the Colorado representative of the Garrett A. Morgan Program.

The committee organized the following NCIT activities:
17 October 2001: NCIT booth at DU Career Fair on campus.
31 January-1 February 2002: Transportation training workshop for secondary education teachers at Denver’s Adams Mark Hotel. NCIT booth during “Operation Stimulus” transportation conference at the Adams Mark Hotel.
25 February 2002: NCIT booth at the State DECA Conference in Colorado Springs. The booth was staffed with transportation industry professionals discussing with students intermodal transportation and the career opportunities in the transportation field.
24 April 2002: “Colorado Intermodal Day” at Union Terminal Station. The display included such items as locomotives, container flat cars, containers, trailers, RTD’s light rail equipment, track riding equipment, an Air Force flight simulator, APL’s Boomerang Box, and much more. This event was open to the public free of charge. School districts were encouraged to participate.
8 May 2002: “Intermodal Champion Day” at Starkville Mississippi Elementary Public School System. The activities include a skit designed to introduce elementary students and teachers to intermodal transportation, illustrating how true champions work together for improved transportation.
14 May 2002: National Transportation Week luncheon/workshop at the DU Phipps Mansion.
Secondary Education Tours: For teachers interested in transportation and distribution, tours were scheduled for the Heat Center at Lowery, Coors Brewing Company, FedEx, and DIA.
Internship Opportunity: in collaboration with the Colorado Transportation and Logistics Community, NCIT seeks to support an internship position with CDOT/TREX or RTD.
Transportation Opportunities Information Brochure: The NCIT Outreach Steering Committee is exploring the possibility of printing a brochure identifying the job and internship opportunities in transportation and providing resources and contact information, for general distribution.
The importance of examining the progress that state DOTs have made in implementing intermodal planning initiatives became apparent during the process of conducting the earlier ITI study on Metropolitan Planning Organizations (MPOs). NCIT faculty members were principal investigators in the congressionally mandated study of MPOs. The study, completed in March 2000, produced a three-volume work, "Metropolitan Planning Organizations: An Assessment of the Transportation Planning Process," that evaluated the transportation planning process in seven, large, fast-growing metropolitan areas. The MPOs studied were in the Charlotte, Denver, Dallas/Fort Worth, Miami, Phoenix, Seattle, and Tampa urbanized areas. The study was written by NCIT Director Paul Dempsey and DU faculty members Andrew Goetz, PhD, and Carl Larson, PhD. It was submitted to Congress. This study is publicly available at http://www.du.edu/
pleted. NCIT faculty have been actively promoting and teaching intermodalism at their institutions and across the nation by writing and


"Intermodal Freight Transportation Planning Using Commodity Flow Data." Principal Investigators: Yunlong Zhang, PhD, PE, MSU; Royce O. Bowden, Jr., PhD, MSU; Albert J Allen, PhD, MSU. There are pressing needs to research and develop systematic intermodal freight transportation planning procedures and methodologies to model freight flows on transportation networks, to identify and prioritize transportation improvement needs, to meet the federal requirements such as TEA-21, and to enhance the competitiveness of the economy at all levels. This project aims at developing intermodal freight transportation planning procedures and methodologies and will have two main focus areas: (1) Intermodal Freight Demand Forecasting Using Commodity Flow Data; and (2) Simulation of the Intermodal Network.

"Individual Fatigue Countermeasures in Intermodal Passenger Transportation." Principal Investigator: Patrick Sherry, PhD, DU. The project will test the application of feedback and knowledge of results, both key principles of behavior change established in many other studies of individual behavior change, as the essential ingredients of an individualized fatigue management program, using Actigraph technology, to a population of vehicle operators in the intermodal industry.

"Planning for Intermodal Facilities and Infrastructure Changes to Enhance Traffic Flows in the Mississippi Gulf Coast Area." Principal Investigators: Warren Couvillon, PhD, Albert Allen, PhD, and David Parrish, MSU. This project will provide policy makers on the Gulf Coast information on potential locations of intermodal facilities. It will use a combination of remote sensing data and information gathered from visits to intermodal facilities to determine spatial needs for different sizes and functions of intermodal yards. Spatially oriented software packages will be used to identify the pros and cons of alternative sites.

"Cost of Ownership Modeling for Support Equipment at Intermodal Transportation Terminals." Principal Investigators: C. Richard Cassady, PhD, University of Arkansas, and Stephen A. Le-May, PhD, MSU. MPOs depend on many types of support equipment to operate intermodal freight and/or passenger terminals. Through an industrial survey and a literature review, the authors intend to explore the types of support equipment used in intermodal terminals and the reliability and maintainability (R&M) characteristics of such equipment to develop an equipment retirement decision support tool.

This tool would use an economic model of the cost of ownership for an equipment fleet in determining an appropriate retirement age for units within the fleet.

Ongoing Research Projects

"Improving the Operation of Overnight Intermodal Cargo Terminals Using Simulation and Optimization." Principal Investigator: Royce Bowden, Jr., PhD, MSU.

"Chicago Cross Town Management [XTMS]." Principal Investigators: Andrew R. Goetz, PhD, DU; Yunlong Zhang, PhD, MSU; and Theodore Prince, Transgistics LLC.

43. Completed Research Projects


"Developing a Standard Definition for Intermodal Transportation." Principal Investigators: C. Richard Cassady, PhD, and Royce Bowden, PhD, MSU. Published in the Transportation Law Journal, 27:3 (Summer 2000). Reprinted in NCIT Intermodal Transportation: Selected Essays (2001).

presenting papers and designing new courses. As an example, the NCIT organized and sponsored a special peer-reviewed “Symposium on Intermodal Transportation,” published in the *Transportation Law Journal* 27:3 (Summer 2000) issue and comprised of a comprehensive array of scholarly articles by distinguished academics from a variety of universities (including DU and MSU).^{44}

NCIT is funded at the lowest level of any UTC. Therefore, NCIT engages in entrepreneurial efforts to encourage and solicit actively outside funding or in-kind contributions to perform research beyond that which would be possible on its U.S. DOT grants and local match—to further the NCIT research agenda and mission. The fact that DU and MSU was designated a UTC focused on intermodal transportation has helped create outside funding commitments beyond that provided by U.S. DOT.^{45}

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"Tracking and Positioning Software: A Market Need, Value, and Cost Analysis." Principal Investigators: Stephen A. LeMay, PhD, and C. Richard Cassady, PhD, MSU.

"The Use of Intermodal Information Technologies by Intermodal Ports and Terminals Serving Agriculture in Mississippi." Principal Investigators: Albert J. Allen, PhD, and Warren C. Couvillion, PhD, MSU.

"Technical Performance of Mississippi’s Industrial Gulf Ports." Principal Investigators: Warren C. Couvillion, PhD, and Albert J. Allen, PhD, MSU. The findings and conclusions for each of the aforementioned studies can be found at http://www.ie.msstate.edu/ncit/RESEARCH.html

44. The more than 200-page symposium issue was coordinated by former NCIT Director Joseph S. Szyliowicz under an NCIT grant and includes the following articles:

"Symposium on Intermodal Transportation," by Joseph S. Szyliowicz, PhD, and Paul Stephen Dempsey, DCL;

"Intermodalism: The Challenge and the Promise," by Joseph S. Szyliowicz, PhD;

"Intermodal Transportation in Historical Perspective," by Arthur Donovan, PhD;

"Developing a Standard Definition of Intermodal Transportation," by W. Brad Jones, C. Richard Cassady, PhD, and Royce O. Bowden, Jr., PhD;

"Modeling Intermodal Transportation Systems: Establishing a Common Language," by D. Wesley Graham, PhD, C. Richard Cassady, PhD, Royce O. Bowden, Jr., PhD, and Stephen A. LeMay, PhD;


"Intermodal Education in Comparative Perspective," by Jonathan B.L.K. Jervell III, Anthony Perl, PhD, Patrick Sherry, PhD, and Joseph S. Szyliowicz, PhD;

"Measuring Economic Benefits of Intermodal Transportation," by Yuri V. Yevdokomov, PhD;

"New York Regional Intermodal Freight Transportation Planning: Institutional Challenges," by José Holguín-Veras, PhD, and Robert E. Paaswell, PhD;

"Progress in Intermodal Passenger Transportation: Private Sector Initiatives," by Andrew R. Goetz, PhD, and Timothy M. Vowles, PhD.

45. Examples include the following:

NCIT Director Dempsey received a major grant from the Transit Cooperative Research Program (TCRP) in Fall 2000 for the production of a treatise on transit law. The book is to be completed in 2002 and the project is well underway. It includes chapters on governmental institutions, transportation planning, environmental law, transit funding and finance, procurement, ethics, safety, operational requirements, labor law, civil rights, and carrier liability. Though there is an established treatise addressing highways (Selected Studies on
NCIT faculty disseminated their research and facilitated the exchange of ideas through their presentations at numerous conferences. \(^46\)

- *Highway Law*, there is no such book on transit law. The fact that Professor Dempsey is its sole author will give NCIT enhanced visibility among transit providers and transit lawyers nationwide.

NCIT Deputy Director Bowden and Richard Cassady received a grant from the Delta and Pine Land Company (D&PL) to research and develop methodologies for optimizing a portion of D&PL’s transportation and distribution system. With the help of NCIT researchers, D&PL’s focus on its transportation and distribution processes resulted in significant financial savings and a fourteen percent reduction in its finished goods move ratio.

Former NCIT Director Joseph Szyliowicz received an NCIT grant to solicit articles from distinguished academics for the NCIT Symposium on Intermodal Transportation (described below), published by the *Transportation Law Journal*. This resulted in significant in-kind contributions of research by faculty beyond the UTC funding assistance:

- “Intermodal Transportation in Historical Perspective,” by Arthur Donovan, PhD;
- “Measuring Economic Benefits of Intermodal Transportation,” by Yuri V. Yevdokomov, PhD;
- “New York Regional Intermodal Freight Transportation Planning: Institutional Challenges,” by Jose Holguin-Veras, PhD, and Robert E. Paaswell, PhD; and
- “Intermodality: The Challenge and the Promise,” by Joseph S. Szyliowicz, PhD.

NCIT entrepreneurial efforts continue as NCIT Education Coordinator Yunlong Zhang recently submitted a proposal to the National Cooperative Highway Research Program seeking to extend the methodologies that NCIT is currently developing, in collaboration with the Mississippi DOT, for forecasting statewide intermodal freight movements.

NCIT has initiated several programs that provided the opportunity for the exchange of ideas, for the discussion of research findings, for the dissemination of transportation education information, and for publicizing careers and jobs in the transportation profession. In addition, NCIT created and continues to develop and improve its website, which is located at http://www.ie.msstate.edu/ncit.

46. Allen, Albert J., PhD, presented the paper “The Use of Intermodal Information Technologies by Intermodal Ports and Terminals Serving Agricultural and Food Product Firms in Mississippi” at the Food Distribution Research Society Annual Meeting in Roanoke, Virginia, 15-18 October 2000.

Allen, Albert J., PhD, Warren C. Couvillion, PhD, Scot Avis, and David Parrish presented the paper “An Analysis of the Use, Adoption, and Benefits of Global Position Systems (GPS) by Agriculture Trucking Firms in Mississippi” at the 58th Annual Professional Agricultural Workers Conference (PAWC), Tuskegee University, Tuskegee, Alabama, 3-5 December 2000.


Allen, Albert J., PhD, Warren C. Couvillion, PhD, Fen Qui, and Rong Huang presented the paper “Modal Competition in the Mississippi International Trade Market with Canada and Mexico: A Post-NAFTA Analysis,” at the Southwestern Economics Association Meeting held in Fort Worth, Texas, 14-18 March 2001.


Dempsey, Paul Stephen, DCL, presented the following papers:

- “Intermodal Transport Law,” NCIT Conference on Technology, Innovation, and Law, Denver, Colorado;
5.4 Conclusion

NCIT is a national center, devoted to addressing and solving some of the most critical transportation issues that face the nation. Facilitating intermodal transportation became a national priority in ISTEA and TEA-21 and offers promising solutions to congestion and pollution, while facilitating productivity and national economic growth.

NCIT has demonstrated that interdisciplinary collaboration between diverse faculties at two universities can be rewarding, stimulating, productive, and highly successful.

"Free Trade But Not Free Transport? The Mexican Stand Off," at the University of Denver Conference on NAFTA—Unresolved Issues, Dispute Resolution, Environment, Labor and Transportation, Denver, Colorado;

"The National Center for Intermodal Transportation," First Annual FHWA Transportation/Academic Research Forum, Washington DC;


Goetz, Andrew R., PhD, presented the following papers:


LeMay, Stephen A., PhD, presented the following papers:

"Developing Transportation Personnel," Mississippi Transportation Conference;


Zhang, Yunlong, PhD, presented the following papers:

"Control Delay in CORSIM," Transportation Research Board Annual Meeting, Washington DC;


Dempsey, Paul Stephen, DCL: Airport Landing Slots: Barriers to Entry and Impediments to Competition, 16 Air & Space Law 20-48 (2001);

Trade & Transport Policy in Inclement Skies: The Conflict between Sustainable Air Transportation and Neo-Classical Economics, 65 J. of Air Law & Com. 639-93 (2000);


NCIT has completed an impressive array of research and educational activities in the field of intermodal transportation, in a manner consonant with the goals of the UTC, RSPA, and national policy.

NCIT has completed all of the activities discussed in a little more than two grant years and at the lowest funding levels of any UTC.

NCIT, though embryonic, is highly motivated and energetic and has devised an agenda going forward that builds upon the solid foundation laid.

6. The University of Denver's Efforts to Provide Leadership in Making National and Regional Contributions to the Solution of Immediate and Long-Term Transportation Problems

In all of its transportation programs, the University of Denver is committed to making substantive contributions in helping to solve current and future transportation problems. Both ITI and NCIT are concerned specifically with the assessment, planning, and design of the nation's intermodal transportation system with a focus on improving the safety for both passengers and freight. ITI and NCIT seek to identify ways to better utilize the strengths of the individual modes and to integrate them into a seamless transportation system. The fundamental objective of intermodalism is not to optimize a single mode of transportation but to integrate the modes into an optimal, sustainable, and ethical system. Such a system should promote efficiency, safety, mobility, economic growth and trade, national security, protection of the natural environment, and enhancement of human welfare. The tragic events of 11 September 2001 put these objectives in crisper perspective, for they revealed that the transportation security umbrella is porous, that the nation is excessively reliant on a single mode of transportation for intercity travel, and that multimodal and intermodal alternatives are poor or nonexistent. As a consequence, the nation has suffered undue economic harm.

ITI and NCIT focus on the most important transportation issues facing this generation. As a fundamental component of the infrastructure upon which economic growth is built—the veins and arteries of commerce, communications, and national defense—a healthy transportation system serving the public's needs for ubiquitous service at reasonable prices is vitally important to the region and the nation it serves. An expeditious, efficient, and economical transportation network, seamlessly integrated into an intermodal system, will facilitate the public's need for mobility and will advance economic productivity and growth. Conversely, a deteriorating and disconnected transportation infrastructure
will produce sluggishness in national productivity and retard economic growth.

Land use, congestion, and pollution have become chronic problems in many areas of the United States. By integrating the separate transportation modes into a seamless, unified intermodal network, transportation can not only meet the economic and mobility needs of the society, but it can also alleviate the problems of pollution, congestion, safety, and energy consumption. ITI and NCIT have focused on identifying the strengths and weaknesses of each mode, on developing the means to minimize negative impacts and maximize strengths, and on establishing an efficient and integrated transportation system that is consonant with the goal of sustainable development. To take advantage of the inherent advantages of alternative modes of transportation, each must be available to users, and each should be seamlessly connected to one another.

Congress has declared that among the transportation policies of the United States is “to encourage and promote development of a national intermodal transportation system . . . to move people and goods in an energy-efficient manner, provide the foundation for improved productivity growth, strengthen the Nation’s ability to compete in the global economy, and obtain the optimum yield from the Nation’s transportation resources.” Congress created the U.S. DOT to “make easier the development and improvement of coordinated transportation service . . . .” In ISTEA, Congress set forth a detailed national policy to establish a National Intermodal Transportation System “that is economically efficient and environmentally sound, provides the foundation for the United States to compete in the global economy, and will move individuals and property in an energy efficient way.”

48. 49 U.S.C. § 302(e) (2000). Congress has decreed that, “A national intermodal transportation system is a coordinated, flexible network of diverse but complimentary forms of transportation that transports passengers and property in the most efficient manner. By reducing transportation costs, these intermodal systems will enhance the ability of the industry of the United States to compete in the global marketplace.” 49 U.S.C. § 47101(b)(3) (2000). Further, Congress has recognized that, “An intermodal transportation system consists of transportation hubs that connect different forms of appropriate transportation and provides users with the most efficient means of transportation and with access to commercial centers, business locations, population centers, and the vast rural areas of the United States, as well as providing links to other forms of transportation and intercity connections.” 49 U.S.C. § 47101(b)(5) (2000). Congress also has decided that the US “must make a national commitment to rebuild its infrastructure through development of a national intermodal transportation system.” 49 U.S.C. § 47171(b)(8) (2000).

49. 49 U.S.C. § 101(b)(2) (2000). The Secretary of Transportation is required to coordinate federal policy on intermodal transportation, and promote creation and maintenance of an efficient U.S. intermodal transportation system. 49 U.S.C. § 301(3) (2000). The Secretary is also obliged to consult with the heads of other federal agencies to establish policies “consistent with maintaining a coordinated transportation system . . . .” 49 U.S.C. § 301(7) (2000).

50. 49 U.S.C. § 5501(a) (2000). The National Intermodal Transportation System shall:
ISTEA required that the state and the MPO planning process include consideration of facilitating intermodal transportation. TEA-21 reaffirms and retains the planning provisions and MPO structure of ISTEA, with its emphasis on federal-state-local cooperation and public participation, though significant changes were made in funding levels. TEA-21 replaced ISTEA’s fifteen factors to be considered in TIP preparation with seven, one of which is to “Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.” Moreover, long before it became fashionable, ITI and NCIT were focused on creating a safe, secure, and ethical intermodal transportation system. Creating alternative modal choices will ensure that the nation does not suffer the catastrophic consequences of reliance on a single mode for intercity transportation, revealed by the shutdown of the commercial aviation industry after the tragic World Trade Center attack on 11 September.

This is the agenda to which ITI and NCIT are dedicated. As described above, leadership in this area is reflected in the following:

Establishing additional transportation degree options and supporting the curriculum development of the first graduate degree in intermodal transportation sciences in the world;

“consist of all forms of transportation in a unified, interconnected manner . . . to reduce energy consumption and air pollution while promoting economic development and supporting the United States’ preeminent position in international commerce”; include the Interstate Highway System and the principal arterial roads; include public transportation; provide improved access to seaports and airports; give special emphasis to the role of transportation in increasing productivity growth; give “increased attention to the concepts of innovation, competition, energy efficiency, productivity, growth and accountability”;

be adapted to new technologies wherever feasible and economical, giving special emphasis to safety considerations; and

be the centerpiece of a national investment commitment to create new national wealth.

49 U.S.C. § 5501(b)(8) (2000). All U.S. DOT employees are required to be given a copy of the National Intermodal Transportation System Policy, and it is required to be posted prominently in all offices of the U.S. DOT. 49 U.S.C. § 5501(c) (2000).


53. MPOs are required to develop transportation systems and facilities “that will function as an intermodal transportation system for the metropolitan area and as an integral part of the intermodal transportation system for the state and the United States.” 23 U.S.C. § 134(a)(3); 49 U.S.C. §5303(a)(2) (2000). State plans and programs must do the same. 23 U.S.C. § 135(a)(3) (2000). The states’ long-range 20-year transportation plan must provide for the development and implementation of the intermodal transportation system of the state. 23 U.S.C. § 135 (2000). The Secretary of Transportation shall make grants to the states to develop model state intermodal transportation plans, which shall include systems for collecting data related to intermodal transportation. 49 U.S.C. § 5504(a) (2000).
Sponsoring, supporting, and leading panels at national and regional conferences on intermodal transportation issues;

Leading DU to recruit transportation/logistics faculty;

Introducing K-12 students to the concept of intermodal transportation at an early age;

Conducting research and facilitating numerous publications on intermodal transportation; and

Using previous successes to acquire funding from additional sources to expand the ITI/NCIT agenda.

7. Conclusion

Transportation will continue to be a critical element of our local, regional, national, and international economy. The University of Denver finds itself uniquely and favorably positioned to contribute to a greater understanding of this vital activity.

A great university dedicates its physical, human and intellectual resources to serving its community, providing information, education and reasoned policy analysis. We are committed to making such a contribution. We have the opportunity to make a significant contribution to education in one of the world’s most important industries. We do so with enthusiasm and dedication.

Well before the tragic events of 11 September 2001, highlighted the need for a new kind of transportation system, the University of Denver was working actively to help sow the seeds for such a system not only in the United States but throughout the world. The significance of a system that better utilizes the individual modes and integrates them into a seamless intermodal system cannot be underestimated. It would not only contribute to the resolution of the many chronic problems—land use, congestion, pollution, lack of choice, more costly logistic services, dependence on foreign oil, an aging population, and safety—but also provide a healthy infrastructure for the growth of regional and national economies as well as international trade. The University of Denver remains committed to the achievement of such a vision. Future generations deserve no less.
Articles

Predatory Practices & Monopolization in the Airline Industry: A Case Study of Minneapolis/St. Paul

Professor Paul Stephen Dempsey*

"In the long run, predatory pricing will reduce the number of airlines, ultimately cutting the number of flights and choices available, particularly in smaller markets. This will leave the few surviving airlines free to price just as high as they want for just as long as they want."

John Dasburg
Northwest Airlines CEO

* Dr. Paul Stephen Dempsey is Professor of Law, Director of the Transportation Law Program at the University of Denver, and Director of the National Center for Intermodal Transportation. He formerly served as an attorney with the U.S. Civil Aeronautics Board. Dr. Dempsey holds the following degrees: Bachelor of Arts (1972) and Juris Doctor (1975) University of Georgia; Master of Laws (1978) George Washington University; Doctor of Civil Laws (1987) Institute of Air & Space Law, McGill University. Dr. Dempsey is the author of 10 books on various aspects of transportation economics, law and policy. He is admitted to the practice of law in Colorado, Georgia and the District of Columbia. He is also a member of the Board of Directors of Frontier Airlines, though this study does not address routes flown by Frontier, or the competitive response of Northwest to Frontier. This study has been made possible by grants from the Hughes Foundation and Sun Country Airlines, Inc. The author would like to thank Paul Miller who, at the author's request, provided some of the data upon which this study relies. The views expressed herein are solely those of the author, and not those of any organization with which he is affiliated.
I. Introduction

The monopolization of air transportation is among the most pernicious of commercial events, for the price of air transport impacts the cost of doing business in entire geographic regions. At cities like Minneapolis and St. Paul, Detroit and Memphis, the suppression of competition results in a regressive wealth transfer from consumers to producers to the tune of hundreds of millions of dollars per year. It is, in effect, a hidden tax on all who must pass through the airport. Because aviation is part of the infrastructure upon which all other businesses in a community depend, excessively high air fares dampen economic activity in whole geographic regions.

For more than a decade, Northwest Airlines has been among the most aggressive carriers in responding to new entrants that dare to inaugurate service on its monopoly spokes radiating from its Fortress Hubs at Minneapolis/St. Paul [MSP], Detroit, and Memphis. Numerous studies have revealed that where there are few or no low-fare carriers disciplining an incumbent monopolist, hub premiums are high and continue to increase over time. Conversely, "the greater the presence of a low-fare carrier at the hub, the lower the hub premium." According to Professors Oster and Strong:

[T]he major airlines have been able to exercise market power for extended periods at their hub airports. Sustained entry of low-fare carriers might threaten this market power. In these circumstances, taking steps that forego economic profits in the short run in order to preserve market power in the longer run might well be rational, profit-maximizing behavior.

Airports are public resources, paid for by taxpayers. To allow their monopolization, and the consumer exploitation which results from this, is antithetical to the public interest.

II. Minneapolis/St. Paul Fares Are Among the Nation's Highest

By the late 1990s, Northwest dominated the Minneapolis/St. Paul airport hub with an 84% share of total local and connecting enplanements; no low fare airline accounted for more than a 2% market share. At the hubs it dominates, Northwest Airlines has achieved the highest level of seat capacity (78.3%) and gate domination (73.4%) of any major U.S.
Northwest has gained a near monopoly position in a majority of the city-pair markets served by the MSP airport. Monopoly is usually accompanied by high prices, little consumer choice, and poor service quality.

Northwest has used its entrenched monopoly power to impose high fares in the markets served to and from the MSP airport. Numerous studies have documented the impact of Northwest's monopoly power at MSP. For example, by the third quarter of 1998, travelers using MSP airport were paying the third highest fares in the nation. High fares damage the communities served (1) by transferring wealth to Northwest and (2) by dramatically reducing trips taken by discretionary travelers. Because of Northwest's high fares there have been fewer vacation trips, fewer trips to see friends and relatives, and fewer trips by price sensitive business travelers. By reducing consumer choices, high fares adversely affect the quality of life of all who are deterred from traveling.

The table below reveals the extent to which air travel has been suppressed in the MSP market. As an economic region, the Minneapolis/St. Paul area is the thirteenth largest market in the US – larger than other metropolitan areas with substantial hub operations such as Phoenix, Denver or St. Louis. Each of these cities, except Minneapolis/St. Paul, plays home to both a large hub carrier and a low fare alternative. And each city has significantly more air travelers than Minneapolis/St. Paul: Denver, with a population 19% lower than Minneapolis/St. Paul has 33% more origin and destination passengers; Phoenix, with a population 7% lower than Minneapolis/St. Paul has 59% more origin and destination passengers; Atlanta, with a population only 16% greater than Minneapolis/St. Paul has more than double the number of local origin and destination passengers, and roughly twice the number of daily departures.

In the airline industry, market share appears to be strongly correlated with prices. Higher market shares ordinarily translate into higher prices; where competition erodes market share, the converse is true as well. Average fares at some of these airports can be 50 to 60 percent higher when compared to more competitive markets.

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5. Northwest insists it is not a monopolist because it accounts for only 60% of MSP origin-and-destination [O&D] traffic. See NORTHWEST AIRLINES, THE DEMPESEY REPORT ON NORTHWEST: WRONG ON THE FACTS; WRONG ON THE LAW AND WRONG ON COMPETITION POLICY (November 2000 ) (hereinafter NORTHWEST REBUTTAL). However, the above chart concedes that Northwest accounts for a MSP O&D market share somewhere between 61-68% during the 1990s. The above charts also reveal that Northwest accounts for more than 80% of total traffic at MSP. To be a monopolist does not require control of 100% of the market. Moreover, if one excludes the "live and let live" oligopoly markets in which other major carriers serve MSP from their hubs (e.g., Newark, Chicago O'Hare, Cleveland, Philadelphia, Pittsburgh and Atlanta), Northwest's origin-and-destination share at MSP...
MINNEAPOLIS/ST. PAUL AIR TRAVEL IS SUPPRESSED BY HIGH AIR FARES

TOP 25 ORIGIN/DESTINATION MARKETS IN THE US – 1999

<table>
<thead>
<tr>
<th>Rank</th>
<th>Market</th>
<th>Passengers*</th>
<th>Population*</th>
<th>Income Rank</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Los Angeles</td>
<td>51.9</td>
<td>16.1</td>
<td>2</td>
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<tr>
<td>2</td>
<td>New York</td>
<td>51.5</td>
<td>19.2</td>
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<tr>
<td>3</td>
<td>Chicago</td>
<td>37.5</td>
<td>9.0</td>
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<td>4</td>
<td>Washington DC</td>
<td>35.0</td>
<td>5.4</td>
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<td>5</td>
<td>San Francisco—Oakland</td>
<td>29.0</td>
<td>6.7</td>
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<tr>
<td>6</td>
<td>Dallas/Ft. Worth</td>
<td>26.0</td>
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<td>12</td>
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<td>7</td>
<td>Las Vegas</td>
<td>25.2</td>
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<td>Orlando</td>
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<td>9</td>
<td>Miami—Ft. Lauderdale</td>
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<td>2.8</td>
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<td>10</td>
<td>Phoenix</td>
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<td>3.8</td>
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<td>11</td>
<td>Boston</td>
<td>20.3</td>
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<td>12</td>
<td>Seattle</td>
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<td>Houston</td>
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<td>Denver</td>
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<td>Detroit</td>
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<td>San Diego</td>
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<td>Minneapolis/St. Paul</td>
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<td>Honolulu</td>
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<td>San Jose</td>
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<td>24</td>
<td>Kansas City</td>
<td>9.5</td>
<td>2.1</td>
<td>22</td>
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* millions

The U.S. General Accounting Office [GAO], the investigative arm of the U.S. Congress, has issued numerous studies of the impact of airline deregulation. The most comprehensive studies of the effect of airport concentration upon pricing are those performed by the GAO. In comparing prices at 15 concentrated hub airports and 38 relatively unconcentrated airports, the GAO found that prices were 27% higher in the concentrated hubs. A decade after deregulation, prices per mile charged was 77% for the year ending December 1999. Before Sun Country’s entry, Northwest had no competition on a dozen of its busiest routes.

6. Concentrated airports were those defined as having more than 60% of enplanements handled by a single airline. See United States Dep’t of Transportation, Competition in the U.S. Domestic Airline Industry: The Need for a Policy to Prevent Unfair Practices (May 1999).

by dominant airlines at concentrated hubs were 38% higher than those charged at unconcentrated airports.8

The U.S. Department of Transportation [DOT] also studied the impact of concentration on airline pricing, and concluded:

The average fare per mile at the eight most concentrated hubs is higher than the national average. Adjusting for the average trip distance and the size of the market served at the eight most concentrated hubs, fares were on average 18.7% higher than similar markets for other airports. This finding supports the conclusion that high hub concentration leads to high fares for passengers traveling to and from such cities.9

More recently, the DOT found that, “In the absence of competition, the major carrier is able to charge fares that exceed its fares in non-hub markets of comparable distance and density by upwards of 40 percent.”10

Though in another study the GAO found that air fares had fallen since deregulation at most airports serving communities of all sizes, it reported that fares at Minneapolis increased 17.4% between 1979 (just after deregulation) and 1994 – the second-highest percentage increase of any of the 25 large-community airports it surveyed.11

Another study revealed that concentration at the Minneapolis/St. Paul hub caused a 72% increase in prices from 1988 to 1995, and that by 1995, its residents were paying ticket prices aggregating $693 million above the national average.12

By 1996, the U.S. Department of Transportation [DOT] had found that Northwest was the nation’s most expensive airline, particularly on

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12. Mike Meyers, Minnesotans Indeed Pay More For Air Fare, DOT Says, MINNEAPOLIS STAR TRIBUNE, Apr. 25, 1996, at 1A.
flights of less than 750 miles.\textsuperscript{13}

By the third quarter of 1998, average fares at Minneapolis/St. Paul were the third highest in the nation. Of eighty cities studied by the DOT, Minneapolis/St. Paul passengers paid $65 more one-way, or 38% above, the average. Only two other major cities – Cincinnati and Charlotte, both hub airports as well – had higher fares. Fares in Memphis, where Northwest also maintains a hub, were tenth highest of the cities studied.\textsuperscript{14}

In 1999, the GAO reported that average fares at Minneapolis/St. Paul were 49% higher than the national average for trips of comparable distances, up from 45% in 1995.\textsuperscript{15} Reviewing the study, Minnesota state economist Tom Stinson said, “it makes you less competitive in the national economy and less competitive in the global economy.” The GAO study also revealed that Northwest-dominated Duluth, Minn., and Fargo, N.D., were two of only three cities in the nation where inflation-adjusted fares increased from 1990 to 1998. Consumers at Northwest’s Detroit hub paid a 20% fare premium.\textsuperscript{16} In January 2001, the U.S. Department of Transportation reported that Minneapolis/St. Paul consumers paid a hub premium of 55%—the third highest in the nation – while consumers at Memphis paid a 43% hub premium, and Detroit paid a 40% hub

\textsuperscript{13} Mike Brenner, Dan Fricker & Garry Volgenau, \textit{U.S. Is Looking at Fares at NWA}, DETROIT FREE PRESS, Feb. 27, 1998.
\textsuperscript{14} Greg Gordon, \textit{Federal Study Concludes Twin Cities Air Travelers Pay High Premium}, MINNEAPOLIS STAR TRIBUNE, May 1, 1999, at 1D.
\textsuperscript{16} Mike Myers, \textit{Air Fares Still High In Cities Despite Drop}, MINNEAPOLIS STAR TRIBUNE, Mar. 5, 1999, at 1A.
The Transportation Research Board found that, "For nearly two decades now, the literature consistently has shown higher fares in city pair markets that include a concentrated hub as either the origin or destination point; this especially applies to short-haul markets in which one or two hubbing carriers handle most of the local traffic.” 18 The U.S. Department of Transportation has found, “A hub airline faces only limited competition in most of its nonstop hub markets, although connecting service in long haul markets provides some discipline for the non-stop fares. As a matter of economic theory, a firm will ordinarily charge supracompetitive prices when it has no competition.” 19

**Studies Find Higher Fares at Minneapolis-St. Paul**

<table>
<thead>
<tr>
<th>Year</th>
<th>Comparison</th>
<th>Fares at Minneapolis-St Paul</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>9 gate-constrained and 36 non gate-constrained airports</td>
<td>Overall fares were 49% over average (US General Accounting Office, 1999)</td>
</tr>
<tr>
<td>1996</td>
<td>30 busiest U.S. airports</td>
<td>Northwest 34% over average (Severin Borenstein, 1996)</td>
</tr>
<tr>
<td>1995</td>
<td>60 large and medium airport</td>
<td>Overall fares were 41% over average (US Department of Transportation)</td>
</tr>
<tr>
<td>1992</td>
<td>Concentrated and unconcentrated airports</td>
<td>Overall fares were 30% over average (US General Accounting Office, 1993)</td>
</tr>
</tbody>
</table>

Source: Minnesota Planning Commission; “Flight Plan: Airline Competition in Minnesota

But according to Northwest Vice President Elliot Seiden, “the available evidence does not support the allegation that network airlines extract a ‘hub premium’. 20 Northwest financed a study to prove that there was no hub premium, a conclusion reached by no independent study since deregulation. 21 The study was produced by Professors Darryl Jenkins and Robert Gordon. Contrary to nearly all prior research on the subject, they described the “hub premium” as a “myth.” The Northwest

21. Id. (contending additionally that Northwest’s acquisition of Continental Airlines would not reduce competition).
Airlines’ study insisted that, instead of higher fares, “residents of Minneapolis/St. Paul, Detroit and Memphis actually enjoyed a modest hub discount of 4 percent . . . .” Furthermore, Jenkins and Gordon concluded, “Those passengers originating or terminating their travel in a Northwest hub receive a travel bargain compared to other passengers on Northwest Airlines.”

The Jenkins-Gordon study was quickly and widely criticized. Frank Berardino, President of Gellman Research Associates observed, “Only Northwest Airlines’ fares are included in the analysis, and so, the full competitive alternatives available to consumers are never part of the comparison. Therefore, how do we know if the fares are relatively high or low? . . . The authors never report their regression analysis; their whole hub premium comparison is based on them.” Noting that the Jenkins-Gordon study failed to compare fares at dominated and non-dominated hubs, Kevin Mitchell of the Business Travel Coalition concluded, “the study’s results fly like arrows thick and fast at the conclusion of virtually every credible analysis regarding hub premiums since deregulation . . . .” Five major independent studies of airline pricing at Minneapolis/St. Paul since 1990 have concluded that fares are between 30% and 49% higher for trips beginning or ending at MSP than in competitive markets.

In January 2001, the U.S. Department of Transportation issued a study on “Dominated Hub Fares”. On its first page, the DOT sharply criticized the Jenkins-Gordan study:

[O]thers have reported on the prevalence of high fares paid by passengers at hub airports dominated by a network carrier; indeed, no credible study concludes otherwise. . . . A hub study prepared by Professors Darryl Jenkins and Robert Gordon and funded by Northwest, “Hub and Network Pricing in the Northwest Airlines Domestic System,” purports to show that Northwest fares in its nonstop hub markets are lower than Northwest fares in competitive connecting markets. Aside from finding the study’s conclusion implausible, we have been unable to determine how the authors reached their result. The authors have not responded to our requests for further detail about the analytical model used.

22. DARRYL JENKINS & ROBERT GORDON, HUB AND NETWORK PRICING (2000). Northwest Airlines argues that the Jenkins/Gordan study proves significant hub premiums do not exist. Hub airports have large numbers of business travelers who purchase unrestricted fares. See NORTHWEST REBUTTAL, supra note 5. But not even the DOT takes that study seriously. In attempting to determine average fares, it is inappropriate to disaggregate business from leisure fares. The average price is the average price. That business travelers are taking a price beating reflects the strength of the monopoly premium. Business travelers have only one dominant choice to all business destinations.
24. MINNESOTA PLANNING, supra note 15.
As described earlier, concentration levels often correlate with price levels—higher concentration tends to equate to higher prices in many markets. But the identity of the competitor can also have a significant influence on pricing. The presence of a low-cost/low fare competitor (such as Southwest, AirTran, Vanguard, Spirit, Jet Blue, or Sun Country, for example) can result in significant competitive discipline and consumer savings. According to the DOT, fares tend to be $80 higher on average when no low-fare competitor is present on the route. This is reflected in the chart which shows historical average one-way fares at five airports—Minneapolis/St. Paul, Dallas/Ft. Worth, Atlanta, Salt Lake City, and Kansas City.

![Average Fares—Selected Cities](chart.png)

*Source: US Department of Transportation, Passenger Origin - Destination Survey. Note: Decline in Minneapolis/St. Paul fares in the third quarter of 1999 correlates with the initiation of scheduled service by Sun Country.*

At various times, Braniff, Eastern and TWA attempted to establish a hub at Kansas City. Each failed. The result is that Kansas City remains

26. DOT Assistant Secretary Patrick Murphy, Address before the ABA Forum on Air & Space Law (San Francisco, CA, July 8, 1998).
unconcentrated (Southwest is the largest carrier, with 23% of enplanements), and consumers there enjoy average fares among the lowest of any city its size. Note that average fares at Salt Lake City and Atlanta marched in "lock-step" with fares at Minneapolis/St. Paul, Dallas/Ft. Worth and Washington/Dulles until 1994. In that year, Southwest acquired Salt Lake City-based Morris Air. Average fares dropped by 50% in Southwest's markets, while traffic tripled. By late 1995, average fares in markets served by Southwest were only one-third the level of fares in other Salt Lake City markets.\textsuperscript{27} By 1996, Southwest accounted for 12% of enplanements, and Salt Lake City's average fares were as low as Kansas City's. At Atlanta, ValuJet's entry has brought fares down, though it only accounted for 8% of enplanements.

Contrast these price declines with the relatively higher prices at Dallas/Ft. Worth and Minneapolis/St. Paul. Dallas/Ft. Worth International Airport is dominated by two megacarriers—American (65%) and Delta (19%). Prices are somewhat disciplined in the short-haul market departing from this area due to the presence of Southwest at Dallas Love Field. Minneapolis/St. Paul suffers far more exorbitant airfares, as reflected in the foregoing chart. Northwest dominated the hub, accounting for between a 74%-85% share of local and connecting enplanements, with no low-cost/low-fare carrier accounting for even a 1% market share, and no secondary airport in the area.\textsuperscript{28} In fact, average round-trip fares at Minneapolis from the first quarter of 1994 through the second quarter of 1999 of $416 are 43% higher than at Atlanta (where the average fare was about $252 round trip), 68% higher than at Salt Lake City (where the average fare during this period was $248), and 70% higher than at Kansas City (where the average round-trip fare was $244).

One study estimated that higher-than-average fares cost Minneapolis travelers some $500 million per year.\textsuperscript{29} Actually, if Minneapolis/St. Paul fares were set at the level of fares in Atlanta (where AirTran maintains about an 8% market share), MSP's 12-million origin-and-destination (O&D) passengers would be saving several hundred million dollars per year. If MSP's fares were set at the level of those prevailing in Salt Lake City (where Southwest maintains about an 11% market share), or at unconcentrated Kansas City, MSP's 12-million O&D passengers would be saving even more. As the Minnesota Planning Commission identified in a 1999 report, concentration, not the hub, is the main issue. Professors Oster and Strong note, "[b]ecause the presence of the low-fare carrier has

\begin{itemize}
  \item \textsuperscript{27} Testimony of DOT Assistant Secretary Patrick Murphy Before the U.S. Senate Appropriations Subcommittee (May 5, 1998).
  \item \textsuperscript{28} Julius Maldutis, \textit{Airline Competition at the 50 Largest U.S. Airports—Update} Salomon Bros., (July 23, 1997).
  \item \textsuperscript{29} \textit{Minnesota Planning}, \textit{supra} note 15.
\end{itemize}
such a dramatic effect on hub premiums, predatory practices are especially likely to be targeted at low-fare new entrants.  

**St. Louis Enjoys Hub Status With Lower Fares**

Northwest passengers in Minneapolis/St. Paul pay much higher fares for hub service than TWA passengers in St. Louis, where Southwest Airlines competes for traffic. Both airports are similar in size, with a central US location.

**III. NORTHWEST ACQUIRES REPUBLIC AIRLINES**

To expand quickly, and to monopolize major airports, some carriers have digested rival airlines. Domestic entry and ratemaking jurisdiction was phased out by the Airline Deregulation Act; but authority over mergers, consolidations and acquisitions was transferred to the U.S. Department of Transportation [DOT] on January 1, 1985. The DOT’s highly permissive policies with respect to mergers led to an explosion of such activity. The DOT approved each of the twenty-one mergers and acquisitions submitted to it, including the following: American-Air Cal; United-Pan Am (various route systems); Delta-Western; Continental-PeopleExpress-Frontier-Eastern; USAir-Piedmont; TWA-Ozark; Southwest-Muse; and Northwest-Republic. Many of these mergers were approved under

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the then-prevailing (and since discredited)\textsuperscript{31} neo-classical economics view that "contestability" of markets would arrest any anticompetitive conduct.\textsuperscript{32}

\textbf{NORTHWEST AIRLINES—ENPLANEMENT SHARE}

\begin{center}
\textbf{Share}
\end{center}

\begin{center}
\begin{tikzpicture}
\begin{axis}[
    title={Northwest Airlines—Enplanement Share},
    xlabel={Quarter/Year},
    ylabel={Share},
    xmin=1Q84, xmax=1Q99,
    ymin=0, ymax=90,
    xtick={1Q84, 1Q87, 1Q90, 1Q93, 1Q96, 1Q99},
    ytick={0, 10, 20, 30, 40, 50, 60, 70, 80, 90},
    xticklabels={1Q84, 1Q87, 1Q90, 1Q93, 1Q96, 1Q99},
    yticklabels={0\%, 10\%, 20\%, 30\%, 40\%, 50\%, 60\%, 70\%, 80\%, 90\%},
    legend style={at={(0.5,0.5)},anchor=north},
]
\addplot+[mark=+] table [x index=0, y index=1] {northwest_airlines_data.csv};
\addplot+[mark=] table [x index=0, y index=2] {northwest_airlines_data.csv};
\addplot+[mark=] table [x index=0, y index=3] {northwest_airlines_data.csv};
\legend{DTW, MEM, MSP}
\end{axis}
\end{tikzpicture}
\end{center}

\textit{Source: US Department of Transportation; T-100 Monthly Operating Statistics by Carrier Entity}

The Northwest-Republic and TWA-Ozark mergers were vigorously opposed by the U.S. Department of Justice [DOJ] on grounds that they would create hub monopolies at Minneapolis and St. Louis, respectively. In the Northwest-Republic merger, the Justice Department argued that the merger would result in a reduction of competition in 42 markets, all but four of which radiated from the carriers’ common hubs at Minneapolis (26 cities) and Detroit (12 cities). In 29 additional city-pair markets, the combined carrier would have 80\% of the existing capacity. DOJ pointed out the extreme northerly location of Minneapolis/St. Paul made it an unlikely candidate as a hub for a new entrant.\textsuperscript{33} But at the time DOJ participated in an advisory capacity only, and again, DOT approved all mergers submitted to it (although a few were conditioned on a spin-off of certain routes and slots). Nonetheless, the DOT approved the Northwest-Republic merger on August 12, 1986.

In 1986, Northwest and Republic Airlines were the nation’s eighth and ninth largest carriers, respectively, and held the largest market shares at Minneapolis/St. Paul, Detroit, and Memphis. That year, Northwest ac-

\begin{itemize}
\item \textsuperscript{31} See \textbf{Paul Dempsey} \& \textbf{Laurence Gesell}, \textit{Airline Management: Strategies for the 21st Century} 69-84 (Coast Aire 1997).
\item \textsuperscript{32} \textbf{Paul Dempsey}, \textit{The Social \& Economic Consequences of Deregulation} 131-47 (1989).
\end{itemize}
required Republic for $884 million. Republic itself was a product of the 1979 merger of North Central, Southern and Hughes Airwest.

As the above chart reveals, Northwest Airline's passenger market shares doubled after its 1986 acquisition of Republic Airlines, a carrier which until then accounted for about a third of the Minneapolis/St. Paul market. A 1988 study compared fares in markets radiating from Minneapolis-St. Paul in which Northwest and Republic Airlines competed prior to their merger, and found that after the merger prices rose between 18%-40%.

According to Alfred Kahn, “Spotty antitrust enforcement in the first place may be a reason there’s so much concentration in Minnesota and other markets. Surely we should have ensured that the antitrust laws were reinforced when Northwest merged with Republic.”

A 1997 antitrust suit alleging that Northwest Airlines violated the antitrust laws by engaging in predatory behavior following its 1986 acquisition of Republic Airlines was reinstated in February 1999. The suit alleges Northwest overcharged consumers as much as $400 million. Plaintiffs ask that Northwest be restrained from engaging in anticompetitive conduct. Specifically, plaintiffs allege:

Numerous studies have documented the ability of airlines with dominant market shares at “fortress hubs” to discourage and defeat new entry by the use of exclusionary marketing and pricing policies. Northwest has pursued exclusionary pricing and marketing strategies that are unremunerative for Northwest but for their effect of defeating and deterring new entry. Northwest has communicated to new entrants, by public statements and by its conduct that Northwest will pursue vigorously its announced strategy with respect to new entrants at [Minneapolis/St. Paul].

34. U.S. DEPT OF TRANSP., T-100 MONTHLY OPERATING STATISTICS BY CARRIER ENTITY (These data are based on passenger enplanements).
35. Tom Hamburger, *Fares Rose With NWRA's Dominance*, MINNEAPOLIS STAR TRIBUNE, Dec. 23, 1988, at 1A. (“In 15 of the 18 hubs in which a single carrier controls more than 50% of the market, passengers pay significantly more than the industry norm”).
38. Kelley Holland, *Minnesotans vs. Northwest*, BUS. WEEK, Feb. 15, 1999, at 44. (“These are not the first plaintiffs to allege the Northwest's acquisition of Republic was an attempt to create a monopoly”). See also Fischer v. NWA, Inc., 883 F.2d 594 (8th Cir. 1989) (holding plaintiffs failed to establish an antitrust injury).
The acquisition of Republic gave Northwest significant domestic feed for its international routes, and undisputed control of the hubs of Minneapolis/St. Paul, Detroit, and Memphis. But it also forced management to put together fourteen union groups, several incompatible fleets, and corporate cultures. Service levels deteriorated due to the clash of corporate cultures, procedures and equipment. As one response, in 1991 Northwest inaugurated its “Northbest” University training program for its customer service personnel in an attempt to overcome its “Northworst” service reputation.  

More recently, Northwest acquired (and has since divested) a controlling interest in Continental Airlines. Citing several major routes on which the combined carriers would have a monopoly, the U.S. Justice Department filed suit to block the acquisition, alleging, “As a result of Northwest’s acquisition of control of Continental, consumers likely will pay higher prices and receive lower quality service for scheduled airline passenger service in the markets dominated by Northwest and Continental, and lose the benefit of new, competitive entry by Continental against Northwest.”  

The following table reveals the combined market shares of the merged airlines in several important city pairs.

<table>
<thead>
<tr>
<th>Route</th>
<th>NW Share</th>
<th>CO Share</th>
<th>Combined NW &amp; CO Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit-Cleveland</td>
<td>73%</td>
<td>19%</td>
<td>92%</td>
</tr>
<tr>
<td>Detroit-New York</td>
<td>75%</td>
<td>17%</td>
<td>92%</td>
</tr>
<tr>
<td>Detroit-Houston</td>
<td>48%</td>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>Memphis-Houston</td>
<td>39%</td>
<td>61%</td>
<td>100%</td>
</tr>
<tr>
<td>Minneapolis-Cleveland</td>
<td>75%</td>
<td>25%</td>
<td>100%</td>
</tr>
<tr>
<td>Minneapolis-New York</td>
<td>79%</td>
<td>17%</td>
<td>96%</td>
</tr>
<tr>
<td>Minneapolis-Houston</td>
<td>58%</td>
<td>38%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Source: US Department of Transportation; Passenger Origin-Destination Survey.

IV. NORTHWEST FALLS TO A LEVERAGED BUY-OUT

Northwest’s tenacious efforts to suppress competition so as to maintain its monopoly fares may be motivated by the unfortunate financial condition in which it was placed as a result of a leveraged buy-out of the company in 1989. Maintaining prices at supra-competitive levels enables it to pay down balance sheet debt. Certainly, its poor financial condition

42. Minnesota Planning, supra note 15.
played a role in leading it to seek a taxpayer-funded bail out from the citizens of Minnesota.

A. The Corporate Raiders Circle

Northwest entered deregulation with perhaps the strongest balance sheet in the industry. Unfortunately, this would make it a prime candidate for LBO, which turned one of the industry's strongest balance sheets into one of the weakest.

 Owned aircraft have large residual values. In 1970, Northwest's Don Nyrop began selling off his fleet of 707s (then about 12 years old, on average), and used the proceeds to purchase new aircraft, particularly DC-10s. Between 1971 and 1978, these proceeds from the sale of old aircraft provided more than a third of the total capital cost of the purchase of new aircraft. During this period, nearly a third of Northwest's pre-tax earnings came from these sales. A sale/leaseback results in an immediate capitalization of these values on a discounted basis with a loss of these long-term residual values. In other words, the short-term benefits of leasing results in a sacrifice of the long-term values of aircraft ownership.

Unfortunately, low debt has subjected some airlines to leveraged buy outs. Low debt suggests that there are lots of assets owned which can be sold to pay off the debt assumed during the acquisition. For example, Northwest had one of the lowest percentages of aircraft leased (4%) and one of the industry's cleanest balance sheets prior to its acquisition of Republic in 1986. Before 1990, Northwest had been consistently profitable every year since 1949. Until then, Northwest had produced 39 straight years of profitability, a record no other U.S. carrier could match. Among major airlines, only Delta had a more favorable debt-to-equity ratio.

Denver oil king Marvin Davis began a hostile takeover bid for Northwest Airlines in 1989, offering $2.7 billion. He was out-bid by Alfred Checchi and associates, offering $3.7 billion. The transaction increased Northwest's debt-to-equity ratio from 0.42/1 to 5.85/1, allowing Wings Holdings, Inc., to acquire control of Northwest with 81.5% debt and 18.5% equity. Wings' debt was $3.1 billion, almost two-thirds of

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43. ESG Aviation Services, 8 The Airline Monitor (Feb. 1996).
44. Aviation Daily, November 6, 1986.
46. Smith Barney, Northwest Airlines Corp. (Sept. 8, 1994).
which was put up by Japanese banks. Equity was $705 million, of which Alfred Checchi, Gary Wilson and Frederick Malek put up only $40 million (for which they received about half the voting and nonvoting common stock), KLM (a Netherlands airline) put up $400 million (or 57% of the equity, for which KLM received 70% of Wings’ nonvoting preferred stock, 31% of its nonvoting common stock, and 4.9% of its voting common stock, as well as a warrant allowing it to convert up to $50 million of its preferred stock into common stock, some of which could be voting), and Elders IXL (an Australian company) put up $80 million (or 11% of the equity, for which it received 10% of Wings’ nonvoting preferred stock, 16% of its nonvoting common stock, and 15.4% of its voting stock).49

Wings, which became the parent company of Northwest, encumbered Northwest’s balance sheet with several billion dollars of debt as a result of the LBO. That is more than the purchase price of Pan Am’s trans-Pacific division (bought by United for $715 million), Western Airlines (bought by Delta for $860 million), Ozark Airlines (bought by TWA for $250 million), Eastern Airlines and People Express (bought by Texas Air for $676 million and $112 million, respectively), and Air Cal (bought by American for $225 million), combined.50 For these investments, those airlines acquired significant operating assets and market share. As a result of the LBO, Northwest acquired nothing more than burdensome debt.

The need to pay down debt may well have motivated Northwest to protect its monopoly hub status against incursions by low-cost/low-fare competitors. Only in the absence of competition could Northwest hope to maintain prices at supracompetitive levels.

B. NORTHWEST STRUGGLES WITH THE DEBT BURDEN

By the early 1990s, Price Waterhouse concluded that Northwest was at a “critical juncture” and was facing “significant hurdles.”51 Most stemmed from the $3.65 billion leveraged buy-out of the company by Alfred Checchi and partners (Wings Holdings, Inc.) in 1989, which saddled an almost debt-free company with enormous debt.52 Both mergers and route sales were explored to shore up its financial condition and strategic

50. Dempsey, supra note 31 at 127-29.
position. In 1990, Northwest's pension was underfunded by $78 million.

According to one source, the heavy debt burden put on by the Checchi LBO, coupled with these tremendous losses, caused Northwest's debt-to-equity ratio to soar to an unbelievable 30 to 1 ($4.2 billion in debt versus $141 million in equity). The LBO so loaded Northwest with debt that, in order to avoid Chapter 11, Northwest deferred aircraft deliveries, persuaded banks to defer loan payments, convinced labor to take deep wage cuts in exchange for stock, and persuaded the State of Minnesota to engage in the largest public bail-out in the history of commercial aviation.

C. NORTHWEST'S FLEET AGE ASCENDS

The massive debt burden imposed by the LBO also made it difficult for Northwest to retire aging aircraft. Northwest opted instead to hushkit and refurbish all of its DC-9s whose average age was then 24 years, so as to be able to fly them another 15 years. The cost of a hush-kit is about $1.5 million per aircraft, or as much as $18 million if new avionics, engines, and cabin interiors are added. This compares favorably with the $30-$35 million cost of a new aircraft.

As a result of hush-kitting and new aircraft cancellations, by the dawn of the 21st Century, Northwest Airlines had the oldest fleet of aircraft of any major airline by a significant margin, surpassing even TWA's fleet for that ignoble distinction. In 1991, Northwest's fleet was 35% older than the industry's average; by 1998, Northwest's fleet was 60% older than the industry's average. According to the 2001 Global Fleet Handbook, Northwest continues to have the oldest fleet at 20.4 years.

D. LABOR BAILS OUT NORTHWEST

After the Checchi LBO, annual interest expenses at Northwest rose to $7,835 per employee, compared to $2,534, $1,612 and $928 at United, $30-$35 million cost of a new aircraft.

53. See id.
58. Data for the chart are drawn from CIBC World Markets, Aircraft Fleet Analysis (Oct. 5, 1999).
59. Fleet Study Sees Overcapacity, Aging Planes at Northwest, Aviation Daily, March 27, 2001 at 3.
American and Delta, respectively. In 1993, labor surrendered $886 million in concessions over three years, in exchange for 33% of the company’s stock. By 1994, despite several profitable quarters, Northwest was still struggling to refinance $4 billion in debt, with a $1.7 billion note due in 1997. A balloon payment of $731 million due in the year 2000 was rescheduled to be paid out over three years beginning in 2005; that debt was taken off the books as long-term debt and treated as a minority interest in an affiliated company. Yet belt-tightening would not reach senior management. In 1995, Northwest’s John Dasburg pocketed a salary and bonus of more than $800,000, and $8.7 million in stock options. In 1998, Dasburg reaped $16.7 million by exercising stock options. He reported compensation of $3.65 million in 1999.

E. THE STATE OF MINNESOTA BAILS OUT NORTHWEST

Northwest also turned to the State of Minnesota to help it out of the

60. Laing, supra note 55 at 8.
63. Susan Carey, Northwest Air’s Chief Got $8.7 Million From Exercising Stock Options in 1995, WALL ST. J., Apr. 8, 1996, at 4A.
64. Tony Kennedy, Union Leader Assails NWA Executive In Letter, MINNEAPOLIS STAR-TRIBUNE, Apr. 14, 2000, at D1.
financial morass created by the LBO. It successfully lobbied the State legislature to sell $250 million in bonds on behalf of Northwest Airlines to finance construction of a maintenance facility in Duluth, and $100 million for a engine repair facility in Hibbing. In 1991, the State of Minnesota gave an incentive package worth $838 million to Northwest Airlines to build an aircraft maintenance complex in the state. Included was $320 million in low-interest loans provided by the Metropolitan Airports Commission, operator of the Minneapolis/St. Paul Airport, as well as $350 million in bonds to construct the complex.

Ultimately, $47.7 million in revenue bonds were issued by the State of Minnesota to finance the design, construction and equipping of Northwest’s Airbus heavy maintenance facility. Collateral for the loan consists of the facility, and Northwest’s Detroit-Paris route. The Metropolitan Airports Commission issued $270 million in general obligation revenue bonds, for which it acquired Northwest’s flight training center at Eagan, certain other property at the airport, and refinanced certain leasehold interests of Northwest. Collateral for the bonds exists in the form of airport facilities, airport building components, aircraft engine parts, and certain international routes. An additional $9.7 million was issued to Northwest in the form of forgivable loans to build and equip a reservations system at Chisholm.

Minnesota taxpayers now were not only paying among the highest air travel fares in the nation, their state government was providing subsidies to an airline which had created a monopoly at the airport their federal taxes had built. Ironically, Northwest spokesman Jon Austin would later complain that Sun Country and other new entrant airlines were trying to win “at the government dole” what they could not win in the free market.

V. NORTHWEST ACCUSES AMERICAN AIRLINES OF PREDATORY PRICING

A. VALUE PRICING

In April 1992, American Airlines introduced “Value Pricing”, an attempt to simplify the increasingly chaotic airline fare structure which had
evolved under deregulation. Though American Airlines had introduced yield management in the 1980s as a strategic tool to maximize revenue relative to the demand characteristics of different classes of travelers, by the 1990s, American concluded that the Byzantine pricing structure was unduly complex, and that the highest fares were dissuading business travelers from taking trips. Value Pricing reduced American's fares to a simplified four-tiered pricing approach — first class, regular coach, a 14-day advance purchase, and a 21-day advance purchase. American believed that the existing pricing structure created too large a gap between the highest and lowest fares, introducing Value Pricing in order both to simplify the fare structure, and to lower the highest prices and raise the lowest ones. 70 The unrestricted coach fares, then used by only 6% of travelers, were reduced between 38%-40%. 71 Though American anticipated the new fare structure initially would cost it money, American believed Value Pricing would be profitable after an inaugural period, and that consumers would appreciate and benefit from a simplified pricing structure. 72

B. GROWNUPS FLY FREE

The leadership American attempted to exert to simplify the fare structure evaporated when, on May 26, 1992, Northwest Airlines responded with its "Grown-Ups Fly Free" promotional fare, whereby an adult would receive a free ticket if accompanied by a fare-paying child. In order to preserve the integrity of its four-tier Value Pricing structure, on May 27th American met Northwest's pricing initiative by slashing its lowest advance-purchase fares in half. 73 The result was a financially troubling period for the industry as prices spiraled downward. 74 Ultimately, fare proliferation re-emerged, with all of the complexity and volatility of before. The price wars were highly destructive to airline balance sheets. Coupled with recession and high fuel prices, the airline industry suffered the worst losses in its history during this period.

C. NORTHWEST'S PREDATORY PRICING LAWSUIT AGAINST AMERICAN AIRLINES

After several months of sustaining enormous losses, Northwest and

70. Crandall Calls Fare Cuts Fair, Associated Press, July 29, 1993.
Continental filed a lawsuit contending that American Airlines had dropped fares in an effort to drive them out of business. They alleged that American Airlines introduced the simplified Value Pricing plan as a means of implementing its long-term strategy of persuading its competitors to charge higher prices, limiting price competition, and disciplining competitors which failed to follow American's price signals, as well as driving most other carriers from the market.\textsuperscript{75} Northwest alleged that American Airlines' "predatory and exclusionary conduct . . . was undertaken for the specific purpose . . . of accomplishing precisely what [American Airlines CEO Bob] Crandall has sought -- the elimination of competitors . . . and the financial weakening of . . . Northwest." Northwest further contended that American was "offering discounts for a far greater number of passengers and incurring substantial revenue losses to itself, which were avoidable if it had merely matched Northwest's limited promotional fares." According to Northwest, smaller rivals were forced to charge the fare structure dictated by American, or "suffer imposition of progressively lower and unremunerative pricing levels that would lead them even more quickly to extinction."\textsuperscript{76} Northwest alleged that American engaged in "illegal, anticompetitive and monopolistic activities" which were "intended to further its goal of eliminating competition."\textsuperscript{77}

Contending that American Airlines was a ruthless schemer trying to ground Northwest with below-cost pricing, Northwest Chairman Gary Wilson said, "American almost drove us out of business."\textsuperscript{78} The losses, after special charges, of nearly more than $1 billion in 1992, caused Northwest to seek concessions from lenders and its 40,000 employees.\textsuperscript{79} No mention was made of the $3 billion leveraged buy-out of Northwest as a cause of Northwest's ill health. Referring to American's CEO Bob Crandall, Wilson said "It's not fair . . . . It's time the bully in the schoolyard got punched."\textsuperscript{80} Wilson claimed that American's fare cuts were designed to bleed rivals into their graves. "Natural death is not a


\textsuperscript{76} Josephine Marcotty & David Phelps, NWA Suit Says American Is Trying to Drive Competitors Out of Business, Minneapolis Star Tribune, June 13, 1992, at 1A.


\textsuperscript{78} Terry Maxon, Northwest Execs Say AA Almost Ruined Airline, Dallas Morning News, July 15, 1993, at 1D.

\textsuperscript{79} Northwest Airlines Reports Losses Widen, United Press Int'l, Feb. 4, 1993.

\textsuperscript{80} Stephen D. Solomon, The Bully of the Skies Cries Uncle, N.Y Times Magazine, Sept. 5, 1993, at 6-13. Crandall would deride Northwest's managerial ineptitude in acquiring the airline in a highly leveraged buy-out, then failing to run it profitability, saying, "Northwest's management is Northwest's problem." Josephine Marcotty & David Phelps, NWA Suit Says American Is Trying to Drive Competitors Out of Business, Minneapolis Star Tribune, July 13, 1992, at 1A.
problem,” said Wilson. “It’s murder where there’s a problem.”81 Wilson
would also deride the low-fare carriers, describing Southwest Airlines as
“clearly a ‘cancer’ that is going to plague the airline industry . . . .”82

Northwest CEO John Dasburg claimed that American’s response to
Northwest’s “Grown-Ups Fly Free” promotion was not legitimate price
competition, “It is predatory pricing, deliberate pricing below profitable
levels to undercut competition to the point that few airlines will survive.”
Dasburg insisted, “In the long run, predatory pricing will reduce the num­
ber of airlines, ultimately cutting the number of flights and choices avail­
able, particularly in smaller markets. This will leave the few surviving
airlines free to price just as high as they want for just as long as they want.
You will bear the cost of this.”83

Northwest Airlines’ top government affairs official, Elliot Seiden,
echoed these sentiments, saying, “I cannot recall any airline ever suing
any other airline for predatory pricing, no matter how rough things have
gotten. I can’t recall any airline so blatantly and openly trying to destroy
the business of other companies.”84 Nonetheless, the jury was unper­
suaded, promptly issuing a verdict for American Airlines.

Ironically, the allegations that Northwest levied against American
are virtually the same allegations low-fare carriers such as Reno, Spirit,
Pro Air, Western Pacific, Kiwi, Access Air, ValuJet/AirTran, Vanguard,
and Sun Country Airlines have levied at Northwest. Whether or not
American’s pricing practices against Northwest were predatory, it was
clear at the time that Northwest’s executives were clearly sympathetic to
the plight of a smaller carrier in a larger carrier’s cross-hairs.

After losing its predatory pricing lawsuit, Northwest transformed it­
self from prey into predator.

VI. NORTHWEST’S RESPONSE TO NEW ENTRANT AIRLINES

An established carrier which finds its spokes assaulted by a new en­
trant typically will cut prices and, sometimes, expand capacity, to disci­
pline the competitor. Both will lose money, but large carriers have the
ability to cover short-term revenue losses from profits derived from less
competitive markets, and have stronger balance sheets with which to
weather the financial storm.85 Before becoming Executive Vice President

81. Mike Myers, NWA Calls Rival’s Chiefs Ruthless Schemers, MINNEAPOLIS STAR TRIB­
UNE, July 15, 1993, at 1A.
82. Terry Maxon, Northwest Execs Say AA Almost Ruined Airline, DALLAS MORNING
NEWS, July 15, 1993, at 1D.
83. David Phelps, NWA Asks Pilots for Giveback of $500 Million, MINNEAPOLIS STAR TRIB­
UNE, July 14, 1992, at 1A.
85. Peter C. Carstensen, Evaluating ‘Deregulation’ of Commercial Air Travel: False Dichot-
at Northwest Airlines, Michael Levine pointed out that, typically, the major airlines offer the low fare only on local origin-and-destination [O&D] traffic on flights in close time proximity to the new entrant’s, extracting higher yields from passengers arriving and departing from monopoly spokes. According to Levine, this revenue advantage may neutralize the new entrant’s cost advantage and will deleteriously impact its staying power. Levine noted, “The ability of an incumbent to respond rapidly and cheaply to the prices and output of new entrants contradicts perhaps the most critical assumption of contestability theory.” Levine set out a blueprint by which an incumbent airline can destroy a new entrant:

The essence of the strategy is simple. Match, or better yet beat, the new entrant’s lowest fare with a low fare restricted to confine its attractiveness to the leisure-oriented, price-sensitive sector of the market. Match business-oriented fares and offer extra benefits to retain the loyalties of travel agents and frequent fliers. Add frequency where possible, to “sandwich” the new entrant’s departures between one’s own departures. Make sure enough seats are available on your flights in the market to accommodate increases in traffic caused by the fare war. In short, leave no traveler with either a price or schedule incentive to fly the new entrant. If the new entrant attempts to lower prices . . ., the incumbent matches, no matter how low the fare. The object is to reduce trial and to subject the new entrant to a prolonged period of operation at low load factors. This strategy saps the entrant’s working capital while inhibiting trials that would disseminate favorable information about the new entrant.

Northwest argues that it is only matching its rivals’ fares, not undercutting them. Yet, why would Northwest add seat and flight frequency capacity to markets in which its revenue per seat was declining, if not for the impact it has on forcing the new entrant to suffer declining load factors and yields, and ultimately to withdraw? As the Department of Transportation has observed:

A low-fare airline’s entry should not usually require the incumbent airline to match the new entrant’s fare levels and make a large number of seats available at those levels or to eliminate restrictions on its discount fares. Network airlines, after all, typically offer service features unmatched by most low-fare airlines. Professors Oster and Strong correctly point out that airlines compete on many service features, not just price. The network airlines themselves justify hub fare premiums by contending that the superior service offered by the hubbing airline makes business travelers and others willing to...

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87. Id. at 452.
88. Id. at 393.
pay the higher fares. As the state attorneys general point out, ‘Concern of the fate of the public’s access to low fares rings hollow in light of the fact that all airlines are entirely free to offer low fares right now on any route they serve and to commence low fare service today whenever they like.’ Network carriers have failed to show that increasing capacity and the availability of discount seats to meet the demand for low-fare travel and eliminating restrictions on discount fares become rational goals after entry by a low fare airline, but not before entry.89

The weapons with which an incumbent megacarrier attacks a new entrant in the city-pairs in which it inaugurates service include the following:

• Dropping prices sharply;
• Eliminating advance purchase and Saturday night stay-over restrictions;
• Expanding the inventory of low-fare seats offered;
• Increasing the number of flights and/or the size of aircraft;
• Scheduling departures in close proximity to the new entrant’s flights, sometimes boxing them in;
• Offering passengers bonus frequent flyer miles;
• Paying travel agent commission overrides to steer traffic toward the incumbent in the new entrant’s markets;
• Paying higher upfront commission rates on routes where it competes with a new entrant;
• Biasing its computer reservations systems against non-affiliated interline connections;
• Refusing to enter into ticketing-and-baggage, joint-fare, and code-sharing relationships with the new entrant;
• Refusing to lease gates, provide services, or sell parts to the new entrant;
• Restricting airport operators with majority-in-interest clauses to prohibit the construction of gates and other infrastructure for new entrants; and
• Prohibiting affiliated regional feeder airlines from entering into marketing agreements with the new entrant.

At the same time, the incumbent airline maintains its monopoly fares and low service levels in markets where it faces no competition (or competes only with another megacarrier in a tacit “live-and-let-live” environment), allowing the incumbent to earn supracompetitive profits with which to cross-subsidize the losses it incurs as it attempts to bleed the new entrant into eventual submission and withdrawal. After the new entrant withdraws, the incumbent airline typically raises prices sharply.

89. U.S. Dep’t of Transp., supra note 10.
A. NORTHWEST VS. RENO AIR

Reno Air began operations out of Reno, Nevada, in July 1992. On February 10, 1993, Reno Air, then flying only seven jets, had the temerity to announce its intention to inaugurate thrice daily round-trip service between Reno and Minneapolis on April 1 at a fare of $95 one-way. Northwest had abandoned the route in 1991, because it was unprofitable. The day after Reno Air announced it would inaugurate Reno-Minneapolis service, Northwest retaliated by announcing it was beginning three round-trip daily flights between Minneapolis and Reno on April 1.\(^90\) The following day, Northwest announced it would begin new service to Reno, Nevada, from three of the West Coast cities served by Reno Air – Seattle, Los Angeles, and San Diego – on April 1, in effect, establishing a Northwest mini-hub at Reno, Nevada. These were routes not theretofore flown by Northwest. On May 1, 1993, Northwest announced it would begin a second daily flight to both Los Angeles and Seattle to Reno. Northwest began offering bonus frequent flyer miles to passengers flying it from Reno, Nevada, and commission overrides to travel agents booking passengers on Northwest.\(^91\) Northwest also announced that it would match Reno Air’s fares, as low as $55 one-way over some segments.\(^92\) Northwest offered the same fares on its nonstop flights from Minneapolis to Los Angeles, San Francisco, San Diego, Seattle, Ontario, and Portland as Reno Air offered to these cities in connecting service. By May 20th, the losses sustained caused Reno Air to reduce Minneapolis service to one flight per day.\(^93\)

Sen. Richard Bryan (D-Nev.) asked the Departments of Justice and Transportation to investigate whether Northwest was using “predatory pricing and scheduling practices” to run Reno Air out of business. According to Sen. Bryan, “The federal government should not let Northwest snuff out this airline just as it is getting its wings.”\(^94\) DOT Secretary Federico Peña met with Northwest Airlines officials in March 1993, and gave them just two days to reconsider, or face the wrath of DOT. Northwest responded by abandoning its plans to start service to Reno from Seattle, Los Angeles, and San Diego, but continued its Minneapolis-Reno

\(^91\) Oster, *supra* note 2 at 25. The authors point out that commission overrides also played a role in the decision of Southwest Airlines to exit the Indianapolis-Detroit market, one of the few it has ever withdrawn from, and of Midwest Express to abandon the Milwaukee-Detroit market.
\(^93\) Oster, *supra* note 2.
service. But Reno Air was forced to abandon the Minneapolis-Reno market, ceasing service on June 1, 1993. According to Professors Oster and Strong, "Following Reno's exit from the Reno to Minneapolis market, [Northwest's] fares increased quickly and steadily. After Reno Air's withdrawal, Northwest's lowest fare increased 73% from $86 to $149, while its lowest refundable fare increased 320%, from $136 to $455. By the Spring of 2000, Northwest's lowest seven-day advance purchase fare was $1026.

![MINNEAPOLIS-RENO AVERAGE FARE]

Source: US Department of Transportation; Passenger Origin-Destination Survey.

Decrying Northwest's "blatantly anticompetitive responses", Reno Air's General Counsel Bob Rowen alleged, "Northwest entered with excess capacity and reduced its fares. Industry experts agree that Northwest's purpose in doing so was to destroy the market, to push Reno Air out and deter other low fare airlines from entering Northwest's hubs."

97. Oster, supra note 2.
98. Id.
In 1997, Reno Air filed an antitrust lawsuit against Northwest alleging unlawful monopolization. The suit contended that Northwest employed similar anticompetitive conduct against People Express, Icelandair, Midway Airlines and other new entrants at Minneapolis/St. Paul. According to Rowen, Northwest "engaged in a variety of tactics, including below-cost pricing, to drive us from the market. These actions were predatory." The case was dropped in April 1999, after American Airlines purchased Reno Air.

B. NORTHWEST VS. SPIRIT AIRLINES

In 1996, the U.S. Department of Transportation found that Detroit was one of the four most expensive airports in the nation. It also found that Northwest, which carried 74% of Detroit’s passengers, was the nation’s most expensive airline, particularly on flights of less than 750 miles, where it has little competition.

The high fares attracted new entrants. Formerly a Detroit charter carrier, Spirit Airlines began offering once-a-day scheduled flights between Detroit and Philadelphia, on December 15, 1995. Northwest’s domination of Wayne County/Detroit International Airport prohibited Spirit from leasing gates, except on an ad hoc basis. Spirit’s introductory round trip fares in the market were between $49 and $139. In the first quarter of 1996, Spirit carried fewer than 12,000 passengers at fares between $50 and $75, while Northwest carried only about 1,200 passengers at those fares. In the second quarter of 1996, Spirit introduced a second round-trip, which increased its traffic 57%, to nearly 19,000 passengers; Northwest’s traffic increased 36%, though its traffic in the $50-75 range increased only 11% to 1,360. During that quarter, Spirit also entered the Detroit-Boston market.

But in the third quarter of 1996, Northwest unloaded 35 times the number of low-fare seats in the Detroit-Philadelphia market as it had offered previously, causing a 37% decline in Northwest’s revenue. Professors Oster and Strong point to this example as illustrating the ability of incumbent airline to open the inventory of seats for sale at low fares to consume low-fare demand, saying, “The airline could, for example, offer service at low average fares by simply making a large number of seats

101. Tony Kennedy, Reno Air Files Suit Against NWA, Minneapolis Star Tribune, Apr. 17, 1997, at 1D.
103. Katherine Yung, Fair Fares, Dallas Morning News, Mar. 1, 2000, at 1D.
105. Oster, supra note 2.
106. Id.
available in the lower fare categories, as Northwest did in the third quarter of 1996 in the Detroit to Philadelphia market.\textsuperscript{107} Northwest’s previous lowest fare was $100 higher and had required a 21-day advance purchase and Saturday night stay. Northwest matched Spirit’s fares, not only on competitive time slots, but on all of Northwest’s 11 daily flights to Boston, and its seven flights to Philadelphia.\textsuperscript{108} Spirit’s load factor in the market fell from 86% in the second quarter, to 39% in the third quarter. Spirit was forced to withdraw from the Detroit-Philadelphia market on September 30, 1996. After Spirit’s withdrawal, Northwest reduced the number of low-fare seats in the market to 27,100 in the fourth quarter, and flew only 910 seats at that level in the first quarter of 1997.\textsuperscript{109}

Testifying before a U.S. Senate Transportation Subcommittee, Mark Kahan, Vice Chairman of Spirit Airlines, said,

“In June 1996, we began hearing rumors that ‘Northwest will unload on Spirit’ in the Detroit-Philadelphia market. And that is what happened. On June 30, 1996, Northwest ‘matched’ Spirit’s $49 fare in the Detroit-Philadelphia market on all flights and simultaneously increased its capacity by more than 15 percent over the previous year.”\textsuperscript{110}

Kahan testified that after Spirit entered the Detroit-Philadelphia market, Northwest dropped its yields 54% while increasing its capacity 15%. Sharply reduced prices coupled with capacity dumping allegedly forced Spirit to withdraw from the Detroit-Boston and Detroit-Orlando markets as well. Said Kahan:

“It is probable that Northwest sacrificed out-of-pocket losses not less than $10 million because of its fare decreases and capacity increases in the Detroit-Boston and Detroit-Philadelphia markets in the third quarter of 1996 alone. These actions clearly made no sense unless Northwest was confident that Spirit would be obliged to exit the market. . . . You will pardon us for believing that Northwest tried to put Spirit out of business in the third quarter of 1996.”\textsuperscript{111}

Spirit was forced to withdraw from the Detroit-Boston market on September 8, 1996, and from the Detroit-Philadelphia route on September 30, 1996. Within several months, Northwest’s fares climbed dramatically. By early 1998, Northwest’s lowest fare was $275.\textsuperscript{112} According to Northwest spokesman, Jim Faulkner, “We don’t feel like we’ve done any-

\textsuperscript{107} Id.
\textsuperscript{108} Brennan, \textit{supra} note 104.
\textsuperscript{109} Oster, \textit{supra} note 2.
\textsuperscript{111} House Comm. on Transp. and Infrastructure Aviation Subcomm. (Apr. 23, 1998) (testimony of Mark S. Kahan, Vice Chairman and Chief Operating Officer, Spirit Airlines).
\textsuperscript{112} Brennan, \textit{supra} note 104.
In March, 2000, Spirit filed an antitrust suit against Northwest, alleging that Northwest engaged in unlawful monopolization. Spirit contended that Northwest’s domination of Detroit “is the intended consequence of a cleverly crafted avaricious scheme by Northwest to exclude competition in order to raise ticket prices at Detroit to unjustifiable levels that thoroughly demonstrate the absence of a competitive market.” Spirit further alleged that Northwest cut its fares to below-cost levels and flooded the routes with additional capacity after Spirit introduced discount fares in what had theretofore been Northwest’s monopoly nonstop routes.

C. NORTHWEST VS. PRO AIR

Pro Air inaugurated service from Detroit City Airport to Baltimore on July 4, 1997, offering fares 60% lower than Northwest’s at Detroit Metro Airport. Within a month, it had begun service to Indianapolis, Newark, and Milwaukee. In a fax to travel agents, Northwest announced it was offering a 20% commission – then twice what was custom-
Northwest matched Pro Air's $59 one way fare in the Detroit-Milwaukee market until Pro Air withdrew on February 5, 1998. According to Pro Air's COO Craig Belmundo, Northwest raised its fares to $130 on the afternoon of Pro Air's withdrawal, an allegation Northwest denied. Pro Air CEO Kevin Stamper said, "They match us on our prices on every flight, and every seat."119

Before Pro Air inaugurated flights from Detroit City Airport to Baltimore, Indianapolis, Milwaukee and Detroit, Northwest offered one-way fares to these cities of between $180 and $221. After Pro Air entered these markets, Northwest matched Pro Air's fares of $59 to $79. In addition to withdrawing from Milwaukee, Pro Air was forced to reduce service to Indianapolis from two flights per day, to one. Northwest's Richard Hirst observed that its Detroit and Minneapolis hubs "are highly competitive... Congress never expected there to be perfect competition in air services." Pro Air's Chairman Kevin Stemper replied, "predatory activities on the part of carriers that already possess many competitive advantages may drive small airlines out of the industry and lead to monopolies and market abuse."120

D. NORTHWEST VS. WESTERN PACIFIC AIRLINES

Founded by Ed Beauvais (who earlier had founded America West Airlines), Western Pacific Airlines inaugurated service from a base at Colorado Springs, Colorado, in 1995. By 1996, Western Pacific was serving 16 cities from Colorado Springs with 15 Boeing 737-300 aircraft.

Before Western Pacific started up operations at Colorado Springs, Northwest had not served the city. Northwest's ordinary pattern of adding a new city to its network was not to add service from each of its three domestic hubs simultaneously—it was instead to begin by serving the new city from Detroit, and if that was financially successful, expanding service from Minneapolis, and perhaps eventually Memphis. But in 1996, after Western Pacific began to grow, and after Northwest learned that Western Pacific was seeking gates at Detroit, Northwest quickly inaugurated service to Colorado Springs from each of its three hubs – Minneapolis, Detroit and Memphis. The message was clear—Western Pacific would be unwelcome at Northwest's hubs, would be met with fierce opposition, lots of seats and low fares. By the Fall of 1997, Western Pacific had withdrawn from its Colorado Springs hub, and was liquidated the

117. Brennan, supra not104.
118. Stopa, supra note 110.
following year. With Western Pacific's exit, suddenly Northwest's interest in Colorado Springs disintegrated, and it terminated service there from its Detroit and Memphis hubs.

E. NORTHWEST VS. KIWI INTERNATIONAL

Newark-based upstart airline Kiwi International Airlines accused Northwest of predatory practices in the Fall of 1998. Kiwi contended it was forced to pull out of the Minneapolis-Detroit and Minneapolis-Newark markets after Northwest and Continental Airlines matched Kiwi's prices on all their flights. They began by matching Kiwi's $79 fare. Once Kiwi dropped the fare to $69, they matched that too. Kiwi's full flights were soon half empty. Once Kiwi exited the market, Northwest raised fares in the Minneapolis-Detroit market to $467.

F. NORTHWEST VS. ACCESS AIR

Des Moines-based Access Air accused Northwest of predatory practices in 1999. Even though Access Air did not fly to Minneapolis, Northwest and two other carriers matched and lowered Access Air's introductory fares of $198 round trip for flights between Los Angeles and New York, and between Los Angeles and Des Moines, or Moline, Ill. Access Air then attempted to raise its fares to $298 round trip – substantially less than the $380 to $480 the carriers previously charged for a 14-21 day advance purchase, and the $680 they had charged for a 7-day advance purchase. The majors refused to match the increase and continued to offer the $198 round trip fare. Access Air accused the carriers of below-cost pricing in order to drive it out of business. “Unfortunately, the expected bear hug by the major airlines has begun,” said Access Air President Robert Ferguson. “Three of the [major airlines] are now offering fares in Access Air markets that are one-third below our fares – and far below both their normal fares and their costs. If continued, these fares will force us out of business.”

Neither Kiwi International nor Access Air nor Pro Air nor Western Pacific is still flying. As Ed Faberman, director of the Air Carriers Asso-

121. MINNESOTA PLANNING, supra note 15.
123. Katherine Yung, supra note 103.
124. NORTHWEST REBUTTAL, supra note 5.
125. Chris Olson, Regional Fare Game Eppley flights, Fees Draw Passengers from All Over, WASH. POST, Mar. 27, 1999, at 47.
127. Swoboda, supra note 126.
ciation of America, observed when financially injured by the predatory behavior of a major airline, “Most new carriers could not survive the time and money it takes to file [an antitrust] lawsuit.”

G. NORTHWEST VS. VALUJET/AIRTRAN

Northwest responded to ValuJet’s entry into the Atlanta-Memphis market by dropping its average fares 54%, from $122, in the quarter immediately preceding ValuJet’s entry, to $56 in the quarter following its entry. From the fourth quarter of 1994 until the first quarter of 1997, Northwest’s average fares were consistently lower than ValuJet’s. Since January 1994, Northwest has offered an average fare of $55.93, lower than ValuJet’s average fare of $56.13. Since Northwest offers a 1st Class product (which during most of the quarters for which data is available, ValuJet—now AirTran—did not), and since the DOT data includes first class in the average fare base, Northwest is underpricing AirTran in its coach product by a significant margin.

According to AirTran, not only had Northwest cut its yield to less than half its level six months prior to Valujet’s entry into the market, Northwest also increased its capacity by more than 50% in the Atlanta-Memphis market beginning in late 1994.

Why does Northwest charge 37% more than Southwest in the St. Louis-Detroit market, and less than ValuJet in the Atlanta-Memphis market? The likely answer is predatory intent, which emerges depending on the perception of economic strength of the target. Northwest realizes it cannot drive Southwest from the market, but that ValuJet/AirTran might be driven from it.

AirTran also complained to the DOT that Northwest boosted seat capacity in the Minneapolis-Atlanta market after AirTran announced it would begin service there in June 2000. AirTran says Northwest switched to larger planes on the Atlanta-Minneapolis route, increasing its average daily seat count by about 40 percent. “That kind of increase goes well beyond reasonable competition,” AirTran marketing director Tad Hutcheson said. “It’s almost as many seats as we were going to put in the market.”

132. Scott Thurston, AirTran, Northwest In Feud Over Service to Minneapolis, Atlanta Constitution, Apr. 5, 2000, at 17E.
H. NORTHWEST VS. VANGUARD AIRLINES

Vanguard also complained to DOT about the anticompetitive practices of Northwest Airlines.\textsuperscript{133} As the following chart reveals, Northwest Airlines responded sharply and swiftly to Vanguard's entry into the Minneapolis-Des Moines market, slashing air fares 68% in the third quarter of 1995 compared to average fares a year earlier. After Vanguard withdrew from the market, Northwest relentlessly raised fares to levels higher than ever have prevailed in the market. By the second quarter, Northwest charged an average of $244, over 400% more than the $48 fare it charged during Vanguard's brief appearance in the market.

The Minneapolis-New York market also tells an interesting story. Until 1997, Northwest Airlines served only New York nonstop at the LaGuardia and Newark airports. That year, it inaugurated nonstop service between Minneapolis/St. Paul and New York Kennedy International Airport. Coincidentally, Vanguard Airlines had inaugurated service in that market as well. Though Northwest's average fares in the Minneapolis/St. Paul-LaGuardia and Minneapolis-Newark markets averaged between $266 and $355 in late 1997 and early 1998 (about the range at which they had hovered at for several years), Northwest's average fares in the Minneapolis/St. Paul-Kennedy market ranged between $108 and $146. Fares remained at that level until the low-cost/low-fare competitor had been driven out. After Vanguard exited, Northwest raised its average fare to

$141,31\%$ higher than a year earlier. After Sun Country Airlines entered the Minneapolis/St. Paul-New York Kennedy market, Northwest's offered average fares lower than Sun Country's. Since Northwest Airlines offers a first class product, and first class fares are included in DOT's average fare data, Northwest's coach fares were undercutting Sun Country's by a wider margin than suggested by the following chart.

**VII. NORTHWEST VS. SUN COUNTRY AIRLINES**

**A. SUN COUNTRY AIRLINES BEGINS SCHEDULED SERVICE AT MINNEAPOLIS/ST. PAUL**

Inaugurated as a charter airline in 1983, Sun Country Airlines entered the scheduled airline business in the Minneapolis/St. Paul market on June 1, 1999. Until that time, Northwest was the only scheduled jet carrier based there, having absorbed Republic Airlines in 1986.

Northwest is the fourth largest airline in the United States, offering service throughout the country and to many foreign destinations. Northwest has more than 50,000 full-time-equivalent employees. In 1999, Northwest operated more than 400 aircraft, earning more than $9 billion in revenue. Northwest operates a large, profitable hub at Minneapolis, the eleventh largest airport in the United States. It has long-term lease agreements for 55 of the 70 available gates at the main terminal. Twelve more gates are being built and Northwest is seeking to lease ten of the twelve. Northwest has monopoly power in most of its Minneapolis/St.
Paul city pairs. Before Sun Country's entry, Northwest had no nonstop competition on 12 of its busiest routes.

- Los Angeles (three airports)
- San Francisco
- Washington, D.C. (three airports)
- Boston
- Orlando
- Detroit
- Seattle
- San Diego
- Miami
- Milwaukee
- Indianapolis
- New York (LaGuardia)

In markets where Sun Country now competes, Northwest had the following market shares in the first quarter of 1999 (prior to the inauguration of Sun Country's scheduled service):

Even in the short time since Sun Country began scheduled service, the extent to which the Minneapolis/St. Paul market has been constrained can clearly be seen. Traffic on many of the routes where Sun Country now competes had been stagnant for years, primarily attributable to Northwest's high fares. Following Sun Country's introduction of scheduled flights, traffic has jumped significantly. In fact, in the fourth quarter of 1999, traffic volumes were up 50% versus the same period a year ear-

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134. MINNESOTA PLANNING, supra note 15.
NORTHWEST AIRLINES' MARKET SHARE - MINNEAPOLIS/ST. PAUL
CITY PAIRS 1ST QUARTER 1999

<table>
<thead>
<tr>
<th>City</th>
<th>NW Share %</th>
<th>Next Largest Carrier Share %</th>
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<tbody>
<tr>
<td>New York - LaGuardia</td>
<td>88%</td>
<td>AA - 2%</td>
</tr>
<tr>
<td>Kennedy</td>
<td>49%</td>
<td>TW - 44%</td>
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<tr>
<td>Boston</td>
<td>85%</td>
<td>AA - 4%</td>
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<td>Los Angeles</td>
<td>79%</td>
<td>UA - 6%</td>
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<tr>
<td>Seattle</td>
<td>82%</td>
<td>UA - 8%</td>
</tr>
<tr>
<td>Detroit</td>
<td>97%</td>
<td>AA - 1%</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>99%</td>
<td>UA - 1%</td>
</tr>
</tbody>
</table>

Source: US Department of Transportation; Passenger Origin-Destination Survey.

Also recognize that the growth has not come at the expense of Northwest, a clear indication that there is room for both carriers to operate profitably in the Minneapolis/St. Paul market.

As described above, the record of the last decade reveals that Northwest repeatedly responds aggressively to new entry so as to protect and expand its monopoly power. Any time that a low fare carrier attempted to enter Northwest's monopoly markets, Northwest engaged in a predatory response designed to drive the low fare choice from the market, and to serve as a painful example to any other potential competitor. More specifically, Northwest's repeated practice of dumping large quantities of low fare seats into a specific market, coupled with its frequent flyer program and schedule frequency advantages, inflicts unacceptable economic pain on the low fare competitor which has resulted in the competitor leaving the market. Following its departure, the benefits to consumers and businesses of a low fare choice are soon gone as Northwest again raises fares to monopoly levels.

Though Northwest exhibited a relatively benign competitive response when faced with Sun Country's presence in Minneapolis/St. Paul as a charter airline, it would adopt a significantly different approach to that carrier as a scheduled airline, one expanding beyond the types of predatory conduct described above.

B. NORTHWEST DROPS FARES SHARPLY

Northwest's response to Sun Country's foray into the scheduled mar-
Predatory Practices

Total MSP Market Size—By Quarter Competing
Sun Country/Northwest Routes

Source: U.S. Department of Transportation; Minneapolis/St. Paul Origin and Destination Traffic

The market was to radically lower its fares in city-pair markets in which Sun Country entered, while increasing flight frequency and seat capacity.135 Across the board, in every market Sun Country entered, Northwest dropped its 7-day advance purchase fares by an average of 45-67% in April 1999, following Sun Country's announcement of scheduled service earlier that year.

Northwest claims that its response to Sun Country in the Minneapolis/St. Paul-Los Angeles market was only on advance-purchase fares, and had more restrictions than Sun Country's, imposing round-trip and Saturday night stay requirements. Northwest admits that it matched Sun Country's fares, but insists that occurred only on two flights a day.136 Yet Northwest publishes fares that are at the same level as Sun Country in each market Sun Country entered. Northwest's fares carry a Saturday night stay restriction, except on flights in close proximity to those flown by Sun Country. The Saturday-night restriction is imposed to limit revenue dilution on business fares. Northwest describes Sun Country as an airline focused on the leisure travel market (“it continues to offer a service that on most routes is not well-structured for the business trav-

135. Letter from Minnesota Attorney General Mike Hatch to DOT Special Counsel Steve Okun (Apr. 23, 1999).
136. NORTHWEST REBUTTAL, supra note 5.
Thus, setting its restricted fares at levels well above Sun Country’s enables Northwest to keep its business revenue high; Northwest’s unrestricted fares set at Sun Country’s levels are designed to keep Sun Country’s load factor and revenue low.

Though Northwest was radically reducing fares in markets Sun Country had entered, it was keeping fares at extremely high levels where it faced no competition. The following table compares Northwest’s lowest fares in Minneapolis/St. Paul markets Sun Country has entered, vis-à-vis Northwest’s lowest fares in markets of comparable stage length in which there is no low-fare competitor:

Northwest’s actions in the Minneapolis/St. Paul-Milwaukee market demonstrate why Northwest is widely regarded as the most aggressive airline in the industry. As reported to the DOT, by the fourth quarter of 1999, no more than six months after Sun Country started scheduled service, and no more than three months after Sun Country increased Minneapolis/St. Paul-Milwaukee service to twice-daily, Northwest was selling approximately 75% of its Minneapolis/St.Paul-Milwaukee seats at the lowest published rate, dropping its average one-way fare 59%, to $98 from the $234 average fare a year earlier.138 According to the DOT, that was the fourth largest percentage decrease among all U.S. routes, and all U.S. carriers.139 Northwest insists that Sun Country’s two flights per day created enough capacity to capture all the local traffic in the market, and therefore Northwest’s “revenue-maximizing response was to match Sun Country’s fares more completely than it had done on other routes.”140

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137. *Id.*
138. Kennedy, *supra* note 69 at D-1. This data compares Northwest’s average one-way fares in the Minneapolis-Milwaukee market during the fourth quarter of 1998 ($213) to the fourth quarter of 1999 ($98). In the fourth quarter of 1997, Northwest’s average fares were $208.
139. *Id.*
140. *Northwest Rebuttal, supra* note 5 at 26.
Of course, this wrongly assumes no stimulation of demand with low fares, by consumers who have avoided flying in the market because of Northwest's monopoly prices prevailing before competitive entry. Northwest also alleges that "Sun Country has an inexperienced management team, shifting and inconsistent business strategies, insufficient marketing infrastructure, and uncontrolled costs. If Sun Country fails, it has only itself to blame."\(^\text{141}\) If Sun Country is so woefully inept, there appears to be no rational business explanation for Northwest's aggressive behavior in the Minneapolis/St. Paul-Milwaukee market, or any other. If Sun Country is incapable of running an airline successfully, why does not Northwest merely price at the revenue-maximizing level, and stand aside as Sun Country implodes?

The U.S. Department of Transportation has observed:

The network airlines . . . assert that an incumbent airline must respond with deep fare cuts and a large increase in the availability of discount seats to entry by a low-fare airline since the latter is allegedly capable of taking away all of the incumbent's local traffic. This assertion ignores the reality of the market. The claim that the existence of seats offered by a low-fare airline necessarily will cause the incumbent airline to lose a large share of its traffic is unconvincing. Incumbent airlines will keep much of their traffic due to their service features that are important to many travelers, especially busi-

\(^{141}\) Id. at 15.
ness passengers, such as attractive frequent flyer programs and more frequent flights, and their reputation for good service. In addition, the corporate fare discount programs offered by dominant airlines typically require a large share of the corporate customer’s travelers to use that airline in order to qualify for the discounts, with the result that such corporate travelers will be unlikely to use the services of a new entrant. Experience demonstrates that a network airline can attract a substantial number of passengers, especially business travelers, even if a low-fare airline offers lower fares.142

On average, by the fourth quarter of 1999, Northwest’s one-way fare in competing Sun Country markets had fallen from $212 a year earlier to $172, nearly a 20% drop, while fares in all other Minneapolis/St.Paul markets had increased from $204 to $209 one-way. When criticized by Minnesota Attorney General Mike Hatch that it dramatically lowered fares when Sun Country entered its markets; Northwest insisted “these fare actions by Northwest are incremental adjustments to fare levels that have already been in these markets for an extended period of time.”143 Dramatic, certainly; incremental, not.

Finally, the way in which an incumbent carrier can subvert the ability of a new entrant to achieve break-even load factors is not only to drop prices to those offered by the new entrant, but to expand the number of

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seats offered at its lowest fare categories. In industry jargon, this is referred to as opening the low-fare "buckets". If the incumbent offers more additional low-fare seats than the new entrant, it can sop up discretionary demand like a sponge to water, particularly where it has stronger, established market identity, serves more cities with more flights, and offers a rebate in the form of frequent flyer miles. The following chart reveals the quantity of low-fare seats Northwest sold relative to Sun Country.

In its response to the Minnesota Attorney General's request for a DOT investigation of Northwest's competitive practices against Sun Country, Northwest alleged:

Northwest's decision as to the extent to which it should match Sun Country's fares in each of these markets is the product of an assessment of what the profit-maximizing competitive response would be among various options under present market conditions. Northwest makes that assessment on the assumption that Sun Country would remain in the market forever—in other words, the determination of what is the profit-maximizing option does not rest upon the assumption that a particular option would drive Sun Country from the market . . . 144

144. Id.
It is difficult to see how Northwest’s 60% drop in average fare on its seven daily Minneapolis/St. Paul-Milwaukee flights is a profit maximizing response, in the short term, to a carrier that offers only two flights per day. And it’s difficult to see how the addition of nearly 40,000 incremental low fare seats in the Minneapolis/St. Paul-Boston market is a profit maximizing response, in the short term, to a carrier that offers one flight per day, and sold an incremental 15,000 seats in that same market. As explained below, it is precisely such predatory behavior that the U.S. Department of Transportation has condemned.

C. NORTHWEST EXPANDS CAPACITY

Beyond these subversive pricing practices, Northwest also began to target markets that Sun Country entered with additional flights and seats. Northwest’s capacity increases were larger in markets Sun Country entered relative to: (1) the overall growth of Northwest’s system-wide capacity, (2) Northwest’s historic rate of growth on these routes, and (3) Northwest’s growth in the same markets from its Detroit hub. Moreover, Northwest’s increased capacity in markets Sun Country entered despite the fact that these markets were experiencing declining operating mar-
gins, well below Northwest's average, as Northwest dropped its prices and expanded the number of low-fare seats offered.

The following is a representative sample of Northwest's capacity increases in markets Sun Country entered:

- **Minneapolis/St. Paul-Anchorag**e—Northwest nearly doubled seats to (from 570 seats weekly in August 1998, to 950 seats in August 1999).
- **Minneapolis/St. Paul-Los Angeles**—Northwest changed its flight to match Sun Country's at the same departure time, and added wide-body 747 and DC-10 aircraft. Northwest's discount tour subsidiary, MLT, also added a twice-weekly DC-10 in the market.
- **Minneapolis/St. Paul-Orlando**—Northwest added a 6:00 a.m. aircraft in proximity to Sun Country's 6:45 a.m. flight.145
- **Minneapolis/St. Paul-Phoenix**—Northwest raised its capacity from five aircraft and 715 seats daily in June 1998, to six aircraft and 920 seats weekly one year later.
- **Minneapolis/St. Paul-San Antonio**—Northwest inaugurated twice daily nonstop service in June 2000, a market in which it theretofore had no service.146
- **Minneapolis/St. Paul-Seattle**—Northwest added an additional frequency.
- **Minneapolis/St. Paul-San Francisco**—Northwest added an additional flight and substituted a larger aircraft with more capacity to an existing flight.
- **Minneapolis/St. Paul-Boston**—Northwest added an additional flight.
- **Minneapolis/St. Paul-Houston**—Northwest added an additional flight.147

The following chart reveals Northwest capacity increases in Sun Country markets versus their capacity increases in all other non-stop markets from Minneapolis/St. Paul.

When viewed historically, or relative to Northwest's growth in Detroit, the aggressive capacity increase is equally evident. As shown in the following chart, Northwest had little interest in adding seats in Sun Country markets over the past decade, growing by less than 2% per year prior to Sun Country's entry. The same is true in Detroit where Northwest had negligible seat growth since 1990. Northwest's capacity decisions changed after Sun Country began scheduled service.

For a small carrier, offering one flight per day, Northwest's seat dumping dramatically reduces the potential for viable competitive service. Northwest's response to assertions by Minnesota Attorney General Mike Hatch that it dramatically increased capacity when Sun Country en-

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145. Letter from Minnesota Attorney General Mike Hatch to DOT Special Counsel Steve Okun (Apr. 23, 1999).
146. Testimony of Bill LaMacchia, Jr., Before the U.S. Senate Judiciary Comm., Subcomm. on Antitrust (May 2, 2000).
147. NORTHWEST REBUTTAL, supra note 5 at 27-28.
Northwest & Northwest Airlink Capacity Increases
99/00 v. 98/99

Source: US Department of Transportation; T-100 Monthly Operating Statistics by Carrier Entity
January-April reflects 2000 v. 1999; April-December reflects 1999 v. 1998; September omitted due
to labor strike in 1998

Northwest's decision to add capacity on some of the routes Sun Country is serving cannot possibly be viewed as predatory. Indeed, those scheduling decisions were not a competitive response to Sun Country at all. Rather, they reflected decisions made by Northwest of where best to deploy a large number of additional aircraft available to Northwest this summer.148

One must ask why Northwest devoted additional frequencies and larger aircraft to markets in which it was dropping fares sharply, given the opportunity costs of not devoting that capacity to higher-revenue markets. Far from being a revenue-enhancing strategy, such circumstantial evidence suggests a different motive — to dump capacity in the markets Sun Country has entered in order to drive it from the market, sustaining short-term losses in order to re-exert its monopoly.

Northwest Capacity Growth Has Been Directed Toward Its Lowest Margin Routes

The above table demonstrates that Northwest's response to Sun

Country has been to grow faster in markets served by Sun Country than it grew in non-Sun Country markets. This growth has been accompanied by massive price discounting and hence lower unit revenues and margins. This is the strategy of a predator - an airline intent on eliminating the low fare alternative. This is the strategy of a company seeking to regain its monopoly power. And it is surely not profit-maximizing behavior unless the profit sought is long-term profit extracted through higher fares from business and leisure travelers once the monopoly is re-established.

Northwest CEO John Dasburg defined predatory pricing as "deliberate pricing below profitable levels to undercut competition to the point that few airlines will survive." By the standard of Dasburg's own definition, Northwest has crossed the line from competitor to predator.

D. NORTHWEST'S SUBSIDIARIES' RESPONSE TO SUN COUNTRY

Northwest also allegedly turned its partially-owned charter airline subsidiary, Champion Airlines, and wholly owned discount tour operator, MLT, against Sun Country after it became a scheduled airline. MLT and

149. David Phelps, NWA Asks Pilots for a Giveback of $500 Million, MINNEAPOLIS STAR TRIBUNE, July 15, 1992, at 1A.
Champion added flights and undercut fares on several of Sun Country’s new routes, including the following:

- **Minneapolis/St. Paul – Las Vegas**—MLT increased to daily service on a route it had previously only flown twice per week each summer for the prior fifteen years.
- **Minneapolis/St. Paul – Los Angeles**—MLT offered round-trip charter fares of $239, undercutting Sun Country’s lowest fare of $298.150
- **Detroit-Las Vegas**—MLT commenced twice-daily service after Sun Country expanded flights from four per week to daily. Northwest awarded its World Perks frequent flyer program miles to passengers who flew MLT out of Detroit, offered travel agent commission rates of 20%, agent cash bonuses of $10 per person booked, and published round-trip airfares as low as $99.90.
- **Minneapolis/St. Paul-Orlando**—MLT went from twice-per-week service to daily service following Sun Country’s scheduled entry into this market. MLT had operated its twice-weekly schedule since 1992.

Champion Air flew 32 weekly flights among seven routes Sun Coun-

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150. Letter from Minnesota Attorney General Mike Hatch, supra note 145.
try inaugurated. These pricing and capacity activities of tour operators and charter airlines are relatively unmonitored by the DOT, which collects data on scheduled airlines.

Sun Country is owned by Bill La Macchia, Sr., who also owns Mark Travel Corporation. It has been alleged that Champion and MLT have aggressively targeted Mark Travel Corporation since Sun Country inaugurated scheduled service at Minneapolis/St. Paul.

Minnesota Attorney General Mike Hatch asked the U.S. Department of Transportation to investigate Northwest's pricing and scheduling aimed at Sun Country. According to Hatch, "It is difficult not to conclude that the use of a three-front attack by NWA through Champion, MLT and its own carriers creates a climate of expanded seating, reduced prices and scheduling conflicts designed to push an emerging competitor out of this marketplace. . . . I believe NWA may be in engaging in activity prohibited by your guidelines." Northwest, with revenues of $11 billion, an organization nine times the size of Mark Travel, owning 100% of MLT, responded to assertions that it used MLT as a competitive weapon against Sun Country by saying, "MLT draws no significant competitive strength from its affiliation with Northwest. In the charter tour operator business, Sun Country/Mark Travel is Goliath and MLT is David. In that world, MLT has no market power."

E. NORTHWEST CANCELS COOPERATIVE AGREEMENTS

In the fall of 1998, Northwest canceled agreements with Sun Country at Boston and Los Angeles to provide ground services and office and ticket counter space, preferring to leave such space vacant rather than leasing it to Sun Country. In February 1999, Northwest Senior Vice President Richard Hirst assured the Minnesota Attorney General that, "Northwest has historically provided Sun Country Airlines with a wide range of services and facilities. . . . [I]t is not our policy and never has been our practice to use airport services as competitive weapons."

Yet soon thereafter, Northwest was doing precisely what Hirst had assured the Attorney General it would not do. Northwest canceled its maintenance and training agreement and certain airport rentals, refused

152. Torbenson, supra note 151; see also Tony Kennedy, Hatch Asks Federal Officials To Watch Northwest's Response to Sun Country, MINNEAPOLIS STAR TRIBUNE, Apr. 29, 1999, at D-3.
154. Testimony of Bill LaMacchia, Jr., supra note 146.
to sell or loan parts to Sun Country, and upped its hangar rent. Only days after Sun Country entered the scheduled market at Minneapolis on June 1, 1999, Northwest violated long-standing industry etiquette by refusing to continue its 16-year pact to share parts and testing equipment. Northwest sent out a company-wide memorandum ordering its employees to bar Sun Country from buying or borrowing spare parts: “effective immediately, all parts support (loans/sales) to Sun Country is terminated until further notice.”

Because most airlines are committed to safety and customer service, the standard industry practice is to loan or sell other carriers parts on an “as needed” basis. No airline can maintain a full inventory of aircraft parts at all of the cities to which it flies. La Macchia observed, “If Northwest can disadvantage us and our customers are inconvenienced, they see that as a win for them.”

Northwest next closed its flight attendant and pilot emergency training facilities to Sun Country. According to Northwest spokeswoman Marta Laughlin, “if our decisions don’t happen to please one particular airline – one that happens to be stealing our customers – then so be it.”

At the same time, Northwest chose to impede Sun Country’s ability to compete by discriminating in travel agency commissions. According to Northwest, approximately 80% of its ticket sales are made by travel agents. While offering 5% commissions on most routes, it offers 8% commissions on routes flown by Sun Country. Northwest also offers “override commissions” to many of the largest travel agents in the state. These overrides are typically based on the share of traffic an agency tickets on Northwest relative to all other carriers. Given Northwest’s extensive route network from MSP, many travel agents are unwilling to support a new entrant carrier and jeopardize these incentive payments from Northwest.

According to Sun Country Vice President Tammy Lee, “What Northwest is trying to do is to sew up every aspect of the community, dominate market share, and squeeze out competition.” Sun Country’s Chairman, William E. La Macchia, concluded, “Rational businesses do not sell their products below costs, or pay travel agents bonuses to induce them to book passengers at drastically reduced rates or cut prices from 40%-60% except in hope and expectation that competition will be stifled and supracompetitive pricing will then compensate for losses.”

156. Id.
159. Hawkins, supra note 155.
Sun Country Airlines was forced to cease scheduled operations from Minneapolis/St. Paul on December 9, 2001.

VIII. DOT Policy on Unfair Exclusionary Practices

Between 1993 and 1999, the U.S. Department of Transportation received 32 informal complaints alleging unfair competitive practices. Half of these complaints involved complaints of unfair pricing and capacity responses to new entry – dumping low-fare capacity, and in some cases adding flights. Since 1996, new entrants have tended to exit more routes than they entered. According to Professors Oster and Strong, "the slowdown in route entry may be due to the nature of responses by network carriers. . . . [T]he response of incumbents [to the entry of low-fare carrier Southwest Airlines] appeared to be very mild compared to the responses [of Northwest] to Reno Air and Spirit . . . ." They observed that, "the decline in entry applications [after 1996], and in the number of carriers moving from authorized to operating status, may in part be due to the perceptions of both investors and prospective new entrants about the nature of likely entry responses from the incumbent carriers." As Alfred Kahn has observed, "The entry of these new low-fare carriers keeps the industry honest . . . . I'm a strong advocate of competition and I don't want to go back to regulation. But you've got to distinguish legitimate competition from what is intended to drive competitors out and exploit consumers." As Congress has observed, "Although the airline industry has been deregulated, this does not mean that there are no limits to competitive practices. As in the case with all industry, carriers must not engage in practices which would destroy the framework under which fair competition operates."

John Nannes, Deputy Assistant Attorney General, US Department of Justice, speaking before the International Aviation Club, said:

"[I]n the 1980's the DOT approved a number of transactions involving carriers with high shares of city-pair traffic, reasoning that other carriers could easily enter those city pairs and discipline fares if the merging carriers began to act noncompetitively. Companies rarely engage in predatory conduct, it [was] said, because any attempt by the predator to 'recoup' the financial costs of predation in the form of higher prices after the prey is driven out will be defeated by new entrants undercutting those higher prices.

161. Oster, supra note 2.
162. Id.
163. Id.
165. H.R. REP No. 98-793 (reporting on the CAB Sunset Act of 1984)
The airline industry exhibits certain characteristics that make a predation theory more than merely 'plausible'.

First, hub carriers dominate hub markets, as demonstrated by market share. Second, hub carriers appear to be in a position to exact high fares, as demonstrated by hub premiums. Third, hub carriers can easily respond to entry by start-up carrier by increasing capacity and reducing fares in affected markets virtually overnight. Fourth, hub carriers have an incentive to act before start-up carriers develop a foothold in the hub: it is obviously easier to drive a carrier out before it gets established in the market. Fifth, a start-up is likely to have limited capital and is thus vulnerable to predatory practices; this is not an instance where anyone has to wait a long time to see whether competitors can be, or actually have been, driven out of business. Sixth, a hub carrier 'defending its turf' against encroachment by a start-up carrier in a few markets can create a 'reputation for predation' that deters start-up carriers from entering its many other hub markets; this can significantly alter the 'cost-benefit' predation calculation for a hub carrier in a way uncharacteristic of most other industries. In short, a 'recoupment scenario' is not implausible at all. 166

The U.S. Department of Transportation became so concerned with the high failure rate of new entrant airlines, the widespread allegations of predatory pricing and capacity dumping, and the ineffectiveness of the antitrust laws to arrest it, that in 1998 it announced a proposed policy statement on unfair exclusionary practices. 167 The policy was designed to fill a void in the law which places the unfair competitive practices of virtually all U.S. industries, except airlines, under the jurisdiction of the Federal Trade Commission. Such jurisdiction instead resides with DOT.

As the Department of Transportation observed:

A major carrier can minimize or even avoid self diversion of local revenue, for example, by matching the new entrant's low fares on a restricted basis (and without significantly increasing capacity) and relying on its own service advantages to retain high fare traffic. We have seen that major carriers can operate profitably in the same markets as low-fare carriers. Major carriers are competing with Southwest, the most successful low-fare carrier, on a broad scale and are nevertheless reporting record or near-record earnings.

166. John Nannes, Address Before the International Aviation Club (July 20, 1999).
167. Under the DOT's proposed guidelines, the DOT would initiate enforcement proceedings when one or more of the following occurs: the major carrier adds capacity and sells such a large number of seats at very low fares that the ensuing self-diversion of revenue results in lower local revenue than would a reasonable alternative response, the number of local passengers that the major carrier carries at the new entrant's low fares (or at similar fares that are substantially below the major carrier's previous fares) exceeds the new entrant's total seat capacity, resulting, through self-diversion, in lower local revenue than would a reasonable alternative response, or the number of local passengers that the major carrier carries at the new entrant's low fares (or at similar fares that are substantially below the major carriers' previous fares) exceeds the number of low-fare passengers carried by the new entrant, resulting, through self diversion, in lower local revenue than would a reasonable alternative response. U.S. DEP'T OF TRANSPORTATION, supra note 10.
Our enforcement policy will not guarantee new entrants success or even survival. Optimally, it will give them a level playing field.\textsuperscript{168}

More recently, the Department of Transportation concluded:

The most controversial competitive responses to entry have involved sharp fare cuts, a large increase in the number of seats sold at low fares, and often an increase in total capacity. . . . In some cases the incumbent network airline has . . . responded to entry in ways that appear to be economically irrational unless the entrant exits the market or reduces its service. In these cases the hubbing airline cuts its fares and increases the availability of its lowest fares by so much that it obtains much lower revenues and profits than it would have obtained if it had chosen a more moderate response. In extreme cases the incumbent airline cuts its fares to match the new entrant's fare levels, eliminates all or most of its restrictions on discount fares, and greatly expands the availability of discount-fare seats. The incumbent airline often adds flights as well. . . . Although the incumbent carries many more passengers, its total revenues are well below the revenues realizable through a more moderate response to entry.

When the incumbent airline responds to entry by slashing fares and making low discount fares much more available, the new entrant airline usually cannot obtain enough traffic to sustain its service. The ready availability of low fares on the incumbent airline, which offers service features not offered by the new entrant airline and has an established reputation, dries up the traffic available to the entrant. The entrant must exit the market, and the incumbent airline then often increases its fares and sharply reduces the availability of its lowest discount fares.\textsuperscript{169}

Northwest hired several economists to refute the allegation that predatory pricing exists in the airline industry, or that monopoly hub carriers exact a monopoly fare premium from passengers. Northwest CEO John Dasburg insisted, "Are we to believe today that the nation's air transportation system now depends upon the survival of a handful of thinly capitalized new-entrant airlines and, therefore, an interventionist policy is warranted and desirable?"\textsuperscript{170} Northwest Vice President Elliot Seiden said, "What is really at work here is the sense that some firms are entitled to a break - let them get started, give them a shot, let them get their roots spread . . . . Our view is that's just a formula for slow death."\textsuperscript{171} Competition is a formula for slow death? Is monopoly North-

\textsuperscript{168} Id.
\textsuperscript{169} U.S. DEP'T OF TRANSPORTATION, supra note 10.
\textsuperscript{170} Dasburg Calls On Government to Halt Market Intervention, AVIATION DAILY, Apr. 24, 1997, at 151
\textsuperscript{171} Lisa Zagarolli, Why Feds Went After American, DETROIT NEWS, July 20, 2000. Apparently, Northwest fears that consumers might prefer the services of low-cost/low-fare competitors to its own. Yet the antitrust and competition laws exist to allow consumers to choose among competitors, and not to allow the dominant firm to deny consumers of that choice.
west's formula for a long life?

Despite these well-funded efforts, the DOT concluded, “unfair competitive practices have occurred in the airline industry. Such practices are likely to cause consumers to pay higher fares and receive poorer service than they would obtain in a competitive market. The Department, working with the Justice Department, has an obligation to prevent such practices.”\textsuperscript{172}

IX. \textbf{Northwest's Usual Response to Allegations That it is a Monopolist Which Engages in Predatory Conduct}

As this Chapter has revealed, allegations of predatory behavior have been levied against Northwest Airlines on numerous occasions. Its response typically has been either to deny the substance of the allegations, attack the messenger, or alternatively, to admit the facts but offer a justification that it is merely competing fairly and lawfully. Northwest sometimes claims that there is no such thing as predatory pricing, though Northwest itself accused American of the same behavior.\textsuperscript{173} Northwest also typically accuses its competitors of asking for a government bail-out, or of failing because of managerial ineptitude rather than anything Northwest has innocently done, though Northwest itself was bailed out by the State of Minnesota.\textsuperscript{174} On occasion, Northwest claims that it is a large employer in Minnesota, and that its citizens should be grateful that Northwest has created a hub at Minneapolis/St. Paul. Frequently, Northwest will claim that fares appear higher at Minneapolis/St. Paul because the region has a higher proportion of business travelers, and because charter flights are capturing a portion of the low fare traffic. As noted above, Northwest has also alleged that its very existence potentially is threatened by low-cost/low-fare new entrant airlines.

But the allegations of predatory behavior are too numerous, and too oft-recurring, to be dismissed as random complaints of malcontent airlines seeking to blame others for their ills. Northwest's prices in the non-stop markets where it faces no competition (or faces only another high-cost/high-fare megacarrier) are too high to deny the existence of a monopoly, and consumer exploitation. And if Northwest insists that the exorbitant prices it charges in its monopoly markets are in fact \textit{reasonable}, and that it operates in an industry with very thin margins, then most cer-

\textsuperscript{172} U.S. \textsc{Dept of Transportation}, \textit{supra} note 10.

\textsuperscript{173} Northwest has claimed, "There is no evidence that major carriers are engaged in predatory pricing." Reply Comments of Northwest Airlines in DOT Docket OST-98-3713-1594 (Sept. 8, 1998).

\textsuperscript{174} Northwest has insisted that "There is no evidence that new entrant failure is the result of major carrier competitive responses." Reply Comments of Northwest Airlines in DOT Docket OST-98-3713-1594 (Sept. 8, 1998).
tainly the radical price discounts Northwest offers in response to a new entrant are below-cost, and therefore predatory.

Why does Northwest suffer massive opportunity costs in the form of taking aircraft out of monopoly markets, where they are producing supracompetitive profits, to re-deploy them into markets where seats are overwhelmingly discounted? Why does Northwest sharply drop prices and increase capacity in nonstop markets where low-fare new entrants appear, while consistently maintaining high prices in markets where they are absent? The answer is clear—Northwest is willing to suffer short-term losses in order to drive new low-fare competitors out of Minneapolis/St. Paul, out of Detroit, and out of Memphis, where it maintains monopoly hub operations.

Northwest has the financial ability to weather a predatory storm longer than a new entrant. Its message is clear—new entrant competition with Northwest is the equivalent of challenging a blood bank to a bleeding contest. Northwest has monopoly spokes radiating from each of its hubs that can cross-subsidize its losses in spokes in which low-cost/low-fare competition appears. The predatory battle is waged in order to raise prices sharply once the new entrant departs, and resume its monopolistic exploitation of consumers in all the spokes radiating from its Fortress Hub. If there is no such thing as unlawful predatory pricing, what did Northwest CEO John Dasburg mean when he said, "In the long run, predatory pricing will reduce the number of airlines, ultimately cutting the number of flights and choices available, particularly in smaller markets. This will leave the few surviving airlines free to price just as high as they want for just as long as they want. You will bear the cost of this"?175 Is pricing predatory only when it is directed against Northwest?

Several Fortune 1000 companies are headquartered in Minneapolis/St. Paul, Detroit, and Memphis. But 3M Company does not charge Minnesota consumers more for Scotch Tape than it charges out-of-state consumers; Ford Motor Company does not charge more for Ford Explorers in Michigan than it charges elsewhere; FedEx does not charge more to ship packages from Memphis than it does from another city. The fact that Northwest Airlines is a major employer in Minnesota gives it no license to exploit consumers and use its predatory muscle to suppress competition designed to provide a modicum of consumer relief.

Northwest's large employee base has afforded it considerable political power to suppress efforts to build a new airport at Minneapolis/St. Paul, to persuade airport authorities at its hubs to favor it over new entrants, and to persuade Minnesota politicians to deliver up several hun-

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175. David Phelps, NWA Asks Pilots for a Giveback of $500 Million, Minneapolis Star Tribune, July 15, 1992, at 1A.
dred millions of dollars in taxpayer guaranteed debt financing. To claim, as Northwest does, that small airlines which seek government relief from monopolistic, predatory, and exclusionary practices is the equivalent of asking for a government bail-out, is both to misunderstand that a bail-out is an economic subsidy, and to engage in unashamed hypocrisy. The competition laws apply to all monopolists; airlines are not exempt. To ask for their enforcement is merely to ensure that competition disciplines pricing and service as it does in every other American industry.

Northwest’s assertion that the “hub premium” is instead a reflection of a higher mix of business travelers does not seem to acknowledge that high fares lead to less travel by all but the most price-insensitive. Beyond that, it is unclear why major airlines, such as Northwest, believe that businesses must necessarily continue to pay high prices. And although Northwest will claim that fare data in the Minneapolis market is skewed by not recognizing charter activity, it has again confused the symptom with the cause. The presence of charter activity is an indication of high scheduled fares in a dominated market.

Finally, the allegation that competition might cause the “slow death” of Northwest is a startling admission of a lack of self-confidence by management of one of the world’s largest airlines, one which dominates three major American hubs, and flies to several Continents. In fact, several smaller metropolitan areas (including Denver, Salt Lake City, and Phoenix) have an established low-cost/low-fare competitor, and the dominant airlines (United, Delta, and America West, respectively) do not make this claim that somehow competition will destroy the world as we know it. At airports where competition exists, taking advantage of the price elasticities of demand inherent in air travel, the low-cost/low-fare carrier stimulates the market with discretionary traffic growth. According to the U.S. Department of Transportation, “Virtually all domestic traffic growth in recent years is attributable to the spread of low cost service. . . . [T]o a great extent low fare service attracts new passengers to the industry rather than simply diverting traffic.” The incumbent and new entrant airlines both enjoy higher load factors, filling seats which otherwise would fly empty. Far from destroying the incumbent, competition encourages it to provide better service to consumers, making it a

176. It was Northwest that sought and received a State of Minnesota government bail-out. It was Northwest that sought Federal court protection from the actions of a larger competitor when it felt threatened. It was Northwest that threatened bankruptcy to obtain employee wage concessions. It is Northwest that has sought anti-trust exemption so that it could form cartels with other large airlines. It is Northwest that places a high value on its Tokyo hub because it is severely constrained by government controlled slots. And it is Northwest that has a political action committee and a Washington office dedicated to lobbying.

177. Zagaroli, supra note 171.

stronger and more sustainable enterprise. Monopolies tend to be high-cost, high-priced, low-service enterprises. Competition can breathe new life into such a lethargic corporate culture, causing it to reduce its costs, lower its price, and improve its service. In a service industry such as commercial aviation, such competitive discipline is essential to long-term sustainability.

One must recall the impact of the flood of Japanese automobiles into the U.S. market in the 1960s and 1970s. Far from destroying the U.S. auto industry, it inspired General Motors, Ford and Chrysler to new levels of productivity, efficiency, and quality. And by giving consumers more dependable, durable, and reliable automobiles, it enabled Detroit automakers to enjoy record profitability.

Sometimes Northwest alleges that those who urge enforcement of the competition laws are trying to re-regulate the airline industry. When one hears such a claim, one must remember the words of the father of free market capitalism, Adam Smith, who wrote:

By a perpetual monopoly, all the other subjects of the state are taxed very absurdly in two different ways; first, by the high price of goods, which, in the case of free trade, they could buy much cheaper; and secondly, by their total exclusion from a branch of business, which it might be both convenient and profitable for many of them to carry on. It is for the most worthless of all purposes that they are taxed in this manner. It is merely to enable the company to support the negligence, profusion, and malversation of their own servants [managers and employees] whose disorderly conduct seldom allows the dividend of the company to exceed the ordinary rate of profits in trades which are altogether free, and very frequently makes it fall even a good deal short of that rate.

Fair competition obviates the need for monopoly regulation.

X. Conclusion

"There have been instances in which a new, small carrier has offered low price service between a major carrier's hub and a spoke city, only to find the major carrier cutting its own air fares and increasing the number of seats—or even airplanes—on that route and sacrificing short term profits with only one goal in mind: to drive the new entrant out of the market and then raise its own fares to their original level or higher, and cut back its service."

The U.S. Department of Transportation

One source described Northwest Airline's anticompetitive activities

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179. NORTHWEST REBUTTAL, supra note 5.
in these words: "Northwest's tactics - matching cut-rate fares, surrounding flights of smaller competitors and other attempts to exclude upstart carriers from some markets - show how established airlines use their economic power and tools such as bigger jets and fleets, travel agency bonuses and gate domination to protect their turf from fare-cutting challengers."\textsuperscript{182}

Minneapolis/St. Paul travelers pay some of the highest air fares in the nation - up to 49\% higher than the national average for trips of comparable distance. The monopolization of Minneapolis/St. Paul International Airport began with Northwest's acquisition of its largest competitor, Republic Airlines in 1986. That merger gave Northwest the means to raise prices sharply. In 1989, a leveraged buy-out of Northwest Airlines saddled its balance sheet with more than $3 billion in debt. Minneapolis/St. Paul passengers and Minnesota taxpayers have, in effect, been asked to pay down that debt through higher fares and government subsidies. The net drain on the Minnesota economy is several hundreds of millions of dollars per year.

Monopolistic pricing is possible only if competition is suppressed. Among all major U.S. airlines, Northwest has been the most aggressive in attacking any low-cost/low-fare airline which attempted to enter its fortress hub. Over the past decade, several low-cost/low-fare carriers have been attacked by Northwest, including Reno Air, Spirit Airlines, Pro Air, Western Pacific, Kiwi International, Access Air, AirTran, and Vanguard Airlines. The response in every case was to use predatory pricing to deny the new entrant break-even load factors by flooding the market with sharply discounted seats. Once the injured competitor withdrew, Northwest reinstated prices to their monopolistic levels.

In 1999, a Minneapolis/St. Paul-based charter airline - Sun Country Airlines - transformed itself into a scheduled airline. The response by Northwest was to aggressively attack Sun Country with additional flights and larger aircraft, coupled with an avalanche of discount seats in every market in which Sun Country attempted to compete. Northwest canceled agreements with Sun Country for leased space, training, and parts. Northwest's charter and tour operator subsidiaries added flights and undercut fares in markets Sun Country had entered. The nation's most aggressive major airline became even more aggressive in attempting to deny Minnesota travelers a competitive choice. On December 9, 2001, Sun Country was forced to terminate its scheduled operations.

Northwest's success in driving another competitor from Minneapolis/St. Paul may encourage it to do what it has always done - raise prices sharply to their previous monopolistic levels. As Northwest reestablishes

\textsuperscript{182} Zagaroli, supra note 171.
its monopoly, it will be highly unlikely that another new entrant airline will dare try to take on Northwest from its Minneapolis base. Ironically, the people who will pay the price of monopolization are the citizens who came to Northwest’s rescue with a bail-out, and the taxpayers who built, and own, the very airport that Northwest seeks to monopolize.

If major hub-dominant airlines are free to price below cost and increase capacity or flight frequency significantly, a new entrant will find consumer demand for its product eroded below a break-even cost level. Though the incumbent will lose money in the short-term, it will recoup those losses in the long-term.

The competitive response of a major airline to the entry of another major airline into its hub is generally not to dump capacity or price below-cost, for such a predatory effort would be futile. But when a less-well-capitalized, younger, low-cost new entrant airline attempts to enter, the competitive response is often predatory, with the intent of driving the new entrant out of the market. Chronologically, the process is this:

1.) Major airline establishes dominance at airport serving major city.
2.) Dominance allows major airline to price well above competitive levels.
3.) When a new entrant attempts to enter a major airline’s hub, dominant airline responds with below-cost pricing, capacity dumping, and/or a number of other predatory practices until the new entrant is driven out.
4.) Once the new entrant is driven out of the market, dominant airline raises prices to levels sometimes higher than those prevailing before the new entrant attempted entry.

Predatory behavior can have a chilling effect on new entry. As Irwin Steltzer observed, a hunter who walks past a field with a no trespassing sign may ignore it, unless the field is littered with bodies of previous trespassers. Similarly, Mark Atwood concludes, “Fear of predation shrinks the available pool of investment capital for upstart airlines and channels their entry away from the very (monopoly) markets where their competitive presence would be most valuable” to the consuming public, relegating them to the small, safe niches of the airline market.183

Reviewing this pattern, which has appeared again and again over the past two decades, Alfred Kahn concluded:

When I am confronted with that objective sequence of events, I am prepared to characterize the response of the incumbents . . . as predatory, and I see no reason to require any further demonstration. I think the most grievous governmental failure in the recent years has been the failure to prosecute a single case against new competitors, and I certainly applaud the Department of Transportation for undertaking a vigorous enforcement effort. . . .

183. Mark Atwood, Refining Predatory Policy: The Fear Factor and Reduced Funding for Low-Fare Airlines, ANTITRUST LAW & ECON. REV. 89 (1999).
The acid test, whether it is framed in terms of a predatory intent or in terms of the likely objective of anticompetitive consequences . . . is whether the incumbent airline is deliberately accepting financial losses selectively in the markets where it is subject to competitive challenge, engaging in what Corwin Edwards 50 years ago called discriminatory sharp-shooting. For the reasons that the DOT clearly expands, a policy of deliberately losing money would not make sense except on the expectation of driving people out and being able to recover it. . . . The scores of competitors that have entered the industry over the last 20 years attest to the widespread eagerness of enterprises to take the risk of coming in and competing in free markets. But the history of their entry and demise also demonstrates that we must have vigorous antitrust-like policies to keep open the opportunity for that entry, free of the threat, apparently abundantly demonstrated by actual practice, of predatory responses.184

If Neiman-Marcus, Saks, Sears and Montgomery Wards had lowered their prices to Wal-Mart’s levels, while building stores several times their size right across the street of every newly opened Wal-Mart, consumers would have been denied the opportunity to buy consumer goods at discount prices. It is consumer choice that our competition laws must protect. This is particularly true in industries which market their wares from publicly-owned, taxpayer-financed facilities, like airports.

To survive, low-fare competitors need reasonable access to airport facilities, the cessation of predatory conduct, and the support of the flying public. Supporting competition and identifying the predatory actions of any monopoly is not just the responsibility of government regulators, it is also the responsibility of business leaders and consumers. Competition is good for consumers, good for businesses, and good for the regional economy which relies on high quality, reasonably priced air transportation.

Northwest Airlines has become the most aggressive major airline in protecting its monopoly status. There is another way. There are several examples of where a major hub carrier and a low fare alternative both operate successfully in the same city: United and Frontier in Denver; Delta and AirTran in Atlanta; TWA (soon American Airlines) and Southwest in St. Louis; America West and Southwest in Phoenix; and Delta and Southwest in Salt Lake City. This is not a “zero sum game” where one airline gains at the expense of another—a low fare competitor enlarges the market, provides additional consumer choice and makes the larger competitor more responsive to the marketplace.

As the Department of Transportation identified:

Low fare carriers’ success relies on having such low costs that they can offer prices that incumbent carriers cannot match for large proportions of their

capacity. What this means is that to a great extent low fare service attracts new passengers to the industry rather than simply diverting traffic from the network carriers. And network carriers still have advantages that enable them to compete at higher cost levels. They have an advantage in flow traffic, which allows them to shift capacity from local passengers to flow passengers in order to maintain adequate revenues, and they typically have advantages in frequent flyer programs and travel agent commission overrides. Thus, while network carriers probably can never match the lower unit costs of point-to-point operators, they do not have to. Rather, they have to narrow cost differences to the point that their competitive advantages on the revenue side provide a competitive equilibrium.\(^\text{185}\)

There are several reasons why Northwest should cease its predatory behavior:

- **First**, a low fare competitor does not threaten the viability of Northwest. To the contrary, a low fare competitor will expand the market place for all, including Northwest.
- **Second**, a hub competitor will improve Northwest’s service quality by giving customers a choice.
- **Third**, allowing a low fare competitor a chance to compete will reduce the risk of antitrust enforcement litigation against Northwest.
- **Fourth**, the consumers traveling to and from MSP airport want and deserve a choice. Northwest will further damage its reputation by driving yet another low fare choice from the market place. Consumers and business travelers resent not being allowed a choice.

Undoubtedly, an airline like Northwest has a place in the market. It will continue to be the largest airline in several cities, despite the fear expressed by Northwest executives that allowing low-cost/low-fare competition will produce Northwest’s “slow death.” Through its vast network and enormous fleet, Northwest can provide more frequent service to an array of destinations around the world than can a smaller competitor. But price-sensitive consumers still deserve a choice. The effort of a monopolist to deny consumers that choice is illegitimate, if not illegal.

The monopolization of public resources is antithetical to the public interest. The purpose of airline deregulation was to promote competition, not allow airlines to monopolize public resources. Monopolies generally bring high prices and poor service quality. Predatory behavior by a monopolist to suppress competition should not be tolerated under U.S. competition law.

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\(^{185}\) U.S. DEP’T OF TRANSPORTATION, supra note 178.
Reform of Air Cargo Transport Regulation Through the WTO and GATS

Stephen Dolan*

ABSTRACT

This paper examines the air cargo transport system and the regulatory framework in which it operates. It suggests that the regulatory system that has governed air cargo transport throughout its modern history has been eclipsed by changes in global trade and global economics. This paper proposes that if air cargo transport is to achieve its full potential as an efficient and integral part of global trading networks, then the regulatory system in which it operates must adapt to these changes as well. It is the thesis of this paper that the most effective method of adapting the air cargo regulatory system to the new realities of global trade and economics is through the WTO and GATS.

This paper begins by introducing the history and development of the air transport system, especially as it relates to air cargo transport and regulation. The limitations of this system are introduced, as well as the benefits a reformed system would bring to bear on global trade. The introduction concludes by stating the thesis of this paper, that the air cargo regulatory system should be reformed through the WTO and GATS, as well as the implications of such reform.

The paper continues by describing the air cargo market, including the nature and types of air cargo services, the players in the market,

* Attorney, Norton Rose, Brussels, Belgium. Original article date is January 25, 2002.
trends in air cargo and its prospects for the future. The current system of international air cargo regulation is examined next, with a particular emphasis on the historical and other circumstances that influenced its development. Following a brief introduction to the WTO and GATS, including its current limited coverage of air transport, this paper explores the benefits of air cargo transport reform, various mechanisms available to achieve such reform, and why reform through the WTO and GATS should be preferred above all others. This paper next examines how such reform would be achieved through GATS, including the specific legal techniques involved and the problems likely to be encountered.

This paper concludes by examining the significance of air cargo transport regulation reform through GATS, including its likely effect on passenger air transport regulation and on world trade in general.

**Introduction**

A. The Role of Air Cargo Transport in World Trade and the Regulatory System in Which It Operates

Trade in goods forms the fundamental basis of most world economies. Since the beginning of trade, the transport of goods from producer to market and from market to consumer has been an essential part of every mercantile transaction. Beginning with the twentieth century, the transport of goods by air has played an important and ever expanding role in the course and conduct of world trade. Air cargo transport has grown and matured to become an integral part of the global transportation infrastructure, facilitating the movement of goods and information across vast distances in relatively short periods of time.

Air cargo transport is part of a broader air transport system that includes passenger air transport, as well as a broader cargo transport system that includes surface modes of transport, such as sea, road and rail. For most of its history, air cargo transport has been more closely linked with passenger air transport than other modes of cargo transport.1 This affinity for the mode of transport – air – rather than the subject of the

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1. See Dr. Rene John Fennes, *International Air Cargo Transport Services, Economic Regulation and Policy* 32 (1997), discussing integrators, multi-model carriage: (“Interestingly, this means that the air cargo industry is best analyzed not by following the normal sectoral approach, which looks at the transport mode, but rather by looking at the product offered. Yet, as far as regulation is concerned, most regimes in the world still use a segmented approach in accordance with transport mode.”) See also *International Chamber of Commerce, Committee on Air Cargo Transport, Air Cargo and the WTO* 5 (1998), available at http://www.ccwbo.org/home/statements_rules/statements/1998/air-cargo_wto.asp. (“Air transport is increasingly becoming only one element in the overall inter-modal cargo transport chain. The point of focus has moved from the transport mode to the goods themselves. For the users of integrators, for example, the mode of transport is irrelevant, it is the on-time delivery factor which is important.”)
transport — cargo — has had implications for the development of the air cargo transport system and the regulatory framework in which it operates. Because of this affinity, an understanding of the passenger air transport system is essential to an understanding of the air cargo transport system.

The modern air transport system traces its origins to the close of the Second World War.

Reflecting one of the primary lessons of the war, the Chicago Convention of 1944 acknowledges the legal principle that sovereign states have exclusive control of the airspace above their territory, as well as the right to determine the circumstances by which one may access that airspace, if at all. It is upon this bedrock notion that the foundation of the modern air transport system is built. A profound document in its time and to this day, the Chicago Convention was quickly ratified by the victorious Allies and many others. It continues to enjoy nearly universal acceptance by the nations of the world.2

Within this international regulatory framework, access to sovereign airspace was achieved through bilateral air transport agreements. Although the U.S. had pushed for broader, multilateral grants of airspace access, the issue was deferred at Chicago due to the objections of the British, who felt that such an arrangement would disproportionately benefit the Americans with their large fleet of war-surplus aircraft and wartime manufacturing capability. The issue was resolved between these two powers through a bilateral air transport agreement, the original Bermuda Agreement, a model quickly followed by other states. The result was a global civil air transport system composed of thousands of interlocking bilateral trade agreements, not all of them transparent, that governed the conditions by which air transport services may be conducted between one state and any other.3

Bilateral air transport agreements specify the routes that airlines of party states may fly, and provide for a system of government control over capacity that may be offered on those routes and the fares that may be charged. Such agreements also limit the benefits of their terms to airlines owned and controlled by the states party to the agreement or their nationals. Ownership and control regulation is one mechanism by which

2. ANTHONY SAMPSON, EMPIRES OF THE SKY, THE POLITICS, CONTESTS AND CARTELS OF WORLD AIRLINES 71 (Hodder and Stoughton 1984). ("Chicago and its offspring ICAO did provide the starting-point for he phenomenal development of world airlines and air travel in peacetime, at a speed which few of the delegates had conceived possible. It permitted an exchange not just of landing rights, but of information, safety systems and routine technology which, though soon taken for granted, far exceeded the pre-war arrangements.")

3. Id. at 72. ("The Anglo-American agreement at Bermuda became the prototype for all other countries over the next thirty years, and it was followed by a 'vast cobweb of bilateral international agreements' as professor Bin Cheng called it, 'linking individual pairs of states.' ")
national origin and destination (O&D) traffic is protected, and the economic gains of such traffic are directed toward their home states. Likewise, capacity and fare restrictions are designed to provide price support to a nation’s airlines, while limited traffic rights guard a nation’s air transport network and the O&D traffic carried on it.

By their nature, bilateral exchanges of authorities to conduct civil air transport operations between states were made on the basis of a reciprocal exchange of benefits to be gained by each state. In any such exchange, states carefully weighed the rights it gave against those it got in return. More often than not, these considerations resulted in limited exchanges of rights, conspicuously omitting the right to pickup and discharge passengers and cargo at points behind, between and beyond the territories of states party to the agreement. In extreme measures to protect national O&D traffic and national airlines, some bilateral air transport agreements even specified a predetermined split of traffic between airlines of states party to the agreement.

Within the framework of interlocking bilateral air transport agreements, as well as national laws that licensed and limited the number of airlines and the degree of foreign ownership allowed, a highly regulated air transport marketplace emerged. This marketplace bore the imprint of protectionist national air transport objectives, as well as the regulatory policies designed to implement them:

* Bilateral air transport agreements limited the number of airlines authorized to conduct flights between partner states, and provided for government control of capacity and fares.
* Bilateral air transport agreements tightly controlled traffic rights between states, specifying gateways open to traffic from partner states, as well as accessible destinations behind, beyond and between.
* Bilateral air transport agreements limited the ownership and control structures of a state’s airlines, allowing only airlines owned and controlled by a state or a state’s nationals to exercise authorities granted to that state.
* National law prohibited the transport of domestic traffic by foreign airlines.
* National law governed who could be licensed as an airline, and the conditions under which they could fly, including authorized routes.
* National law provided that only a state’s nationals could own or control an airline licensed by it.

The totality of these policies and the regulations that served them had as their object and effect the protection of a state’s airlines, strategic

4. Id. ("The dreams of open skies gave way to the realities of horse-trading between governments over landing rights, gateways and freedoms.")
economic interests and national security. The result was the emergence, in most states, of national airlines, or "flag carriers", which transported the bulk of a state's O&D traffic, and which were the primary beneficiary of the various regulatory restrictions imposed on the air transport marketplace, and subsidies and preferences afforded to national airlines.

Despite protectionist overtones that seem rather extreme today, or perhaps because of them, these policies were highly successful in building a global civil air transport system from the ashes of the Second World War. Within only a very few years, it was possible to travel by air to virtually any destination on the globe with a reasonable assurance of an aircraft's and an airline's safety and security. Aircraft became more advanced and more numerous. An air cargo industry emerged to cater to a new demand for fast and efficient air cargo transport. In these respects, these highly restrictive regulations were products of their time, and did indeed serve their time well.

Although most of the above regulations are recognizable in the air transport system of today, the current air transport regulatory framework is less restrictive than that which prevailed in the period following WWII. Important global economies such as the U.S. and the European Community (EC) have undertaken a process of "deregulation" of their air transport marketplaces, and eased restrictions on market access, pricing and capacity. Governments have divested their interests in national "flag" carriers, and airlines are increasingly subject to the forces of the marketplace. Bilateral air transport agreements are less restrictive, and affect a broader and deeper exchange of rights among partner states.

Like the restrictive regulatory system that emerged from WWII, deregulation was a product of its times. The deregulation of air transport achieved during the 1980s and 90s reflects a maturing of the air transport industry, and a consensus that the protective policies of the past had largely achieved their goal of building a stable, efficient air transport infrastructure. No longer a developing industry that needed pampering in order to survive, the air transport industry, so went the argument, could now survive the forces of the marketplace and all their vagaries on its own and without government help. Although in practice this sentiment proved to be a bit optimistic, this shift transformed air transport regulation from a system designed to nurture and protect the industry itself, toward a system that benefited the ultimate consumers of air transport, passengers and shippers. Nevertheless, even considering the effects of deregulation, the air transport system of today remains one of the most highly regulated industries in the world, with market access, pricing and ownership and control restrictions found in no other industry.
B. RECENT DEVELOPMENTS IN AIR CARGO TRANSPORT — THE GLOBALIZATION OF TRADE

As in the period leading up to deregulation of the air transport market, the air cargo market of today is changing rapidly in response to broader economic and political change. The last decade has seen unprecedented changes to the manner in which global trade is conducted. Democracy and capitalism have spread, opening formerly closed markets and creating new markets where none existed before. The movement of goods, capital and persons has become freer. New technologies allow instantaneous access to vast amounts of information. The end of the Cold War's divisions has integrated the world's economies to an extent never before seen.

Evidence of these changes in the course and conduct of world trade is abundant. The last decade has seen the rise of the concept of "global manufacturing," in which the various stages of a manufacturing process take place in different corners of the globe, to be brought together only when the finished product is delivered to the market. Automobiles, computers, electronic equipment and other durable goods are manufactured in so many and in such diverse locales that the phrase "Made in

5. See George Melloan, Qatar Offers the Best Chance for Economic Recovery, WALL ST. J., July 31, 2001, at A19. ("There is only one economy, and it is global. One of the great intellectual breakthroughs of the post-World War II era has been the recognition by most political leaders that free trade serves their own interests. Some, in Japan, South Korea or Brazil, for example, have tried to game the system by promoting exports and restricting access to their own markets. But the leaders who count, in the U.S. and Europe, have promoted three major global trade liberalization negotiations, the Kennedy, Tokyo and Uruguay rounds. The resulting expansion of world trade has brought about a corresponding enlargement of the world economy, lifting millions out of poverty and into the middle class."). See also Michael M. Phillips, Steve Liesman & Christopher Rhoades, As G-8 Leaders Meet, Europe, Japan Must Rely on U.S. to Lead Recovery, WALL ST. J., July 20, 2001, at A1. ("What they, and others, have learned in the meantime is that the world economy is more closely linked today than ever before. Problems in the U.S. quickly turn into problems elsewhere. Much about the world has changed in the decade since. For one thing, globalization has proceeded apace, and a rapidly spreading network of computers, satellites and fiber-optic cables has linked world trade, investment and financial markets more tightly than ever before. Exports now account for 48% of the output of developed nations, up from just over 37% a decade ago. And as important as expanding trade has been the growing reach of multinational companies. 'What we probably underestimated,' says Christian Noyer, vice president of the European Central Bank, 'was the impact of more big companies operating worldwide. No matter where they're based, a sudden weakening of the U.S. economy prompts them to cut investment elsewhere—in Europe and in Asia. So the spread goes more rapidly than before.' Many of these companies spread their operations around the globe in the past decade in part to diversify their risks from a regional economic downturn. But the increased integration of the world economy means diversification today doesn't always help. 'Now, there's no place to hide,' says Joseph Quinlan, senior global economist at Morgan Stanley Dean Witter.")


America” or “Made in China” often conveys only part of the truth.8

“Just-in-time manufacturing”, another modern manufacturing technique, relies on precise, timely delivery of materials and components to keep an assembly line supplied and functioning.9 Stocks of inventories that once fed assembly lines are reduced or eliminated altogether for huge savings in storage and warehousing costs. Commercial purchasers and their suppliers have instantaneous access to current inventory stocks and current pricing information, allowing ordering and invoicing to be simplified, and some purchases to be made automatically without the intervention of either the customer or the supplier.

In addition to these “business-to-business” marketplaces, internet-based “business-to-consumer” marketplaces have exploded, with consumers selecting merchandise and confirming pricing and paying by credit card “online.” In some cases electronic automation allows order, invoice, payment and delivery to consumer to be achieved without the need for human intervention on the part of the seller.

Internet-based technologies that allow instantaneous access to vast amounts of information make the above techniques and countless other new business methods possible. These technologies themselves and hundreds of others rely on new computer hardware and software that, along with electronic devices and new types of composite materials, have created new classes of high-value, low-volume and low-weight goods. The rush to bring these new classes of goods to the market before the relentless march of technology renders them obsolete has created a new type of perishable good - computer hardware and software.10

These changes and countless others have conspired to dramatically alter the market for air cargo transport services. Air cargo services must now reach geographical markets never before served. New classes of goods and perishables have expanded the product markets that justify the

9. Rick Brooks, UPS’s 2nd Quarter Net Fell 9.4% as Shipping Slowed Worldwide, WALL ST. J., July 20, 2001 at A2. (“UPS, which moves about 5% of U.S. economic output at any time, is an economic bellwether. It also is an increasingly important link in global supply chains and carries shipments across more than 200 foreign borders.”)
10. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, OECD WORKSHOP ON REGULATORY REFORM IN INTERNATIONAL AIR CARGO TRANSPORTATION, BACKGROUND DOCUMENT 5 (1999). (“[T]ransportation by air of goods/freight for commercial purposes plays an increasingly important role in the global economy. New forms of international trade and investment, including electronic commerce, global sourcing and manufacturing networks, and international trade in perishable and high-technology goods, use the air mode for their transportation needs. Quantity and efficiency of air cargo services are essential for the development of these new forms of globalization. Air cargo has contributed to and benefited from the recent rapid growth of the world economy and globalization and internationalization of production. It offers a fast and relatively safe mode of transport for low volume, low weight but high value products.”)
expense of air cargo transport. Changes in manufacturing techniques have placed a new premium on the timeliness and precision of deliveries, while changes in commercial and consumer buying habits have stimulated a new demand for simple, timely and comprehensive shipping solutions.

Air cargo services suppliers have responded to these new demands by adopting new business methods and offering new types of products. Air cargo services are becoming more integrated, offering under one company and one brand name comprehensive delivery services that used to be supplied by other service providers, including surface transport, customs clearance and logistics services. These integrated suppliers are expanding their reach by entering new markets and expanding services to existing markets. Cargo hubbing and other cost savings techniques allow these expanded services to be offered while still reducing costs to the consumer. Integrated suppliers offer time-definite delivery products that guarantee delivery in a specified number of days or hours. Door-to-door delivery services are being offered by a single company under a single brand name, simplifying the shipping process for increasingly demanding customers and opening the complex world of shipping and package delivery to consumers for the first time. Some companies will now offer to supply a customer's entire supply management needs, including not just shipping but also inventory management, billing and invoicing.

C. NEW REGULATORY DEMANDS OF A GLOBAL ECONOMIC SYSTEM

The current regulatory framework of the air cargo transport system stifles the potential of these dramatic new developments and their efforts to serve the new global economy. The traditional regulatory system, developed by nations to serve a different time and different needs, is not conducive to the free and uninhibited exchanges demanded by the vibrant and open economic system as described above. For example:

11. FENNES, supra note 1, at 18. (“The more traditional forwarders have seen their market share substantially reduced by the inroads of integrated air freight forwarders. These integrated forwarders no longer perform intermediary functions but have taken the step to partially, or even wholly, perform transportation and ancillary services themselves. These forwarders have become a mixture of the traditional forwarder, carrier, handler, etc. They present themselves to the shipper offering one product: delivery, total transport and care, from door to door for a fixed price.”)

12. See BOEING COMMERCIAL AIRPLANES, supra note 6, at 5. (“Globalization, itself influenced by expansion of world airline networks, encourages nations to adjust the regulatory environment. Many countries have removed competitive constraints within their national boundaries, and airlines are free to choose where to fly, how much service to provide and how much to charge.”) See also INTERNATIONAL CHAMBER OF COMMERCE at 4. (“Global networks cannot achieve their full potential in the current patchwork of bilateral air services agreements.”)

13. INTERNATIONAL CHAMBER OF COMMERCE, supra note 1, at 3.
Reform of Air Cargo Transport Regulation

- Protection of O&D traffic ignores the increasing globalization of manufacturing processes and the reductions in the types and amounts of goods truly “originating” in a single nation.
- Market access restrictions inhibit the efficient allocation of services to the markets exhibiting the greatest demand, and prohibit the development of efficient hubbing networks.
- Capacity and fare restrictions prohibit the economic and efficient pricing of services.
- Ownership and control restrictions inhibit the efficient allocation of capital to the airlines best positioned to capitalize on emerging and underserved markets.
- Restricted access to other transport sectors inhibits the free intermodal transport required to design and offer comprehensive integrated services.

These restrictive regulations all demand reform if the potential of the new global economy and the role of air cargo transport in it are to be realized. To be fair, many of the restrictions as described above have been relaxed in limited ways and in some markets. In fact, it is due to this selective deregulation that the innovative services as described above were made possible in the first place, and their potential in other markets made known. But in order for the full economic potential of air cargo transport to be realized, the global regulatory framework in which it operates must be fully and finally reformed.

D. Reform of Air Cargo Transport Regulation

Various mechanisms have been proposed to undertake air cargo transport reform, some with the prospect of immediate, incremental gain, others with the prospect of more comprehensive reform, but slower progress. Bilateral air transport reform offers the prospect of immediate progress, at least among states party to the agreements, as well as extreme flexibility. More comprehensive bilateral reform may be achieved in the context of “open skies” agreements. Bilateral open skies agreements may be expanded to include other partner states as well, resulting in “multilateral” or “plurilateral” open skies agreements among several states.

Groups of states may agree to liberalize their air transport markets among themselves, as has been achieved with the common air transport market of the European Community. It has been proposed that various islands of air transport reform, such as the U.S. domestic market and the European Community internal market, should combine to form a “com-
mon aviation area” or CAA. The common aviation area would be open to accession by other states or regional associations of states. An organic process, common aviation areas offer the prospect of piecemeal reform that ultimately approaches comprehensive, multilateral reform.

Multilateral reform in all its various iterations offers the prospect of more comprehensive, fundamental reform of the air cargo transport system. Within the air transport regulatory system a vehicle for multilateral reform has been in place since the Chicago Convention in the form of the International Air Transport Agreement. Another existing vehicle for multilateral reform of the air transport system is the WTO. The WTO is an international organization dedicated to facilitating trade among nations. With more than 130 member states representing 90% of world trade, the WTO serves as a forum for trade discussions, negotiations and agreement among member states.

It is the thesis of this paper that the best way to undertake the reform of air cargo transport regulation is through the WTO and the General Agreement on Trade in Services, or GATS. The WTO and GATS are global institutions with a venerable heritage of world trade liberalization. They exist already, obviating the need to undertake a new and painstaking multilateral reform instrument. They are highly regarded and well subscribed among the world’s great trading nations, and contain all the tools and mechanisms needed to achieve comprehensive, meaningful air cargo transport reform. The basic principles of the GATS trading system, especially “most favored nation” (MFN) treatment, are designed to reduce trade barriers in the most efficient and fair manner possible, and are thus the ideal regulatory framework for the integrated, global economies of today.

Furthermore, the WTO and GATS are comprehensive trade forums with jurisdiction over most industrial and service sectors. The potential for cross sectoral trade concessions and reforms through GATS is uniquely suited to the conduct of air cargo transport of today, which cuts across many industrial sectors, including air transport, surface transport, freight forwarding and information technology. The potential for cross-sectoral concessions affords GATS advantages over other forums for addressing the complex air cargo transport system, and increases the likeli-

hood of states realizing a comprehensive multilateral reform. This is especially important in an era in which the integrated services of integrators, express couriers and logistics solutions providers are expected to capture an ever increasing share of the air cargo transport market.

The WTO and GATS also address the special needs of developing nations, nations with the most to gain through enhanced access to infrastructure technologies such as air cargo transport. The “multiplier effect” of even modest advances in air cargo transport services made possible through GATS reform could have a huge impact on these economies, and better the lives of millions of people in these developing nations.

Finally, air cargo transport reform through the WTO and GATS fulfills the promise of GATT. GATT, well-subscribed by nearly all the major trading nations of the world, promises the benefits of trade reform through the freer exchange of goods. Goods must be transported to market and from market to consumer, and increasingly in today’s economies this transport is achieved by air. GATS liberalization of air cargo transport thus effects a tidy, symmetrical fulfillment of the primary objective of GATT, and of liberalized world trade in general.

E. IMPLICATIONS OF AIR CARGO TRANSPORT REFORM THROUGH THE WTO AND GATS — THE WAY FORWARD

Against the broad backdrop of human history, the development of the air transport system has been incredibly fast. The twentieth century witnessed both the origin of human flight and its development into the global mass transport system of today; a system capable of linking nearly all peoples and places across the globe. The pace of global change has been especially rapid in the last ten years, with new technologies and a new openness among nations conspiring to break down technological, political and physical barriers. This new openness has changed the course and conduct of trade, and fostered new and innovative ways of doing business. As the fastest, safest and most reliable form of transport, air cargo has emerged as the preferred form of transport in this integrated new world. Air cargo transport is relied on in today’s integrated global economies as never before, and will form an indispensable and perhaps predominant part of all trading systems of the future.

Unfortunately, the regulation of air cargo transport has not kept pace with this change. The current regulatory system inhibits the full flowering of air cargo transport, and the integrated, global economies that increasingly rely on it. The WTO and GATS offers the fastest, most fair and most comprehensive prospect for reform of the air cargo trans-

17. Id. at Part 4.
18. INTERNATIONAL CHAMBER OF COMMERCE, supra note 1, at 4.
port system, preferable to all other existing and proposed vehicles. Reform of air cargo transport through the WTO and GATS would ratify these vehicles as the preferred method of air transport reform, and direct all subsequent air transport reform efforts toward this method. Subsequent reform efforts, especially passenger air transport reform, would then be undertaken in a WTO-GATS context, to the exclusion of other reform vehicles, including bilateral open skies agreements, other regional or multilateral agreements and common aviation areas. The preference for the WTO and GATS also strengthens these institutions, and demonstrates their viability as vehicles for world trade reform efforts in other sectors.

THE AIR CARGO MARKET

A. THE NATURE OF AIR CARGO AND AIR CARGO TRANSPORT

The air cargo market is composed of goods shipped by air and the enterprises that undertake to ship them. The term "air cargo" is not well-defined in a regulatory sense, and is often used interchangeably with air freight. As used in this paper, air cargo means simply goods shipped by aircraft from one destination to another through the air transport system. Although not directly relevant to this paper, air mail is often excluded from the definition of air cargo because in some jurisdictions it is subject to its own regulatory system distinct from passengers and other forms of cargo.19

Air cargo transport is usually more expensive than other forms of transport such as road, rail and sea, and is generally faster than other transport modes, especially over long distances and intercontinental routes. Air cargo is particularly sensitive to the weight of goods shipped, as weight bears more directly on the cost of air transport than other transport modes.

These factors combine to create a profile of goods shipped by air that are generally of high value and low weight and volume.20 A high percentage of finished goods ready for market are shipped by air,21 including manufactured goods such as computers and electronics equipment, lightweight plastics, composite materials and clothing. Bulk commodities such as steel, coal and grains are generally unsuited to air transport. All types of perishable goods are shipped by air, reflecting the high value of the

19. BOEING, supra note 8, at 12.
20. Id. at 42, regarding the trans-pacific market, ("The air market primarily consists of commodities valued at $16 per kilogram or more. Commodities in these categories historically make up more than 50% of all airborne traffic.")
21. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, supra note 10, at 25. ("... exports contain more finished goods than imports, and the former are better suited to air transportation.")
goods and the advantage of speed that air transport affords over other transport modes. Newspapers were among the original perishables shipped by air, as were organic perishables such as cut flowers, fruits, vegetables and other agricultural products.

In today's new economy, new technologies have given rise to new types of perishable goods and new types of products suitable for air transport. Moore's law states that computing power will double every eighteen months. Since the dawn of the computer age, this law has assured that computing and other electronic devices will become obsolete with alarming speed and regularity. Consumer demand for the latest gadgets ensures that computing and electronic products and the software that run them will eventually become worthless, sometimes in a matter of weeks or days. The time saved by shipping these perishable products by air may result in several more weeks of marketable shelf life, and contribute significantly to a product's profitability over its brief life cycle.

Regular, profitable air cargo routes have been developed to rapidly transport these high-tech goods among manufacturing centers and from manufacturer to market, many originating in Asia and terminating in the consumer markets of North America and Europe. The manufacturing techniques frequently employed to produce new goods compounds the value of air cargo transport to the profitability of these high tech products. Often the components of these products are produced in manufacturing locations all over the world, with final assembly taking place only upon delivery to market. When these manufacturing techniques are employed, rapid, reliable air cargo transport becomes not just a means to deliver the finished product to market, but an integral part of the manufacturing process itself, and adds valuable shelf life to a finished product. This transformation reflects air cargo's shift from a "premium" to a "mass" transport service.

The link between air cargo transport and high-value, high-tech goods is demonstrated by the relationship between the volume and value of all cargo shipped. While it is estimated that only 2% of the total volume of cargo is transported by air, the peculiar economics of air cargo are such

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22. The Progressive Policy Institute, The New Economy Index - What's New About the New Economy?, available at http://www.neweconomyindex.org.html (Nov. 1998). ("Moore's Law (named after Gordon Moore, a founder of Intel), which says that the processing power of microchips doubles every 18 months, has a corollary: the cost of computing is dropping by nearly 25 percent per year.")

23. Organization for Economic Cooperation and Development, supra note 10, at 21. ("Today world demand for air cargo services is in the midst of a shift from a "premium" to a "mass" transportation market. This evolution is visible in the long-terms growth pattern of the industry, as world trade transported by air has picked up since the early 1990's. According to many indicators, the role of air cargo in the global economy should considerably expand in the years to come.")
that 30% of the total value of merchandise is shipped by air.\textsuperscript{24} This fact reflects the relatively small transport capacity of the commercial air transport fleet as compared to other modes, but also the strong link between air cargo transport and high value, high-tech goods. Goods may be valuable due to their intrinsic worth, such as computer chips, or because they are perishable, such as the overnight transport of documents. The latest consumer electronic device or software package (Windows 95) are examples of goods that are both intrinsically valuable and perishable, and that are therefore uniquely suited to air cargo transport. The growth in the number and variety of these types of high-tech perishable goods has contributed in large part to the growth in air cargo transport over the last few years, and to the development of new types of air cargo services, such as door-to-door and time-definite services catered to meet the particular demands of these goods and their producers.\textsuperscript{25}

The nature of air cargo differs from passenger air transport in important ways. Air cargo transport is often unidirectional, which can lead to inefficiencies if there is insufficient traffic to fill the aircraft on the return trip. This “backhaul” problem exists between markets with an imbalance in the directional flow of goods, such as between the east and west coasts of the U.S. (more goods are manufactured on the east coast and shipped to the west coast than vice versa) and between North America and Asia (more goods are shipped to North America than vice versa, reflecting the imbalance of trade between the two economies).

Air cargo carriers sometimes solve the backhaul problem by designing triangular or circular routes that connect a series of one-way flights. Although such routings solve the backhaul problem, they often present regulatory issues. Such routings frequently involve 5th freedom, seventh freedom and even cabotage flights, and therefore require the air carrier to possess or obtain underlying economic authority to conduct such fights. For scheduled air cargo flights, unlimited fifth freedom authorities are not routinely exchanged between states in their bilateral air transport agreements, and seventh freedom and cabotage authorities are rare or nonexistent.\textsuperscript{26} Unscheduled or charter authority for cargo flights is granted on an ad-hoc basis by affected states, and is more liberally authorized.\textsuperscript{27} While more flexible and easier to obtain, unscheduled or

\textsuperscript{24} International Chamber of Commerce, supra note 1, at 1.

\textsuperscript{25} Organization for Economic Cooperation and Development, supra note 10, at 23, regarding express and time definite services, (“Delivery times are lower, and in principle guaranteed: ‘overnight services promise .5/1 day delivery times in many parts of the world. Goods carried are also generally more valuable, and a value/weight index of US$30 per kg could be considered a benchmark.”)

\textsuperscript{26} See Id. at 58-59.

\textsuperscript{27} Id. (“Scheduled cargo services are therefore fully included in ASA’s, both in their combined passenger and all-cargo segments. Flight routes, carrier designations and capacity plan-
charter authority is not granted on a permanent basis, and must be continuously reapplied for. The tenuous nature of such authority may not offer the reliability that some air cargo customers demand, and makes it risky for air carriers to invest in infrastructure and other improvements designed to provide enhanced services, such as hubbing and sorting operations.

Air cargo transport is conducted on a different schedule than most passenger air transport services. While passenger air transport services exhibit a preference for daytime operations, especially during early morning and late afternoon peaks periods, air cargo transport operations may be conducted at any time of the day, and may even exhibit a preference for nighttime operations. Nighttime operations allow carriers, especially integrated carriers and express couriers, to avoid competition with passenger airlines for scarce slots at crowded hubs, and allow greater access to an airport's other infrastructure facilities during off-peak hours, such as taxi ways, ground handling, refueling, and terminal and hanger space.

For major express courier operations such as UPS, FedEx and DHL, airport operations at major hubs begin at night and continue throughout the early morning hours until passenger operations begin again. Such scheduling provides for efficient and high-capacity airport utilization with a minimum of disruption to either passenger or cargo operations.

While offering logistical advantages, especially at crowded passenger hubs, nighttime operations pose other difficulties, especially high noise levels at hours of the day when affected persons are much more inclined to protest. No one likes to be kept awake at night by aircraft noise and these and other environmental effects of nighttime cargo operations often stir vocal opposition form neighborhood and environmental groups.

B. THE CARGO CHAIN — PLAYERS IN THE AIR CARGO MARKET

Air cargo transport is often described as one component of the cargo “chain” that transports goods from one destination to another, through the efforts of a series of transport services suppliers.28 Some of these suppliers provide actual cargo transport, whether by air or other transport mode, while others perform only administrative or logistical services that speed the transport process along.

The cargo chain begins with the shipper of goods. Sometimes referred to as the sender or consignor, shippers are the source of demand
for cargo transport services. Most shippers employ the services of forwarders, specializing in the management of the transport of goods on behalf of their shipping clients. Forwarders rarely transport the goods themselves, but instead rely on their highly specialized knowledge of shipping options and regulations to arrange for optimum shipping solutions. Forwarders are able to consolidate shipments from a number of clients in order to obtain the discounted rates afforded full loads, and pass those savings on to their clients.

Forwarders turn to carriers for the actual transport of goods. Large forwarders have relationships with carriers in all transport modes, and will select the mode and carrier best suited to a particular client's needs. The urgency of the delivery, cost and particular characteristics of the cargo are all factors a forwarder will take into consideration in choosing among modes and carriers on behalf of a shipper. Specialized forwarders may deal only in a single mode, such as air cargo transport, or a single type of good, such as live animal transport. In either case, forwarders will have a variety of carriers to choose from in determining the method of transport best suited to a client's needs.

If air cargo transport has been selected as the preferred transport mode, it is the air carrier that actually transports the goods from one airport to another. Air carriers may be airlines that carry cargo exclusively, known as all-cargo carriers, or airlines that carry cargo in combination with passengers, known as combination carriers. Following carriage by air, goods are frequently transferred to some form of surface transportation for final delivery to the receiver, also known as the consignee. A forwarder will have arranged such surface transportation in advance as part of its service to the shipper. The complex series of transfers between modes of transport and carriers is arranged in advance and specified on a document called an air waybill. The air waybill contains important information about the nature of the shipment and the journey it will take from shipper to receiver.

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29. Id. at 15.
30. Id. at 16.
31. Organization for Economic Cooperation and Development, supra note 10, at 16. (“Freight forwarders . . . design and market cargo services, collect freight from shippers, consolidate shipments for carriers, and deliver the goods to consignees.”)
32. Id.
33. Id. at 18. (“Freight forwarders have at their disposal large numbers of daily flights and other transportation services offered on the market, which they assemble according to shippers' needs.”)
34. Id. at 16. (“Air carriers . . . actually operate aircraft and carry freight physically between airport points.”)
35. Fennes, supra note 1, at 41.
The complex air cargo chain and the high degree of specialization among various suppliers in the chain is becoming increasingly simplified. New business models are emerging that undertake all the elements of the cargo chain under one company or brand name, and that steer a shipment all the way from shipper to receiver, including guaranteed, time-definite services, and comprehensive door-to-door services. In response to these new types of services and services providers, established transport companies are expanding their services into other elements of the cargo chain, and broadening their line of transport products and services. Undertaken in response to new demands of shippers, these innovative new business models and product offerings find themselves increasingly in conflict with regulations designed to govern older business models.

C. Integrators

Integrators provide more comprehensive shipping services than a traditional air carrier or forwarder. Integrated carriers combine the functions of the forwarder and carrier in one company, or at least under one brand name, and offer the shipper a total shipping solution. An integrated carrier will often provide multi-modal transport, including both surface and air transportation necessary to deliver cargo from origin to final destination. An integrated carrier often owns its own trucks and aircraft, and its employees perform all the tasks necessary for the total transport of a shipment. In some cases, an integrated carrier may subcontract with a third party carrier in order to supplement capacity to account for peak seasonal demand, or in order to access markets in which the integrated carrier does not have regulatory authority to access in its own name.

The comprehensive nature of the service offered by integrators is referred to as “door-to-door” service. The massive networks maintained by integrated carriers are capable of transporting small shipments from virtually any location to another within the effective range of its network. Business-to-business and business-to-consumer markets are both served by the integrators’ door-to-door product. Integrated carriers are not as well equipped to deal with large, bulk cargo loads, although

37. See Organization for Economic Cooperation and Development, supra note 10, at 16. ("Integrators/express carriers, which as one entity provide the different components of door-to-door service.")
they are in the forefront of developing comprehensive logistics solutions for large shippers.

C.2. Express Couriers

A subset of the integrated, door-to-door market is the express courier market. Express couriers add the element of time-definite delivery to the comprehensive door-to-door nature of integrated service.Express courier services developed to serve the document delivery market, frequently guaranteeing overnight delivery of small document parcels within a certain territory.

Although originally limited to the express courier market, time-definite services are becoming more important to all shippers. Just-in-time manufacturing and zero-inventory techniques rely heavily on time-definite delivery services. All types of businesses engaged in cargo transport, including express couriers and forwarders, air carriers and integrators, are being asked to add a time-definite element to the services they provide.

Proprietary tracking and tracing systems are an integral part of door-to-door and time-definite services. These systems allow a shipment to be traced throughout the entire delivery chain, from pickup at origin to delivery at final destination. Tracking and tracing systems add an element of transparency to the transport process, and provide shippers who can track their own shipments with an added sense of security and peace of mind. Along with huge investments in aircraft and trucking equipment, sorting facilities, and personnel, tracking and tracing hardware and software form part of the investment in infrastructure that fully integrated carriers must maintain in order to serve their shipping clients.

C.3. Logistics Solutions Providers

Some shippers are asking their transport providers to supply more than just transport services. They demand a company that can manage their entire system of inflow and outflow of goods and materials. Logistics services providers will design a supply chain for clients that includes not just shipping, but a variety of services on either end of a shipping transaction, such as ordering, invoicing, storage, inventory management and tracking. Logistics services providers rely on their core expertise in

38. Id. at 19. (“Express carriers provide freight forwarding with time definite delivery properties and continuous shipment trucking by using proprietary inter-modal transportation networks. . . . They may also have recourse to local third party carriers because of regulatory reasons.”)

39. Id. at 23. (“The object of this service is to optimize the logistics chain (the transport mode/storage point/delivery time/delivery cost selections) according to shippers' needs and market circumstances. Transportation is only an element of a wider service. Providers of such value adding logistics services often offer inventory management services, and handle storage points
providing comprehensive shipping solutions, and on new information technologies that automate and track inventories and shipments from the initial supply of materials to a manufacturing process through to final delivery of finished product to market or consumer. Freight forwarders and integrated carriers are entering the logistics services business in response to a growing number of clients who want all their processes to be integrated in a single, easy to track and monitor system, and provided by a single supplier with responsibility for the entire process. In such a system, shipment of goods by air, if undertaken at all, represents just one component of a larger logistical solution.

D. SIZE OF THE AIR CARGO MARKET AND PROSPECTS FOR GROWTH

For much of its history the story of the air cargo transport business was that of excess capacity looking for demand. At the close of WWII and especially following the Berlin airlift there was tremendous air cargo capacity in the form of surplus military aircraft and pilots trained to fly them. The introduction of wide-body jet service in the 1970s brought a similar glut of capacity in the form of belly-hold space on aircraft scheduled for passenger service. Although airlines were anxious to subsidize their passenger services with revenues from freight sales, there remained a dearth of products that justified the higher expense of shipment by air.

New technologies and the new economies that rely on them have created a new demand for the type of high-speed, reliable transportation that air cargo transport provides. Air cargo transport is the preferred

and buffer stocks on behalf of shippers, as part of further optimization of the logistics chain. . . . Value adding logistics begin to be used in electronic commerce, where transportation companies handle orders, stocks and deliveries on behalf of shippers.

40. See international chamber of commerce, supra note 1, at 5. ("Air cargo services used to be by-products, with cargo filling up the unused passenger capacity of aircraft, but this is no longer the case as an ever increasing proportion of high value commodities are transported by air, justifying new all cargo services.") See also fennes, supra note 1, at 22. ("Because of the introduction of wide body aircraft, aircraft came on the market with enormous surplus belly capacity which enabled many carriers to top off their aircraft load with cargo to earn extra income and make operations more profitable. See also, alan j. wright, cargo airlines 7 (ian allan 2000) "The introduction of jets soon became a significant feature of the air freight scene, mainly because many carriers found themselves with more capacity than needed for passenger work, so alternatives were sought to achieve adequate utilization.").

41. Id. at 5. ("During the ensuing period (after the start of WWII) the benefits of air freight became fully appreciated, with the military forces making increased use of this form of transport as the war progressed. When peace was restored in 1945 a similar situation existed to that of 25 years earlier, when a considerable number of aircraft suddenly became surplus to requirements. Numerous new airlines were launched, many by ex-raf pilots eager to continue flying careers.")

42. Id. at 8.

43. See Fennes, supra note 1, at 22.
mode of transport of high-value, high-tech perishables, and is justified by
the speed and reliability air transport affords. Air cargo transport is also
the primary shipping option for global manufacturers and just-in-time
manufacturers that rely on timely, reliable delivery of components as an
integral part of their manufacturing processes.

As the transporter of the new economy’s high value output, air cargo
is often looked to as an economic bellwether. Known as an “early cycli-
cal,” air cargo transport is particularly sensitive to inventories, especially
inventories of high-tech, high-value goods. As sales slow and inventories
pile up, demand for air cargo transport slackens, indicating a slowing of
high-tech economies. Conversely, air cargo is among the first indicators
to rebound in an economic upturn, as markets rush to restock depleted
inventories.

In 1999, worldwide air cargo traffic, including mail, was 137.1 billion
revenue ton kilometers (RTKs). That figure is expected to grow at a rate
greater than that of underlying economic growth (3% over the next
twenty years) to reach 470 RTKs by 2019. This would represent a tripling
of air cargo traffic over the period, and an average annual growth rate of
6.4%. (Airbus predicts a smaller, yet robust growth rate of 5.7% over
the same period.) Mature economies such as Europe and North
America will experience slower growth, although they will account for a
larger percentage of overall economic activity. Growth in markets
linked to Asia, especially the intra-Asian market, will exhibit the strong-
est growth over the period, with the intra-Asian market predicted to grow
at a blistering 8.6% per year. North America-Asia and Europe-Asia
flows will also be strong, with growth exceeding the global average an-
nual growth rate.

The superior projections of air cargo over both the passenger air
transport business and growth in worldwide gross domestic product reflect
the changing nature of air cargo transport. In its developmental
stages, air cargo transport was a premium service justified only by excep-
tional economics of the products involved or an emergency time crunch.
With the development of global and just-in-time manufacturing tech-
niques, as well as increased reliance on door-to-door and time definite

44. INTERNATIONAL CHAMBER OF COMMERCE, supra note 1, at 2. (“Air cargo is an indica-
tor of wider economic trends, often showing the way in and out of recession.”)
45. BOEING, supra note 8, at 11-12.
46. AIRBUS, supra note 7, at 42.
47. BOEING, supra note 8, at 13.
48. Id.
49. Id. at 7. (4.8%.) See also AIRBUS, supra note 7, at 4. (5.7% per year.)
50. BOEING, supra note 8, at 7. (3% per year.)
51. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, supra note 10, at
21, 24.
services, air cargo transport is becoming an integral part of smoothly functioning economies. No longer a luxury employed to speed delivery of a product, air cargo transport is being incorporated into the manufacturing and service delivery process itself. The increasing reliance of global economies on air cargo transport services goes a long way toward explaining its superior growth projections over the next twenty years, and its evolution from a premium to a mass-market service.

Most of this superior growth is expected to be captured by new types of air cargo services suppliers, the integrators, express couriers and logistics solutions providers. The time-definite and door-to-door services offered by integrated carriers are among the fastest-growing in the industry. The express industry grew at a torrid pace in North America in the 1980's, and now comprises nearly 63% of the U.S. domestic cargo market, up from 4% in 1977. This rate will cool in the near future, reflecting the maturing of the industry. However, the international express industry is expected to pick up where the U.S. industry left off, and replicate the blistering growth set by the U.S. industry over the next twenty years. Boeing forecasts the international express industry to grow 13% through 2019, with its overall share of international traffic expanding from 9.2% in 1999 to 31% in 2019.

These incredible growth figures reflect the evolution of the express segment from a novelty service into an integral part of the way business is conducted. Time-definite and door-to-door services have become an established part of the business models of the new industries that have grown up in the period since the 1980's, including all of the e-commerce companies of the late 1990s, as well as older "bricks and mortar" companies that have adapted to meet the challenges of these new business models.

**International Air Cargo Transport Regulation**

International air cargo transport regulation is necessarily a matter between sovereign states, and is governed by bilateral trade agreements known as bilateral air transport agreements. Like other forms of air transport regulation, bilateral air transport agreements are designed by

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52. *Id.* at 21. ("Today world demand for air cargo services is in the midst of a shift from a ‘premium’ to a ‘mass’ transportation market. This evolution is visible in the long-terms growth pattern of the industry, as world trade transported by air has picked up since the early 1990's. According to many indicators, the role of air cargo in the global economy should considerably expand in the years to come.")

53. *See Id.* at 24. ("The air cargo industry is no longer just a premium/exclusive transportation service, offering highly customized remedies to the deficiencies of the postal service on the one hand, and to the specific transportation needs of perishable, urgent or precious goods on the other.")

54. *See Boeing, supra* note 8, at 2-3.
states to fulfill the objectives of their national air transport policies. At one time, the policy of bilateral air transport regulation for most states was the protection of national O&D traffic, in furtherance of national objectives of building a strong and stable air transport industry. At other times states have taken a more open attitude toward their bilateral air transport agreements, and allowed freer access to their home markets, freer pricing and freer capacity provisions. States have also used bilateral air transport agreements to achieve sectoral air transport goals, such as special provisions for air cargo transport.

A. International Air Cargo Transport Regulation in the U.S.

Like other nations, the U.S. directed its bilateral air transport relations toward strategic economic goals. For the most part, the U.S. has consistently pursued open international aviation markets, in the belief that open access and freer competition were in the best interests of U.S. carriers and the U.S. economy as a whole.\footnote{FENNES, supra note 1, at 199. ("The deregulation process in fact emphasized the basic international policy of the U.S. to strive for international air transport markets, as open as possible, a policy that it had pursued even before the second world war. The conviction that an open policy would be in the benefit of the strong aviation industry was now supported by the fundamental conviction, embodied in the Deregulation Act, that open markets were the best possible way for air transport to develop and prosper.")} This is true of both passenger and air cargo markets. During the period from 1944 to 1977, the U.S. had no separate position on international air cargo regulation.\footnote{Id. at 184. ("Until the period of domestic deregulation, the policy declarations of the respective administrations were silent on air cargo as a specific issue. Cargo was an issue that was handled in the same fashion as the other air transport elements, passenger and mail carriage, as one total issue under the bilateral system.")} It was simply grouped together with international air transport regulation and regulated according to traditional bilateral air transport agreements. International air cargo was not a large market at that time, and most U.S. carriers, to the extent they focused on air cargo at all, were interested primarily in the U.S. domestic air cargo market.

Coincident with U.S. domestic air transport deregulation, the U.S. began seeking more open air transport relations with its partners in international trade, with regard to both passenger and cargo air transport. The primary vehicle for achieving such open relations was the "open skies" bilateral air transport agreement. Open skies agreements entailed, at the very least, a full exchange of the five basic freedoms of flight, full market access including routes, frequencies, capacity and designation, and double disapproval pricing.\footnote{Id. at 206.} Open skies agreements often included special provisions for air cargo, including air cargo rights that mirrored...
passenger rights, intermodal rights, and liberal charter provisions. The U.S. open skies with Singapore, for example, includes special rights of U.S. carriers to conduct cargo hubbing operations out of Singapore.\(^{58}\)

Open skies agreements represent a break with the traditional way of negotiating bilateral air transport agreements that carefully balanced reciprocal exchanges of benefits. Open skies agreements and the way they were pursued by successive U.S. administrations acknowledge that the U.S. often has more to give in bilateral air transport trade than its trading partner. Instead of seeking equal benefits, open skies agreements seek a reciprocal attitude toward air transport on behalf of its bilateral partner.\(^{59}\) A fully open and free air transport market is all that the U.S. seeks from its partners in an open skies agreement, no matter how large or developed the partner’s air transport market. Today, the U.S. has open skies agreements in place with 56 states, including states with small air transport markets such as Guatemala.\(^{60}\)

The U.S. strategically pursued open skies agreements with some states in order to pressure other states to agree to open skies agreements.\(^{61}\) In Europe, the U.S. used an open skies agreement with the Netherlands to gain a foothold on the Continent, and force other states to agree to similar agreements, lest all the advantages of liberal access to the U.S. market accrue to the Netherlands. These agreements were beneficial to both partners, of course, but the U.S. is said to receive an extra benefit from European open skies agreements that is not reciprocal to its European bilateral partners. Specifically, the U.S obtains fifth freedom rights in most of its open skies agreements, rights that can be linked together in Europe to provide access to the European internal market. Cumulatively, these fifth freedom rights may even allow minor forms of hubbing in Europe by U.S. carriers. European states also obtain fifth freedom rights from the U.S., but such rights are not as useful in North America due to the vast distances between the U.S. and other major trading nations. Europeans are heard to complain that they should be granted access to the U.S. domestic market in their bilateral agreements, as only the U.S. domestic market is comparable to U.S. carrier access to Europe’s internal market, accessible by cumulative fifth freedom routes.\(^{62}\)

\(^{58}\) Id. at 205.

\(^{59}\) Id.


\(^{61}\) FENNES, supra note 1, at 215.

\(^{62}\) See Neil Kinnock, The Future of the Global Airline Industry, Address at the 12th Annual FT World Aerospace and Air Transport Conference (September 3, 1998 London). (“While the integration of the industry is seriously hampered by the existing bilateral framework in gen-
The U.S. has also expressed an interest in sectoral bilateral air transport agreements, particularly those covering air cargo. As part of its statement on international air transport policy, the Bush administration stated that it would consider separate air cargo agreements, if they were considered a step toward a broader air transport agreement.63 There is a vocal constituency in the U.S. in favor of separate air cargo agreements. Federal Express has consistently and vocally endorsed separate air cargo agreements as a way to achieve concrete steps toward more open air transport relations in advance of passenger air transport agreements.64 Not without self interest, Federal Express is an advocate of sectoral liberalization in order to fulfill its ambition of building a global hubbing system linking its North American, European and Asian operations. Sectoral agreements or limited passenger agreements are sometimes used as precursors to broader open skies agreements, as was the case with the United States-German open skies agreement.65

B. INTERNATIONAL AIR CARGO TRANSPORT REGULATION IN EUROPE

In Europe, international air transport relations among Member States of the European Community are open and free. The Third Package of air transport regulation created an internal market for air transport within the EC, resulting in completely liberalized air transport relations among Member States. While the Third Package technically represents a form of international air transport regulation, the internal market for air transport it creates is often analogized to a large domestic market, such as the U.S. domestic market.

63. FENNES, supra note 1, at 202.
64. Id.
65. Id. at 209.
The Third Package makes no distinction between passenger air carriers and air cargo carriers, and thus applies to both equally. The Third Package also makes no distinction between scheduled and unscheduled carriers, allowing air carriers full freedom to determine their scheduling priorities. The result is a completely free and open air cargo transport regulatory system for Community air cargo carriers for routes within the Community. This freedom is of great benefit to Community air cargo carriers. However, as discussed above, the internal European air cargo market is rather small, both physically and economically, making it difficult for Community air cargo carriers to fully exploit the benefits of this market without combining it with other inter-European markets.

While the Community air cargo market is completely free and open, the markets between Europe and other nations remain subject to traditional bilateral air transport agreements. Thus, while air transport relations among Member States are governed by Community legislation, air transport relations with states outside the Community remain subject to traditional bilateral air transport agreements. This unusual situation has worked to the advantage of some states. For example, the U.S. has used the cumulative effect of open skies agreements with individual Member States to pry open the European air transport market to the benefit of U.S. carriers. Member States complain that this gives U.S. carriers access to the EC internal air transport market, while leaving the U.S. internal market closed to European carriers.

The disparate regulatory approach to the EC internal transport market and the air transport market between the EC and third parties has placed the European Community in a difficult position. On one hand, it would like to secure the most favorable trading terms with other nations on behalf of its member states. This would argue for EC competence to negotiate air transport agreements with third parties on behalf of all Member States. On the other hand, the EC has until now respected individual Member State competence to enter into their own air transport agreements with third states according to their own air transport policies and goals. The difficulty, as shown by successful U.S. efforts to break open to internal EC air transport market for U.S. carriers, is that the air transport policies of individual member states have a significant impact on other members of the Community. Indeed in such an integrated economy there could be no other result.

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66. See id. at 289.
67. See id. at 295. ("These efforts were aimed not only at the bilateral markets with these individual countries, but were also indirectly aimed at the Community. By committing as many European countries as possible to the principle of the open air transport market, it would become more difficult for the Community to take a protectionist stand in any future discussions with the U.S.")
In order to address this problem, the European Commission has challenged Member State authority to enter into bilateral air transport agreements with third states. In a suit before the European Court of Justice (ECJ), the Commission has claimed that the European Council has granted the Commission exclusive competence in the field of air transport, and that therefore Member States no longer have the legal authority to enter into their own bilateral air transport agreements. In the view of the Commission, the Commission is the only European institution with the authority to negotiate "bilateral" air transport agreements between the European Community and third states.

The advocate general in the case issued his opinion in January 2002, finding largely in favor of the Commission and against the Member States and their open skies agreements. In the opinion of the advocate general, nationality clauses contained in the open skies agreements (and most other bilateral air transport agreements) violate one of the bedrock principles of European Community law, the freedom of establishment. Although the opinion of the advocate general is not binding on the court, the advocate general's opinion is followed by the ECJ most of the time. A final decision by the court is expected Summer 2002.

The Commission's legal challenge to the open skies bilateral agreements is significant, because a successful suit could upset the entire trans-Atlantic air transport market. If the opinion of the advocate general is followed by the ECJ and United States-European bilateral open skies agreements are found to be illegal under Community law, it is unclear under what legal authority continuing trans-Atlantic air transport would take place. Old bilateral air transport agreements would not govern because they were voided by the open skies agreements that succeeded them. However, unless a transition period is built in by the ECJ to give the U.S. and the European Commission time to negotiate a substitute agreement, there would be no air transport agreement in place governing US-EC air transport.

A ruling favorable to the Commission would have important strategic implications in the lucrative trans-Atlantic air transport market. Europeans have long complained that the U.S. piecemeal approach to the

68. See European Commission, supra note 62, at 11.

69. Nationality clauses found in most bilateral air services agreements permit one party to refuse the designated airlines of another party if they are not substantially owned and controlled by the other party or its nationals. In this manner, the benefits of traditional bilateral air services agreements have been limited to the parties to the agreements themselves, and to the exclusion of airlines of third states. See Zuckert, Scourt, & Rasenberger LLP, European Court says 'Bye Bye Bermuda', AVIATION ADVISORY. November 6, 2002 available at http://www.zsrllaw.com/publications/Newsletters/AA-%20Nov-%206%2002.htm ("The Bermuda-type agreement became the template for hundreds of bilateral, nationality-restricted air transport agreements, and it served the U.S. airlines well").
European air transport market dilutes the negotiating strength of Member States. Arguably, together Member States can negotiate from a much stronger position, and would be able to extract greater concessions from the Americans than individual Member States can. Individual Member States have been reluctant to grant the Commission full competence to negotiate on their behalf, however, perhaps because they believe they can extract the unique benefits that they seek from the Americans in one-on-one negotiations. If the advocate general's opinion is followed by the court, it is much more likely that Member States will cede some or all of their negotiating authority to the Commission, making it possible for the Commission to negotiate “bilateral” air transport agreements between the EC and third states, and begin crafting a common external air transport policy for the first time.

Interestingly, the U.S. was willing to negotiate with the European Community as a whole in the years before it initiated its open skies strategy. In 1988 the U.S proposed a separate air cargo agreement with the EC in anticipation of a broader passenger agreement. The EC was unable and unwilling to consider such an agreement at that time. Later the European Commission did win a limited mandate from the European Council to negotiate with third states, although this external competence was limited to so-called “soft rights.” Soft rights include marketing and other affiliated air transport services, but not the so-called “hard rights” such as route authorities and other market access provisions that are the primary subject of bilateral air transport agreements.

C. Air Cargo Transport Reform

The air cargo market continues to evolve, and the regulatory framework in which it operates must evolve with it. New air cargo services and air cargo products continue to be introduced, reflecting the growing importance of air cargo to world trade, and the increasing reliance on air cargo by mature and developing economies of the world. A variety of different approaches may be taken to air cargo reform in order to keep pace with these changes. They range from rapid, bilateral reform with immediate impact, to slower, multilateral reform reflecting broader, more comprehensive reform objectives. All are designed to adapt to new global political, economic and technological circumstances, and secure air cargo’s future in the emerging patterns of world trade.

Bilateral air transport reform offers the prospect of immediate effect, as well as extreme flexibility. Partner states may decide the nature and extent of any such reform, allowing air cargo to be addressed separately.

70. FENNES, supra note 1, at 202, 292-293.
71. Id. at 308-309.
or linked to reforms in other areas of air transport. Sectoral bilateral reform may be undertaken in anticipation of subsequent broader reform. For example, bilateral air cargo reform may be undertaken as a segue to broader passenger reform, especially, as is often the case, if the details of a passenger reform agreement cannot be worked out immediately.

Comprehensive bilateral reform may be achieved in air cargo transport as opposed to piecemeal reform. Such is the approach advocated by the Organization for Economic Cooperation and Development (OECD). OECD favors a separate protocol to be attached to existing bilateral air transport agreements that addresses air cargo relations between partner states in full. The effect of this protocol would be to fully reform air cargo transport regulation between partner states, allowing the full exercise of rights necessary to undertake the latest in air cargo service offerings, such as express delivery services, cargo hubbing and logistics services.

Bilateral open skies agreements may also be open to accession by other states, resulting in plurilateral agreements, or signed by several states at once, resulting in multilateral open skies agreements. A multilateral open skies agreement was entered into by the U.S., Singapore, Chile, New Zealand and Brunei. A multilateral open skies agreement decreases the number of bilateral air transport agreements, and helps to establish the open skies framework as a preferred pattern of air transport reform. The agreement is notable for the strength of the cargo carriers among parties to the agreement, such as Singapore Airlines and Lan Chile, and includes special provisions for cargo handling and intermodal operations.

Regional air cargo transport reform may be undertaken among groups of like-minded states. The EC internal air transport market is perhaps the most successful such reform. Regional air transport reform could also be achieved sectorally, and then later broadened. An air cargo transatlantic common aviation area (TCAA), for example, could liberalize the air cargo market between the U.S. and the EC, and later be broadened to include passenger air transport.

Multilateral air transport reform may be undertaken through existing or new instruments. Originally part of the package of agreements

74. Id. at 3-4.
75. Multilateral Agreement on the Liberalization of International Air Transportation, November 15, 2000, Bandar Seri Bagawan, Brunei.
forming the Chicago Convention of 1944, the International Air Transport Agreement (IATA) represents an existing instrument that may be co-opted for modern air transport reform.\(^7\)\(^6\) OECD proposes a new multilateral instrument to comprehensively reform air cargo transport relations among member states.\(^7\)\(^7\) The instrument would liberalize the hard rights and soft rights necessary to conduct the full range of modern air cargo services, including market access provisions, pricing and capacity provisions, competition provisions, full freedom to diversify operations into forwarding and surface transport and full freedom in ground handling.\(^7\)\(^8\) A new multilateral instrument would have to be agreed upon by all parties to the agreement and ratified according to national law. This is traditionally an arduous process, and would undoubtedly slow the pace of reform. However, the result would be a comprehensive, multilateral air cargo transport regime capable of fully supporting the most modern air cargo transport services and techniques.

Another existing instrument for air cargo transport regulatory reform is the WTO and GATS. Already in place for some air transport soft rights, the GATS Annex on Air Transport Services could be expanded to include various air transport reforms, including sectoral reform of air cargo transport as a whole.\(^7\)\(^9\) The GATS Annex on Air Transport Services is in the process of a thorough review begun in 2000, and air cargo transport reform is included on the GATS 2000 reform agenda. Air cargo reform through the WTO in GATS represents an efficient, fair approach to air cargo transport reform, one which promises to meet the needs of the rapidly developing air cargo transport industry both now and in the future. In order to understand how GATS reform may meet the demands

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76. International Air Transport Agreement of 1944, 59 Stat. 1701. Interestingly, the origins of the ownership and control clauses that pervade bilateral air transport agreements of today may be traced back to IATA. Section 6 of IATA provides, ("Each contracting state reserves the right to withhold or revoke a certificate or permit to an air transport enterprise of another state in any case where it is not satisfied that substantial ownership and effective control are vested in nationals of a contracting state . . . "). This clause, in a multilateral context, was probably designed to exclude uninvited states, which at that time amounted to Axis powers, from the airspace of signatory states. When IATA failed to catch on, the clause was transferred without change to the Bermuda Agreement between the U.S. and the UK. However, in a bilateral context, the same clause has a much more restrictive effect, as there are only two party states to the agreement. Bilateral ownership and control clauses therefore limit the benefits of the agreement to the airlines of the two party states, and keep third party airlines off the routes between the two party states. This would not be the effect of the same clause in a multilateral context.

77. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, supra note 73, at 23.

78. Id. at 4.

of the air cargo industry, it is important to understand the WTO and GATS trading systems.

AIR CARGO TRANSPORT REGULATION AND THE WTO

A. THE WTO AND GATS

The World Trade Organization (WTO) is an international organization dedicated to trade among nations. The WTO has more than 130 members accounting for over 90% of world trade. The heart of the WTO is a set of legal agreements that lay the ground-rules for international trade. The agreements bind member nations to the trade terms to which they have agreed, and guarantee such trade terms to other member nations. Trade disputes among member nations are channeled toward a dispute resolution process that minimizes the risk that trade disputes will escalate into political or military conflict. The result is an international trading system that is stable and predictable, and that facilitates and lowers the cost of international trade. Beyond serving as a forum for memorializing trade agreements among member states, the WTO also works actively to lower trade barriers among members. By hosting successive rounds of trade negotiations and facilitating communication among trading partners, the WTO actively promotes a reduction in tariffs, regulations and other barriers to international trade.

Since 1947, the General Agreement on Tariffs and Trade (GATT) has served as the forum for negotiating lower customs duty rates and other trade barriers among member nations. Subsumed within the WTO in 1995, GATT is an umbrella agreement for trade in goods, and contains sectoral agreements in areas such as agriculture, textiles, etc. Since 1995, the General Agreement on Trade in Services (GATS) has served as the forum for negotiating lower barriers to trade in services among member states. As GATT applies to trade in goods, GATS applies the principles of freer and fairer trade to international service industries such as banking, insurance, telecommunications, transport and tourism. The WTO Council for Trade in Services oversees the operation of GATS.

Because of the complicated nature of cross-border trade in services and the myriad national regulations governing the supply of services, it was long thought that application of WTO principles to international trade in services would be impossible. However, new technologies have

81. World Trade Organization, supra note 18, at 1.
resulted in new methods for supplying international trade in services, entrenched government service monopolies have eroded and restrictive service industries have been gradually reformed, creating new opportunities to liberalize cross-border trade in services.82

Together, these forces have increased the possibilities for international trade in services, and created a demand for a liberalization of cross-border trade in such services.83

GATS meets this demand by providing a framework for liberalization of international regulation of trade in services. Coverage of a service sector under the GATS framework results in obligations of member states toward the regulation of that particular sector. These obligations may be broadly categorized as general obligations that apply directly and automatically to all members, and specific commitments that apply only to those sectors and activities to which a member has undertaken specific obligations.84

General obligations of members under GATS include Most Favored Nation treatment (MFN) and transparency.85 One of the intellectual cornerstones of GATS and the WTO, MFN provides that members are required to extend to service suppliers of other members regulatory treatment no less favorable than that accorded to like service suppliers of any other country.86 "Favor one, favor all, MFN means treating one's trading partners equally."87 The extension of this equal regulatory treatment is to be immediate and unconditional. As part of a member's general obligation to a particular service sector, MFN applies even if a member has made no specific commitments to provide foreign companies access to its markets under the WTO.88

The general obligation of transparency requires members to publish all laws and regulations relevant to the supply of services.89 Members are required to notify the WTO of any changes to these laws or regulations, and set up points of public inquiry within government. Services suppliers interested in doing business in the territory of a member may then contact these inquiry points regarding the regulations governing foreign service supply in the territory of that member.

Members may undertake commitments resulting in additional regula-

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82. Trade in Services Division, supra note 80, at 1.
83. Id.
84. Id. at 4-5.
85. Id.
86. Id. at 4.
87. Trading into the Future, supra note 80, at 2.
88. Id. at 3.
89. See generally, WTO Secretariat, supra note 80, at 5.
tory obligations and undertakings toward a particular service sector.\textsuperscript{90} These specific commitments may include \textit{market access commitments} and \textit{national treatment commitments}. A commitment in a specific service sector means that a member has decided to open that sector to foreign service supply. Typically the result of negotiations with other members, a member's commitment to a specific sector carries the force of law, and is legally enforceable against that member by other members. Member commitments for each sector are contained in detailed schedules that list all the various service sectors and member commitments in each area.

A \textit{market access commitment} is the opening of a member's domestic market to foreign service supply. Typically negotiated in multilateral packages, market access commitments contain negotiated and guaranteed conditions for conducting trade in services.\textsuperscript{91} Market access commitments may be improved at anytime, but changes for the worse are difficult, and must be accompanied by compensation to affected members. Market access commitments may effect a broad, unlimited access of a specific service sector to foreign entry, or may be limited in certain ways. Six types of limitation are possible under GATS: the number of services suppliers granted access to a market; the total number of service operations or total quantity of service output; the number of persons that may be employed in a sector; the value of transactions in a sector; the legal form of the service supplier; and the participation of foreign capital.\textsuperscript{92}

Pursuant to a \textit{national treatment commitment}, in any sector in which a member has made specific commitments that member is obliged to grant foreign services suppliers treatment no less favorable than that extended to its own services suppliers.\textsuperscript{93} If a member makes a national treatment commitment, then once a foreign company has been allowed to supply a service in a member state there may be no discrimination between the foreign and local companies.\textsuperscript{94} The primary national treatment obligation is to eliminate measures that would modify, in law or in fact, the conditions of competition in favor of a member's own service industry at the expense of cross-border supply of the same service.

An example would serve to clarify the different types of commitments a member may make. If a member commits itself to allow foreign banks to operate in its domestic market, that is a market access commitment. If the government limits the number of licenses it will issue to foreign service suppliers, that is a market access limitation. If a member also says that foreign banks are only allowed one branch while domestic

\begin{footnotes}
\item[90] Trading into the Future, supra note 80, at 5.
\item[91] \textit{Id.} at 8.
\item[92] WTO Secretariat, supra note 80, at 8.
\item[93] Trade in Services Division, supra note 80, at 5.
\item[94] Trading into the Future, supra note 80, at 9.
\end{footnotes}
banks are allowed many, that is an exception to the national treatment principle, and may be prohibited depending on the degree of commitment undertaken.95

An important feature of the GATS trading system is an ongoing obligation of member states to review and expand their sectoral commitments. The so called "built-in agenda" of GATS, members must recognize that their commitments made in the initial negotiating round that established the WTO and GATS, the so-called Uruguay Round, represent just a start, and must commit themselves to successive rounds of negotiations aimed at achieving progressively higher levels of liberalization.96 GATS provides for new rounds of negotiation to be undertaken at least once every five years, with the last round having been undertaken in 2000. Serving as a forum for these successive rounds of negotiations is one of the most important functions of the WTO.

The cumulative effect of GATS general obligations, specific commitments and commitments to undertake successive rounds of negotiation is a powerful impetus toward trade liberalization. The GATS principles of fairness and openness, combined with MFN treatment and national treatment that multiply the effect of these principles across hundreds of trading nations, results in rapidly diminishing trade barriers and a significant opening of service markets to foreign supply. These built-in features make GATS a powerful tool for trade liberalization, a tool well-suited to the increasingly integrated global economies of today.

B. GATS COVERAGE OF AIR TRANSPORT

Despite the power of the GATS mechanism for achieving a reduction in trade barriers, and despite the fact that virtually all other service sectors are included within the GATS framework, air transport services are covered only in small part by GATS.97 One of the few service sectors to be granted special treatment under GATS, air transport services are dealt with in a special annex to GATS. The Annex on Air Transport Services provides that, "the Agreement (GATS) including its dispute settlement procedures shall NOT apply to measures affecting (a) traffic rights, however granted, or (b) services directly related to the exercise of traffic rights."98 The Annex then goes on to list specific air transport services that are included under GATS, including aircraft repair and maintenance services, the selling and marketing of air transport services, and

95. Id. at 8.
96. TRADE IN SERVICES DIVISION, supra note 80, at 10.
98. Id.
International air transport proved to be a sector where full inclusion in GATS was impossible, due largely to the complex framework of existing bilateral and multilateral air transport agreements. This existing framework, while cumbersome, complex and opaque, does amount to a viable system of international air transport regulation and has resulted in the successful creation of a robust global air transport system. Unfortunately, this system also proved to be irreconcilable with GATS, at least during Uruguay Round negotiations. Rather than impede the implementation of GATS for all other service sectors, it was decided to set the bulk of the air transport sector aside for the time being.

There were a number of reasons for setting aside air transport. For one, as an entrenched system, it was clear that even if some members were willing to make commitments in the sector, other would not. This would lead to further complexities in an already complex system, as GATS would apply to some air transport relations and existing bilateral agreements would apply to others. No one was anxious to be responsible for the creation of such a mess, much less try to implement it in practice. Aside from that, however, the very nature of bilateral air transport agreements are incompatible with GATS principles.

As discussed above, bilateral air transport agreements are negotiated on the basis of a reciprocal exchange of benefits between partner states. With the exception of open skies agreements that exchange air transport rights on an "open attitude for open attitude" basis, typical bilateral air transport agreements are premised on a balanced exchange of hard rights, such as market access, frequencies, capacity and fares. The GATS system, particularly the MFN treatment principle, offers the prospect of trade liberalization regardless of reciprocity between members. Recall the MFN principle: favor one, favor all. This disparity between reciprocity and MFN treatment is of serious concern to air transport regulation reformers, especially those that hope to achieve air cargo transport reform through GATS.

With traffic rights and other important hard rights excluded, one may legitimately ask why air transport was included within the scope of coverage of GATS at all. After all, hard rights, including traffic rights, fares, capacity and frequencies, are the primary matters to be exchanged in any bilateral air transport agreement. If not included within the scope of

99. Id.
101. Id. at 124.
102. Id.
GATS, the significance of GATS coverage of air transport in economic terms is greatly diminished.

The answer lies in the organic nature of the GATS trading system. While recognizing that the current GATS coverage of the air transport sector is limited to certain soft rights, the fact that air transport is included at all offers the prospect for expanded coverage of air transport in successive rounds of negotiation. A foothold in the air transport sector, current GATS coverage implies that the difficult issues presented by complex bilateral air transport agreements are not to be ignored, just deferred. Subsequent negotiating rounds have the obligation to tackle the issues these bilateral agreements present, and undertake the difficult process of incorporating them within the scope of the GATS system with other air transport matters. While perhaps overly optimistic, inclusion of soft rights under GATS at least reflects a hope and a prayer that hard rights will one day fall within the scope of GATS.

C. PROSPECTS FOR BROADER INCLUSION OF AIR TRANSPORT WITHIN GATS

The scope of GATS coverage of the air transport sector has no effect on a broad range of important air transport services. In some cases such as CRS services and sales and marketing services, these services are already covered under national or bilateral forms of regulation, making their inclusion under GATS even less impactful. However, given the stated objective of GATS, which is to achieve progressive liberalization over time, members have the opportunity, if not the obligation, to consider broader inclusion of air transport services under GATS. A number of additional air transport services have been proposed for inclusion under GATS, ranging from the relatively simple, such as ground handling services, to the ultimate goal, the inclusion of comprehensive passenger and cargo air transport services, including traffic rights, within the GATS framework. Possibilities for further inclusion of air transport services under the GATS framework that have been proposed include: charter operations; all-cargo services; foreign ownership restrictions; ground handling services; airport services; airport slots; and leasing

103. Id.
104. Id.
105. Id.
D. Reform of Air Cargo Transport Regulation Through GATS

D.1. The Case for Air Cargo Transport Reform Through GATS

The lesson of the history of air transport regulation is that such regulation does not exist in a vacuum. Air transport regulations exist in order to further policies and goals established by states and their policy makers. In different eras, protectionist air transport policies served the goal of building large and stable aircraft manufacturing and airline industries, while deregulation served the goal of subjecting such industries to the forces of the marketplace and redirecting them toward serving consumer interests.

The WTO, GATS and MFN treatment are also indicative of their times, reflecting broader global political and economic trends. Evidence of these trends and the changes they represent are everywhere. Physical, political and economic borders have come crashing down. With the end of the Cold War, long-held animosities have disappeared and a new openness has pervaded. Democracy has spread, and with that the spread of capitalism. Markets once closed are opening and new markets are being created. The movement of persons, capital, goods and information is becoming more free. The world's economies are integrated as at no other time. Time has shrunk, as new technologies allow instant communication of vast amounts of information. Capital is spreading all over the globe, as global economic players invest in new markets and establish foreign trading relationships, affiliates and subsidiaries.

Increasing integration and the breakdown of traditional economic and political barriers have given rise to new methods of doing business.  


108. One interesting possibility for inclusion of air transport services within GATS is air carrier foreign ownership restrictions. Many members include foreign ownership and control restrictions in their national laws governing airline licensing. Part of the heritage of post-WWII protectionism, these regulations were intended to coddle national airlines and reserve to them domestic traffic and government subsidies. Although still important to many states for national security and other reasons, at the very least members could schedule their present restrictions in the form of GATS commitments. The effect of such commitments would be to outlaw future tightening of these restrictions, and possibly even foreshadow the loosening of them in successive rounds of negotiations. Organization for Economic Cooperation and Development, supra note 72, at 7.
The entire globe is now open to the most efficient allocation of the costs of doing business. Labor, storage, manufacturing, information processing and countless other business services may now be undertaken anywhere, depending on the cost of undertaking the service and the cost of subsequently integrating that service into a global business operation. Global manufacturing, in which various components of a complex product are manufactured all over the world and assembled for final distribution upon delivery to market, is increasingly relied upon by the world's leading companies. A refinement on global manufacturing, just-in-time manufacturing relies on precise and accurate delivery of materials and components to keep an assembly line supplied and functioning. Aided by internet-based information technology that allows full access to manufacturing information and related supply needs, just-in-time manufacturing achieves significant savings in storage and warehousing costs, savings eventually passed on to consumers.

These new methods of doing business place a premium on efficient transport systems. As business methods and techniques become more dispersed, the links between these remote operations become more important. Materials, components and finished goods often must be shipped several times before final delivery to market. Shipping becomes not just the coda to the manufacturing process, but a part of the process itself. This is especially true in the case of logistics services providers, who engineer an entire manufacturing, inventory and supply system. In this environment, the speed, reliability and universality of transport systems becomes paramount. Indeed, global and just-in-time manufacturing techniques would not be possible without this type of transport infrastructure to support them.

109. Organization for Economic Cooperation and Development, supra note 10, at 1. ("Air cargo plays a crucial role in ensuring the competitiveness and commercial success of a large number of industries across the globe. It is an area of the world economy where policy reforms promise great direct and indirect benefits. Successful regulatory reform in the air cargo sector will most likely pave the way for similar progress in air transportation as a whole.") See also, International Chamber of Commerce, supra note 1, at 1. ([T]he commercial success of e-commerce relies heavily on the existence of efficient, liberalized delivery networks, of which air cargo services constitute the key link.")

110. See Fennes, supra note 1, at 13. ("Transport of goods is of major importance to other economic processes such as the buying and selling of goods, the production of goods, and the allocation of production factors. Transport has evolved from being a necessary, but secondary activity, to a fully matured and major element of the production and distribution process required for industry and trade.")

111. World Trade Organization, Council for Trade in Services. Communication from New Zealand, Chile and Singapore: Air Transport Services 1 (1999). ("The possibilities created by the expansion of air freight have helped underpin and respond to the globalization of production distribution systems. This has led to further integration into the world economy of countries distant from major industrial centers and enhanced the demand for long
The transport industry, and in particular the air cargo transport industry, has responded to these changes, and adapted to meet the new demands placed upon it. The old air cargo transport system of forwarders, air carriers, agents and surface transport providers is increasingly giving way to integrated transport systems. Integrators, express couriers and logistics services suppliers provide comprehensive transport services, including air transport when necessary. Their product has moved beyond carriage of goods by air. In its place they offer new types of products to their customers, including time-definite delivery services, door-to-door delivery services, and comprehensive inventory management and supply services. These new types of products meet the demands of new business methods and techniques, by providing the speed, reliability and global coverage needed to integrate dispersed operations in a comprehensive, reliable and cost-efficient manner. In this new paradigm, air cargo transport, and in particular integrated air cargo transport, has emerged as the transport system of choice of the new global economy.

Integrated air transport systems are constrained, however, by the current air cargo regulatory system. This system, developed in a different time to serve different policy goals, does not match the demands of the new world economies, and the efforts of the integrated air cargo transport system to serve them. This system cannot service integrated global economies, and in turn reach its own potential as an efficient, integral part of those economies, in the current patchwork of outdated, anachronistic regulations.

A new regulatory system is needed to propel the air cargo regulatory system forward and meet the demands the new global economies have placed upon it. The GATS trading system in the WTO framework is the perfect such system. The principles upon which it is based, openness, reliability and cost-efficiency, are exactly the qualities required by the new global economies. The current regulatory system does not permit all air carriers to base their operations on market demand for their air cargo services. They are confined to a range of accessible bilateral markets. They cannot design international route structures and develop services in full and free competition with each other. Also, they cannot build and match their route networks and operational capacity with available service demand at the global level. Beyond traffic rights, carriers are also constrained by a range of other rules affecting operational and 'doing business' opportunities. These rules restrain their corporate and business structures, notably their ownership and control structures, the possibility to contract freely with domestic/local carriers abroad, and to diversify into complementary services such as trucking and in certain instances, freight forwarding, in order to develop seamless transport services for domestic and international customers."

112. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, supra note 10, at 7-8. ("The current regulatory system does not permit all air carriers to base their operations on market demand for their air cargo services. They are confined to a range of accessible bilateral routes and continue to be constrained by a range of restrictions to their access to other countries' domestic markets. They cannot design international route structures and develop services in full and free competition with each other. Also, they cannot build and match their route networks and operational capacity with available service demand at the global level. Beyond traffic rights, carriers are also constrained by a range of other rules affecting operational and 'doing business' opportunities. These rules restrain their corporate and business structures, notably their ownership and control structures, the possibility to contract freely with domestic/local carriers abroad, and to diversify into complementary services such as trucking and in certain instances, freight forwarding, in order to develop seamless transport services for domestic and international customers.")

113. See FENNES, supra note 1, at 355. ("Since air cargo is vital for trade and economic relations in general, and the effectiveness of GATS in particular, there is all the more reason for
transparency and fairness, are perfectly suited to the integrated economic world of today. The tools at its disposal, including MFN treatment and national treatment are designed to effect the fairest and broadest liberalization of regulations in the most efficient manner possible. They facilitate the free flow of goods and services across increasingly irrelevant borders. The system is equipped with a comprehensive and well-respected dispute resolution mechanism designed to minimize political and military involvement.114

Moreover, GATS air transport regulatory reform is uniquely equipped to address the challenges of the air cargo transport system of today. An integrated business, today’s air cargo transport may involve the traditional carriage of goods by air, but also surface transport, computer tracking and tracing systems, warehousing and storage, customs clearance, forwarding, ground handling, and many other formerly distinct services. GATS, which accommodates the possibility of cross-sectoral trade negotiations, offers the ability to negotiate in several or all of the sectors needed to accomplish an integrated air cargo transport system at once.115 This is a powerful tool, as it allows the entire, integrated nature of air cargo transport to be considered and negotiated, rather than through piecemeal negotiations or a patchwork of regulation. The result is that the integrated air cargo transport system may be considered as a whole by a single group of negotiators, lending coherence and efficiency to the entire reform process. No other system of air cargo transport regulatory reform offers this unique advantage.

GATS air cargo transport reform also helps fulfill the promise of GATT.116 The GATT world trading system promises to open up nations and markets to the free flow of goods. Undertaken earlier than GATS, GATT was one of the first comprehensive multilateral efforts to reduce tariffs and other barriers to the cross-border trade in goods. Largely considered a political and regulatory success, the fruits of GATT must be realized in practice on an ongoing basis. Trade must be achieved and goods must actually cross borders in order for GATT to be a success. Air cargo transport reform through GATS helps fulfill that promise by providing the transport system required to effect that cross-border trade.

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114. See Id. at 405-406.
115. Id. at 405. ("Because of the broader context of the WTO, it will be possible to break through dead-lock situations through cross-sectoral concessions...")
116. INTERNATIONAL CHAMBER OF COMMERCE, supra note 1, at 3. ("As import barriers for the entry of goods are progressively lifted in many countries, the transport means used for this purpose needs to be liberalized simultaneously.")
Goods transported across borders within a GATS air cargo transport system reflect a tidy, symmetrical fulfillment of the promise of GATT. Furthermore, the types of goods increasingly transported by the new air cargo transport system of today are the high value, high-technology goods GATT most hopes to stimulate.

Air cargo transport reform through GATS also offers a number of incidental benefits. GATS and the WTO pay particular attention to the needs of developing economies.117 These economies especially would benefit from air cargo transport reform, as transport infrastructure improvements would have multiplier effects that ripple throughout these developing economies.118 Any improvement in air transport infrastructure holds the promise of improving millions of lives in these nations.

Finally, air cargo transport reform through GATS offers to pave the way for passenger air transport reform.119 Air cargo reform has served as a regulatory pilot fish for passenger air transport in the past, and could indeed serve a similar role in the future. Although the hardships inflicted upon the new air cargo business models such as integrators, express couriers and logistics services providers are particularly acute, the passenger air transport system is suffering from restrictive, outdated regulation as well. As it has in the past, passenger air transport reform has lagged behind air cargo reform in part because of a sense of dread over how difficult the process will be. Air cargo transport reform through GATS will help to flesh out all the issues that will be encountered in passenger air transport reform, and offer a sense of hope that these issues are indeed reconcilable. Successful air cargo transport reform may also lead to a sense of inevitability of broader reform, further streamlining the path of passenger air transport reform through GATS.

D.2. The Objectives of Air Cargo Transport Reform

The objective of air cargo transport reform through GATS would be to create a regulatory environment in which air cargo transport, particularly the newly developed services such as those offered by integrators, express couriers, and logistics services providers, could offer their services

117. World Trade Organization, supra, note 16, at 6. ("Over three-quarters of WTO members are developing or least-developed countries. Special provisions for these members are included in all the WTO agreements.")

118. International Chamber of Commerce, supra note 1, at 2. ("Transport, together with financial services and telecommunications, form the key elements of the international business infrastructure.")

119. Organization for Economic Cooperation and Development, supra note 10, at 2. ("Successful regulatory reform in the air cargo sector will most likely pave the way for similar progress in air transportation as a whole.")
to customers unconstrained by restrictive government regulation. This ideal regulatory environment would allow for:

- free route design and network optimization, allowing for cargo hubbing operations to be established according to economic and market based criteria;
- free pricing authority according to economic considerations such as service characteristics and market structure;
- free determination of carrier ownership and control structure according to capital needs and marketing policies; this free determination would imply the unimpeded ability to invest in or merge with foreign carriers;
- freedom to pursue multi-modal operations, including surface operations, either by contract or under a carrier's own name;
- efficient and transparent customs and ground-handling procedures; and
- transparent, non-discriminatory allocation of environmental externalities caused by air cargo services such as aircraft noise and pollution. 120

An air cargo transport regulatory system based upon the above principles would allow such system to reach its full potential within integrated world economies. Routes and networks would be designed based upon purely economic considerations, including market conditions and the cost of serving those markets. Hubbing operations would be established according to the ability to most effectively and efficiently serve existing and potential new markets. No longer having to rely on a patchwork of bilateral traffic right authorizations, networks would become much more efficient and cost-effective, savings which would be passed on to the consumer in the form of improved services and lower prices.

Carriers would be able to invest in remote operational infrastructures, such as warehouses and distribution centers, surface transport operations and even foreign air carriers without fear of violating restrictive national and bilateral regulations. This would effect the most efficient allocation of capital, and facilitate the investments required to serve established and emerging markets. Cross-border mergers would be facilitated, allowing efficient consolidation of complementary operations. Competition regulation would govern subsequent combinations to ensure the proper functioning of the marketplace and prevent competition abuses. Environmental costs of air cargo operations would be borne by appropriate parties, including the air carrier operations themselves in appropriate circumstances.

D.3. The Legal Framework

Air cargo transport reform through GATS would be accomplished by amending the existing GATS Annex on Air Transport Services to in-

120. Id. at 8-9.
clude air cargo transport and related services, coupled with national commitments in these areas. This is the traditional approach of trade reform through the WTO and GATS. This approach relies on the cumulative effect of national market liberalizations, aided by MFN and national treatment principles, to effect, over time, an open and free market in services. In order to effect meaningful air cargo transport reform, important elements such as traffic rights, ownership and control regulations, multimodal regulations, ground handling regulations and other regulations affecting the provision of air cargo services would have to be added to the Annex and open to commitments by member states. States would then be free to make specific commitments in these areas, and be expected to undertake negotiations for further commitments in subsequent negotiating rounds.

The above description represents the basic legal framework for air cargo transport reform through GATS. It is no different from other sectoral reforms undertaken within the GATS framework. However, air cargo transport reform would present some unique issues that would have to be addressed by reformers. For one, the Annex would have to specify the types of carriers to which these reforms would apply. Although some jurisdictions no longer make a regulatory distinction between cargo and passenger carriers, most do. Air cargo is carried by an ever widening array of air carriers, including traditional combination carriers, all-cargo carriers, integrated cargo carriers, forwarders – sometimes known as indirect air carriers, and others. The scope of regulatory reform chosen could provide an advantage to certain carriers over others. A reform affecting only all-cargo carriers could seriously disadvantage combination carriers, for example. On the other hand, reform affecting all types of cargo carriers would implicate the passenger operations of combinations carriers, and could stall or derail the entire reform process. Either way, any reform effort would have to address the differences among types of cargo carriers, and provide for a regulatory solution that compensates for any disparate regulatory treatment.

All-cargo reform is most likely to meet with immediate success. All-cargo reform is simpler to undertake, as it does not implicate the complex and emotional passenger air transport issues. All-cargo reform has the further advantage of addressing the most pressing reform needs, those faced by the new types of air cargo carriers, the integrators, express couriers and logistics services suppliers. The versatile nature of the GATS sys-

121. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT WORKSHOP, ON REGULATORY REFORM IN INTERNATIONAL AIR CARGO TRANSPORTATION, CHAIRMAN'S SUMMARY 2 (1999). ("Any regulatory reform should take into account the need to establish a regime which enables all categories of service providers to respond to the needs of the market, which is increasingly driven by shippers and cargo owners.")
tem could play a role in mitigating the effects of selecting only all-cargo operations for reform, as concessions in other service sectors could be made to help offset any lingering disadvantage suffered by combination carriers. For example, concessions in the passenger carrier wet-leasing market would bring benefits to combination carriers that may help to offset the negative competitive effects of all-cargo reform. The timing of reform could also help offset any harm suffered by combination carriers, by building in a transition period to allow combination carriers to adapt to a new regulatory environment. Combination carriers could adjust their structure and operation to minimize the reform's impact on their business, or capitalize on such reform by reorganizing or forming a separate subsidiary to take advantage of the opportunities created by such reform.

D.4. Problems With GATS Air Cargo Transport Reform

In a pure GATS reform, traffic rights and other regulations would be liberalized on a MFN basis. As we have seen, the very nature of MFN treatment is such that states may be required to offer a set of benefits that other states do not offer in return. In other words, MFN treatment may result in situations in which benefits are not offered on the basis of mirror reciprocity between states. For example, in a MFN situation, if state A were to offer liberalized traffic rights to and within its territory, it would be required to make these rights available to state B, which offers similarly open traffic rights benefits, as well as state C, whose borders are closed to foreign traffic.122 This disparity is acknowledged by proponents of MFN and the WTO trading system, who accept this as the price of trade reform. These proponents would also point out that trade reform is not a static enterprise, and that state C would be obligated to periodically undertake trade liberalizations efforts in good faith in subsequent negotiation rounds.

For many in the air transport world, however, even reformers, this disparity represents a serious obstacle to reform. Even air transport reformers acknowledge that international air transport regulation has traditionally been undertaken on the basis of a reciprocal exchange of benefits, and that such tradition may be impossible to overcome. States simply may not be willing to allow a disparity between the rights and privileges afforded their own air carriers and those of their trading partners. This despite the fact that such objections would be based on carrier interests and not consumer interests, reflecting a very outdated regula-

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122. INTERNATIONAL CHAMBER OF COMMERCE, supra note 1, at 6.
In the example given above, state A may simply not tolerate the restrictive treatment of its own carriers by state C, when the carriers of state C are allowed open access to their own state A. The carriers of State A would certainly complain that their government has not provided a regulatory environment in which they could effectively compete, and that they are placed at a disadvantage in relation to foreign carriers. This last argument, if made by politically powerful carriers and their equally powerful trade unions, would surely doom any undertaking to reform air cargo transport through GATS based upon a pure application of MFN treatment.

For this reason a modified MFN concept, known as conditional or reciprocal MFN, has been proposed for air cargo transport reform through GATS, one based on reciprocal MFN treatment. In the example given above, conditional or reciprocal MFN treatment would require State A to offer State B free and open access to its market because State B has offered the same to State A. State A would only be required to offer free and open access to its market to State C, however, if State C were to reform is regulations and offer free and open access to other states, including State A. Reciprocal MFN treatment would require states to offer its most liberal air transport regulatory treatment to every state that offered such treatment in return. A state would be required to determine the most liberal air transport regulation package, including the degree of market access, foreign ownership and control, double disapproval pricing, etc, that it would be prepared to offer to all comers. It would not be able to deny this package or any elements of it to any other state, provided that that state offers the same package in return.

Despite their apparent similarity, conditional MFN is different from traditional bilateral air transport regulation. Traditional bilateral air transport regulation allows a state to select the partners with whom it chooses to undertake a liberal air transport arrangement, and those with whom it chooses to undertake a restrictive arrangement. This selection may be undertaken according to carefully prescribed criteria or arbitrarily. While such choices may be based on rational economic or political impulses, disparate treatment of trading partners amounts to trade discrimination. Reciprocal MFN does not allow this choice. The only

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123. Id. at 4. ("It is worth noting that, in this case, the argument against MFN is based on carrier, not consumer, interests.")

124. Id. ("The MFN principle ought therefore to apply to the most favorable equal exchange of inbound and outbound access to trans-border markets which a country is prepared to make. In other words, the MFN principle would be applied in such a way that every WTO member should be required to offer to all members the elements of its most favorable bilateral agreement, on the basis of mirror reciprocity.")

125. Id. at 5. ("A country could no longer choose to be liberal with some partners and illiberal with others, or partly liberal in exchange for completely liberal access.")
choice a state may make is the degree of air transport liberalization it is prepared to offer to all comers. Once that choice is made, the air transport package it represents may not be offered on a discriminatory basis. It must be offered on even terms to all potential partners willing to offer the same package. In this sense, reciprocal MFN represents an improvement on traditional bilateral air transport regulation. Although not as powerful as an unfettered MFN treatment, reciprocal MFN represents a more realistic approach to air cargo transport reform, and would still result in progressive multilateral liberalization, leading eventually to a true reformed multilateral air cargo transport regulatory system.

CONCLUSION

A. SIGNIFICANCE OF GATS REFORM OF AIR CARGO TRANSPORT REGULATION

Air cargo transport reform through GATS would reflect a preference for the GATS vehicle of reform above all others. A variety of reform vehicles have been proposed, including single-issue bilateral reform, comprehensive bilateral reform incorporating a detailed air cargo annex, regional reform, plurilateral reform, combining islands of regional reform, multilateral reform through existing instruments and multilateral reform through new instruments. All offer the prospect of reform, but a preference for GATS reflects its unique suitability to the complex nature of air cargo transport that makes it the ideal vehicle for reform.

GATS is a forward-looking trading system designed to address the needs of integrated, global economies well into the future. The choice of GATS reform of the air cargo transport system would not only achieve meaningful, substantive reform, but would forever identify air cargo transport with the regulatory framework likely to govern the course of world trade far into the future. More than a simple choice of reform vehicles, the preference for GATS reform of air cargo transport would be symbolic expression of air cargo transport's accession to the modern global trading system.

B. EFFECTS OF GATS REFORM OF AIR CARGO TRANSPORT REGULATION ON PASSENGER AIR TRANSPORT REGULATION AND WORLD TRADE GENERALLY

The preference for GATS reform of air cargo transport would also have ripple effects across other aspects of air transport, and world trade in general. Air cargo transport reform through GATS virtually guarantees that passenger air transport reform will be undertaken though the GATS framework as well. More than simply paving the way for passenger air transport reform, GATS air cargo transport reform pre-ordains...
the regulatory vehicle to be used to achieve passenger air transport reform. Preferring GATS reform of air cargo transport will not only shape the substantive debate, but dictate the legal framework in which passenger air transport reform will be undertaken.

Finally, air cargo transport reform through GATS, especially if followed by passenger air transport reform, sounds a note of confidence in the WTO, the GATS framework and the principles upon which they are based. Sure to be difficult, contentious reform efforts, if the GATS framework can successfully accommodate the complexities and passions which air transport reform encompasses, it surely can accommodate any subsequent sectoral reform efforts. Air transport reform through GATS demonstrates the vehicle’s flexibility, versatility and strength, building confidence in its institutions and the principles upon which it is based. With a success like air transport reform under its belt, GATS and the WTO would surely be seen as the preferred vehicle for regulatory reform for generations to come.
Time and Demurrage and the Case for Uniformity

Paul W. Stewart, Esq. and Christine H. Scheinberg, Esq.

INTRODUCTION

In the business of ocean-going shipping, delay is a fact of life. In addition, where there is delay, there are also demurrage charges that, in the event of litigation, become an element of a damage claim. Determining the status of repose of those claims is an important factor not only of litigation strategy, but also of settlement negotiations. Unfortunately, given the complex interaction of statutory and common law in the transportation sector, repose is not always easy to determine. There have been two recent cases relating to the proper limitations period for bringing claims for demurrage arising from oceanic shipping. In 2000, the First Circuit issued the TAG/ICIB Services, Inc. v. Pan American Grain Co., Inc., decision, and subsequently, the Eleventh Circuit issued the Venus Lines Agency, Inc. v. CVG International America, Inc. decision. Although the time period of allowable demurrage claims in Venus comported with the outcome in TAG, the reasoning process and the differences in the respective benchmark statutes has created an unnecessary element of confusion in this field. The authors of this article seek to

3. The TAG court's holding for post 1996 charges was for an eighteen month statute of limitations and the Venus court found under equitable principles that only one year of charges was not barred. However, the TAG court did not have the application of the equitable principles before it.
restore the wholeness previously existing in this area by arguing that all future cases should be resolved under the reasoning of the TAG court.

Both of the above courts utilized the laches doctrine to determine whether a claim for demurrage was time barred. Laches has always been applied generally in admiralty cases, and also maritime cases featuring demurrage claims decided by the application of admiralty law principles. The dangerous difference between the two recent cases involves the statute chosen by each court to be the benchmark for the application of the laches analysis. In the TAG case, the First Circuit ruled specifically that the limitations periods of the Interstate Commerce Act and its successor statute, the Interstate Commerce Termination Act, should be used as the analogous statute for applying the laches doctrine. Their reasoning extended a long line of cases on this issue to encompass the changes in the law effective in 1996. Then, the Eleventh Circuit issued its Venus decision, interjecting doubt and confusion in this apparently settled area by incorporating a state statute of limitations as the analogous statute in its ruling on the ability of equitable issues to bar otherwise timely filed actions under laches. However, based on the circumstances of the case itself, and its posture on appeal, it appears that this anomalous result was an unintentional departure from the general jurisprudence in this area that should not and will not become binding precedent. This article will look at the historical posture of maritime demurrage limitations and demonstrate why the TAG ruling is more in line with that result.

Early American case law recognized demurrage as “merely an allowance or compensation for the delay or detention of a vessel.” Demurrage was usually a matter of contract, but could sound in tort as well. The term “demurrage charges” now encompasses the penalty charged to the shipper, or third party, by a carrier or other logistics supplier for holding over equipment, including that shipped by rail, ship, or container or dormant in warehouse space. This article will limit itself to examining maritime demurrage claims.

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5. Formerly found at 49 U.S.C. §§ 1 et seq.
7. 215 F.3d at 176.
8. 1996 was the effective year for the Interstate Commerce Commission Termination Act; the Interstate Commerce Act was repealed effective in January of that year; most of the Shipping Act and all of the Intercoastal Shipping Act were repealed effective September 30, 1996.
9. 234 F.3d at 1230.
11. Id.
12. The term for a similar holding over penalty involving trucks and trailers is detention. However, that issue is well outside the scope of this article.
Claims for demurrage, including maritime demurrage, expanded from a common law tort or contract claim into a federal statutory cause of action with the federal regulation of interstate and international commerce. Federal commerce-related statutes, such as the Shipping Act,\textsuperscript{13} the Intercoastal Shipping Act\textsuperscript{14} (collectively “the Shipping Acts”), and the Interstate Commerce Act\textsuperscript{15} (“ICA”), now replaced in whole or part by the Interstate Commerce Commission Termination Act, (“ICCTA”)\textsuperscript{16}, prescribed rules for filing transportation rates with federal agencies (among numerous other provisions). Once an agency approved those rates, the courts enforced them as statutory causes of action.\textsuperscript{17} Those tariffs included not only the basic rates, but all other accessory rates and terms of transit. The ICA gave carriers the right to recover the lawful charges specified in the tariffs.\textsuperscript{18} Although not specifically referenced, the courts have uniformly found that the “charges” in Section 16(3)(a) of that act included demurrage.\textsuperscript{19} The United States Supreme Court in \textit{Tuner, Dennis & Lowery Lumber Co. v. Chicago, M. & St. P. Ry.},\textsuperscript{20} made clear that the lawful charges that could be recovered in an action under the ICA included demurrage. However, the regulatory system did not cover all types of carriers or shipping situations. Common law maritime principles continued to govern demurrage claims brought in admiralty.

**Maritime Demurrage Covered by Statute**

The federal courts have jurisdiction over actions “arising under any Act of Congress regulating commerce.”\textsuperscript{21} Regulation of the collection of demurrage charges that are ancillary to regulatory statutes has been determined to be within Congress’s commerce powers.\textsuperscript{22} Maritime demurrage rates also fell into the category of tariffs filed with the appropriate

\begin{itemize}
\item \textsuperscript{13} 46 U.S.C. §§ 801 et seq.
\item \textsuperscript{14} Formerly 46 U.S.C. §§ 843 et seq.
\item \textsuperscript{15} Formerly 49 U.S.C. §§ 11 et seq.
\item \textsuperscript{17} \textit{See} Texas & P.R. Co. v. Mugg, 202 U.S. 242 (1906); Kansas City Southern R. Co. v. Carl, 227 U.S. 639, 653 (1913).
\item \textsuperscript{18} Louisville & N. R.R. v. Maxwell, 237 U.S. 94, 97-98 (1915).
\item \textsuperscript{19} \textit{Baker v. Chamberlain Manufacturing Corp.}, 356 F.Supp. 1314, 1315 (N.D. Ill. 1973) and cases cited therein.
\item \textsuperscript{20} 271 U.S. 259, 262-263 (1926). Justice Brandeis rules that the action for demurrage charges previously existing under common law is now a right of recovery under the ICC’s rate enforcement authority.
\item \textsuperscript{21} 28 U.S.C. § 1337.
\item \textsuperscript{22} \textit{See} Tuner, Dennis & Lowery Lumber Co. v. Chicago, M. & St. P. Ry., 271 U.S. 259, 262-3 (1926). Justice Brandeis rules that the action for demurrage charges previously existing under common law is now a right of recovery under the ICC’s rate enforcement authority. \textit{See also}, \textit{Baker v. Chamberlain Manufacturing Corp.}, 356 F.Supp. 1314, 1315 (N.D. Ill. 1973).
\end{itemize}
agency.23 Before 1995, an action to recover demurrage charges related to water-based shipping arose under the tariff provisions of the Shipping Act,24 which required certain ocean carriers to file tariffs with the Federal Maritime Commission.25 The Intercoastal Shipping Act was similar to the Shipping Act in its requirements. The Intercoastal Shipping Act required carriers in intercoastal commerce to file rate schedules with the commission, and required them to abide by the schedules they filed.26 Relying on the reasoning in *Louisville & N. R.R. v. Maxwell*, and *Turner, in Dennis & Lowery Lumber Co. v. Chicago, M. & St. P. Ry.*,27 the First Circuit held that because the Shipping Act was enacted for a parallel purpose,28 recovering demurrage charges was also a right under the Shipping Act.29 By the same analogy, such charges would have been recoverable under the Intercoastal Shipping Act.

Neither shipping act contained a statute of limitations. As is often the case, when Congress does not provide a specific statute of limitations, the courts borrow a limitations period from an appropriate statute. In this search for the appropriate limitations period, there are many reasons for looking first to federal statutes in certain contexts. First, borrowing state statutes' limitations periods for federal statutes that lack one may be inconsistent with the underlying policies of the federal statute.30 The Supreme Court has noted that "state legislatures do not devise their limitations periods with national interests in mind, and it is the duty of the federal courts to assure that the importation of state law will not frustrate or interfere with the implementation of national policies."31

For suits filed under the Shipping Acts for collection of demurrage, the importance of uniformity in the regulation of commerce has led courts to look first to other analogous federal statute of limitations.32 The court in *Puerto Rico Marine Management, Inc. v. Molac Imports*,

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23. *See* Maritime Service Corp. v. Sweet Brokerage De Puerto Rico, 537 F.2d 560 (1st Cir. 1976)

24. After 1940, related provisions of the ICA also applied.

25. 537 F.2d at 561 and cases cited therein recognizing a right of action by carriers to collect tariffs under the Shipping Act as well as in admiralty.


27. 271 U.S. at 262-3.

28. *See* Prince Line v. American Paper Exports, 55 F.2d 1053, 1056 (2nd Cir. 1932), in which Judge Learned Hand held "Within its own ambit, the same remedies attend a violation of the Shipping Act, as have been accorded under the Interstate Commerce Act. . . ."

29. 537 F.2d at 562.


31. Id.

a suit brought under the Shipping Act, looked at two potentially appropriate federal statutes of limitations that could be borrowed.\footnote{Id.} First, they looked at the two-year time limit for filing a complaint with the Federal Maritime Commission contained in the Shipping Act.\footnote{Id.} Second, the court noted that they could also use the three-year statute of limitations contained in the ICA.\footnote{594 F. Supp. at 651.} The defendant in this case argued that a local statute with a six-month period should be borrowed as the action at bar was a mere collection action.\footnote{Id. at 651-52.} The court dismissed this argument on the basis that Puerto Rico Marine Management's right of action arose from a federal commerce statute. The Court instead ruled that a shorter local statute of limitations should not be used to hobble federal policy when that policy clearly dictated a longer period.\footnote{Id. at 652.} Since the claim was brought within the shorter of the two analogous federal limitations periods, the court did not address which specific federal period was preferable.\footnote{Id.}

Courts that have addressed which statute is the most analogous federal statute have selected the former three-year statute of limitations contained in the (now repealed) Interstate Commerce Act as the most analogous statute under the Shipping Acts.\footnote{Ariel Mar. Group, Inc. v. Mistral, Inc., No. 88 Civ. 1625 (JMW), 1989 WL 165875, at *2 (S.D.N.Y. Sept. 29, 1989); Interlink Sys. Inc. v. Ajinomoto U.S.A. Inc., No. 88 Civ. 2308 (SCH), 1990 WL 160906, at *2 (S.D.N.Y. Oct. 12, 1990); Mar. Inspection Services, Inc. v. Thermo-Valves Corp., No. 90 Civ. 7286 (CSH), 1992 WL 42238, at *2 (S.D.N.Y. Feb. 25, 1992); Puerto Rico Marine Mgmt., Inc. v. El Verde Poultry Farms, Inc., 590 F. Supp. 1174, 1176 (D.P.R. 1984); Puerto Marine Mgmt., Inc. v. Molac Imports, Inc., 594 F. Supp. 648, 651-52 (D.P.R. 1984).} In their reasoning, courts have noted that the Shipping Acts were modeled on the ICA.\footnote{Mar. Servo Corp. v. Sweet Brokerage De Puerto Rico, Inc., 537 F.2d 560, 562 (1st Cir. 1976).} In its discussion of this issue, the United States Supreme Court specifically stated, “Congress intended that the two acts, each in its own field, should have like interpretation, application and effect.”\footnote{U.S. Navigation Co., Inc. v. Cunard S.S. Co., Ltd., 284 U.S. 474, 481 (1932).} Hence, by applying the ICA's limitations period to the Shipping Acts, courts are keeping with the spirit and purpose of those acts.

\begin{itemize}
\item \textit{Inc.}, a suit brought under the Shipping Act, looked at two potentially appropriate federal statutes of limitations that could be borrowed.\footnote{Id.} First, they looked at the two-year time limit for filing a complaint with the Federal Maritime Commission contained in the Shipping Act.\footnote{Id.} Second, the court noted that they could also use the three-year statute of limitations contained in the ICA.\footnote{594 F. Supp. at 651.} The defendant in this case argued that a local statute with a six-month period should be borrowed as the action at bar was a mere collection action.\footnote{Id. at 651-52.} The court dismissed this argument on the basis that Puerto Rico Marine Management's right of action arose from a federal commerce statute. The Court instead ruled that a shorter local statute of limitations should not be used to hobble federal policy when that policy clearly dictated a longer period.\footnote{Id. at 652.} Since the claim was brought within the shorter of the two analogous federal limitations periods, the court did not address which specific federal period was preferable.\footnote{Id.}
\item Courts that have addressed which statute is the most analogous federal statute have selected the former three-year statute of limitations contained in the (now repealed) Interstate Commerce Act as the most analogous statute under the Shipping Acts.\footnote{Ariel Mar. Group, Inc. v. Mistral, Inc., No. 88 Civ. 1625 (JMW), 1989 WL 165875, at *2 (S.D.N.Y. Sept. 29, 1989); Interlink Sys. Inc. v. Ajinomoto U.S.A. Inc., No. 88 Civ. 2308 (SCH), 1990 WL 160906, at *2 (S.D.N.Y. Oct. 12, 1990); Mar. Inspection Services, Inc. v. Thermo-Valves Corp., No. 90 Civ. 7286 (CSH), 1992 WL 42238, at *2 (S.D.N.Y. Feb. 25, 1992); Puerto Rico Marine Mgmt., Inc. v. El Verde Poultry Farms, Inc., 590 F. Supp. 1174, 1176 (D.P.R. 1984); Puerto Marine Mgmt., Inc. v. Molac Imports, Inc., 594 F. Supp. 648, 651-52 (D.P.R. 1984).} In their reasoning, courts have noted that the Shipping Acts were modeled on the ICA.\footnote{Mar. Servo Corp. v. Sweet Brokerage De Puerto Rico, Inc., 537 F.2d 560, 562 (1st Cir. 1976).} In its discussion of this issue, the United States Supreme Court specifically stated, “Congress intended that the two acts, each in its own field, should have like interpretation, application and effect.”\footnote{U.S. Navigation Co., Inc. v. Cunard S.S. Co., Ltd., 284 U.S. 474, 481 (1932).} Hence, by applying the ICA's limitations period to the Shipping Acts, courts are keeping with the spirit and purpose of those acts.
\end{itemize}
The Interstate Commerce Commission Termination Act

In January 1996 the Interstate Commerce Commission Termination Act (ICCTA) replaced all provisions of the ICA, as well as repealing the remaining rate-filing provisions of the Shipping Act and the entirety of the Intercoastal Shipping Act, with those changes becoming effective September 30, 1996. The ICCTA still contains some tariff requirements similar to those of the ICA and the Shipping Acts, but those tariffs are filed with the Surface Transportation Board ("STB") rather than with the ICC. Unlike the Shipping Acts, the ICCTA prescribes a statute of limitations for actions relating to transportation services including water-based carriage. It provides:

(a) In General. - A carrier providing transportation or service subject to jurisdiction under chapter 135 must begin a civil action to recover charges for transportation or service provided by the carrier within 18 months after the claim accrues.

Jurisdiction under chapter 135 includes transportation by the following applicable water carriers:

(1) by water carrier between a place in a State and a place in another State, even if part of the transportation is outside the United States;
(2) by water carrier and motor carrier from a place in a State to a place in another State; except that if part of the transportation is outside the United States, the Secretary only has jurisdiction over that part of the transportation provided—
   (A) by motor carrier that is in the United States; and
   (B) by water carrier that is from a place in the United States to another place in the United States; and
(3) by water carrier or by water carrier and motor carrier between a place in the United States and place outside the United States, to the extent that—
   (A) when the transportation is by motor carrier, the transportation is provided in the United States;
   (B) when the transportation is by water carrier to a place outside the United States, the transportation is provided by water carrier from a place in the United States to another place in the United States before transshipment from a place in the United States to a place outside the United States; and
   (C) when the transportation is by water carrier from a place outside the United States, the transportation is provided by water carrier from a place in the United States to another place in the United States after transshipment to a place in the United States from a place outside the United States.

Because demurrage charges are charges for transportation or service, the ICCTA creates a cause of action to collect demurrage, and this statute governs such a claim for most categories of domestic shipping. As such, actions to collect demurrage under the ICCTA are subject to an eighteen-month statute of limitation contained in the Act.

MARITIME DEMURRAGE CASES BROUGHT UNDER ADMIRALTY

Maritime demurrage claims also continued to be brought into admiralty courts after the enactment of the Shipping Acts. Federal courts have original jurisdiction of suits in admiralty. Federal courts and federal law govern admiralty suits because the Supreme Court has recognized an interest in uniformity in admiralty law. The states cannot properly legislate for the high seas. An action to collect freight and demurrage can be brought by an ocean carrier as an action in admiralty regardless of the existence of any other statutory basis for suit. Under admiralty jurisdiction, federal courts apply maritime common law, including the doctrine of laches.

Laches is the equitable doctrine that determines whether a party's delay in bringing a claim should bar the suit. A laches analysis contains three factors: (1) the limitations period established by an analogous statute; (2) plaintiff's excuse for delay in suing; and (3) the prejudice to the defendant resulting from the delay. This analysis concerns only the first factor—the analogous statute's limitation period.

Employing laches in a case under maritime law requires the court to examine the limitations period contained in the most analogous statute as a benchmark. The plaintiff's compliance or lack of compliance with that statute determines where the burden of proof will lie for the remain-

47. Admiralty jurisdiction applies to any claim that is merely incident to a maritime contract in that it "relates to a ship in its use as such, or to commerce or to navigation on navigable waters, or to transportation by sea or to maritime employment." Orient Atl. Parco, Inc. v. Maersk Lines, 740 F. Supp. 1002, 1006 (S.D.N.Y. 1990) (quoting Ingersoll Milling Mach. Co. v. M/V Bodena, 829 F.2d 293, 302 (2d Cir. 1987), cert. denied, 484 U.S. 1042 (1988) (quoting 1 BENEDICT ON ADMIRALTY § 182, at 12-4 (7th ed. 1988))).
50. Id.
ing elements. Determining the correct analogous statute can be pivotal in a case with relatively balanced equities.

Courts have frequently utilized the limitations period of the ICA, the predecessor statute to the ICCTA, for the laches analysis in admiralty actions to collect demurrage charges. For example, in *Puerto Rico Marine Management, Inc. v. El Verde Poultry Farms, Inc.*, which occurred before the enactment of the ICCTA, the District Court employed the three-year time period in the ICA for its laches analysis. Citing cases which held that the Shipping Act had a similar purpose to the ICA, that court found the ICA's statute of limitations as the most suitable to use for an analogous statute in its laches analysis for demurrage cases.

There should be no question that the ICCTA, successor to the ICA, is now the most analogous statute for laches purposes in regard to maritime demurrage. Like the ICA, the ICCTA already sets the limitations period for suits for the collection of demurrage and detention in rail or motor carrier cases. Unlike its predecessors, the Shipping Acts, the ICCTA also includes a statute of limitations to be used for a water carrier demurrage action if a claimant chooses to proceed under statute rather than general admiralty jurisdiction. Further, the ICCTA is a federal statute, so application is uniform. If limitations periods from state statutes were applied, parties to an admiralty suit could be subject to many different limitations periods. Hence, the eighteen-month statute of limitations in the ICCTA should be the analogous time period used in the laches analysis for an admiralty claim for demurrage.

Subjecting demurrage charges to different limitations periods "would undermine the uniformity Congress intended, as well as the policy against discriminatory rates especially in fora having short limitations periods."

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56. The Interstate Commerce Act, the Shipping Act and the Intercoastal Shipping Act.
60. Congress asserted that one of the main policies behind the ICCTA was to guard against discriminatory rates in transportation charges. 49 U.S.C. §§ 10101(12), 13101(a)(1)(D) (2000).
V. TAG Ruling

The above jurisprudential history summarizes the line of cases and reasoning followed by the TAG court in its well-reasoned opinion specifically analyzing the issue of whether a state or federal statute was more appropriate in an admiralty action for demurrage. In TAG/ICIB Services, Inc. v. Pan American Grain Co., Inc., the court addressed as a primary issue what the correct analogous statute choice is when applying the laches theory in maritime law to a demurrage case. Under the facts of that case, demurrage charges were incurred both before and after the effective date of the ICCTA. The First Circuit held:

[The ICA's three-year statute of limitations, which was imported into the Shipping Act, supplies the benchmark limitations period during the time when the Shipping Act governed TAG/ICB's demurrage claims; and that thereafter, the eighteen-month statute of limitations contained in the ICCTA is the presumptive benchmark for the claims.]

This ruling is clearly in line with the prior law. A court sitting in admiralty jurisdiction must apply federal maritime rules that directly address the issues at hand. The ICCTA directly addresses transportation charges, which include demurrage. Thus, the ICCTA, not an analogous state statute, should apply to a laches analysis to collect demurrage charges. Further the ICCTA is the natural successor statute to the ICA, the statute that most commonly set the limitations period for admiralty cases before 1995. This is the best position to both uphold precedent and to ensure the policy needs behind admiralty jurisdiction. It was clear and settled law before the Venus case.

Venus Holding

The Venus case brought the demurrage issue into court as a collateral damage question in a suit to establish the existence of an oral contract. Venus Lines Agency, Inc. v. CVG International America, Inc. was a breach of oral contract claim brought in federal court under diversity jurisdiction. The case also included a damage element for demurrage claims covering three years. The primary issue of the existence of an oral contract would have been purely a creature of state law. The state's oral-contract statute of limitations governed the time period for bringing that claim. The demurrage claims were, however, federal in character. The court recognized that character by choosing to apply the laches analysis

63. Id. at 177.
required by admiralty to determine which claims were barred. The court and parties then lost focus on that issue when they apparently, by dicta, extended the state statute of limitations from the primary issue to the laches analysis without considering its lack of relation to the federal maritime demurrage claims. As this article has demonstrated, utilizing a state statute as a benchmark for the laches analysis of a maritime demurrage claim was contrary to established jurisprudence.

After balancing the equities, the lower court found that, although allowed under the state statute used as a benchmark, two years of demurrage were barred because the claimant had been dilatory in presenting the claim to the shipper, and therefore cut-off certain shipper remedies. The court did find the shipper liable for one year of demurrage claims.

On appeal, the Eleventh Circuit reviewed this subsidiary claim for demurrage charges as well as the original contract issue. However the issue appealed regarding the demurrage claims was not whether the lower court had used the appropriate statute of limitations, but rather, whether the equitable considerations of laches could bar a claim that had been brought within the agreed analogous statute. The parties and court layered their arguments about the application of laches on top of the assumption that the four-year state oral contract statute was the analogous statute to use as a benchmark to determine where the burden of proof lay in regard to the equitable principles. Before addressing the inexcusable and dilatory nature of the claimant's delay, the court itself said, "assuming, then [emphasis added], that the analogous limitations period is four years..." Therefore, the issue of whether a federal or state statute is the proper statute to use as an analogous statute in maritime related laches analysis was never directly addressed by either of the courts in this case.

In considering the amount of the demurrage claim, the court noted that Venus filed its tariff rates and terms for the service with the Federal Maritime Commission. Because the rates were filed with the commission, Venus could also have brought its claim for demurrage under the ICCTA. That act would have required the use of its own eighteen-month statute of limitations. Alternatively, Venus, as the owner/operator of an ocean-going vessel could have made a claim for demurrage under general maritime law in the admiralty courts. In that case, the court would have looked to the arguments in the TAG/ICIB case discussed above and certainly applied the eighteen-month statute from the ICCTA as the analogous statute. Unfortunately, considering the confusion created by this

66. See supra note 45.
68. Id.
69. Id.
70. Id. at 1231.
case, *Venus* was neither pled nor argued with this insight.\textsuperscript{71}

Under the particular facts of the case, the outcome would most likely not have been different had the ICCTA statute been applied, given the ultimate balancing of the equities by the trial and appellate courts. The only demurrage charges for which the shipper was found liable were 1997 charges, which would have fallen within the eighteen-month ICCTA statute. However, even though a similar result was achieved, it is hard to believe that if the parties had raised the issue as to the appropriate analogous statute, the federal courts would not have applied a federal statute. It would be unjust and inappropriate to allow a claimant to circumvent the congressional intent embodied in its eighteen-month ICCTA limitations period by choosing to file a maritime demurrage claim as part of a contract dispute brought to the federal courts on diversity grounds. The lack of uniformity created by such a precedent would be a radical departure from past practice and interject unnecessary uncertainty and discrimination into interstate commerce. Even with the same outcome (the only demurrage charges allowed were those within the eighteen months limitations period), without the recognition of distinctions herein, the dicta alone could confuse this issue.

**CONCLUSIONS**

Uniformity in the realm of interstate and international commerce is a prime goal of all federal legislation on commerce. The need for uniformity, providing confidence to all participants in the marketplace, and improving efficiency in the process, is the reason that courts have generally supported the commerce clause powers of the federal government. That uniformity and predictability is particularly important in statutes of repose. Therefore, courts should, when the issue is raised, work toward a uniform statute of repose for maritime demurrage charges regardless of the theory under which the claim is raised.

Prior to 1995, the three-year ICA limitations period was the most likely statute to be used, either by direct analogy in Shipping Act cases, or as a benchmark in conjunction with a laches analysis in admiralty cases. By enacting the ICCTA, which contains an eighteen-month statute of limitations, Congress has indicated that this shorter time period is the appro-

\textsuperscript{71}. It is worthy of note that in its brief on appeal CVG International America, Inc.,(CVGIA) never contradicted the trial court’s use of the Florida 4-year statute as a benchmark. Even in its argument that the 1997 demurrage claims should be barred, it only looked at the equitable issues in laches. In its reply, Venus does allude to the existence of a 3-year federal limitations statute for maritime personal injury claims, but only as support for the use of what it then mistakenly characterizes as the “3-year” Florida statute (everywhere else it is described as a 4-year statute). Again in its Cross-Appellant Reply brief, CVGIA makes no demur to the use of the state statute.
appropriate limitation for bringing claims related to interstate commerce. When Congress gives a cause of action a specific statute of limitation, their intention is that when the time has run, the claim and corresponding liability has ended. Courts should not, and usually do not, substitute their views for those expressed by Congress in a duly enacted statute. By allowing maritime demurrage claims that are brought as damage items under a different cause of action to proceed with a different time limitation than Congress expressly provided for in the ICCTA, a court would be substituting its own views for those enacted by Congress.

Therefore, the authors of this article believe that the *Venus* case represents an aberration because the appropriateness of the statute being utilized as analogous was not raised or directly decided. The only proper analogous statute for the courts to apply in a laches analysis concerning maritime demurrage cases is the ICCTA. The authors believe that courts will find the reasoning in *TAG* to be persuasive on this point, as summarized:

In the admiralty and maritime context laches is used to determine timeliness of claims;

Laches looks to the most analogous statute for a benchmark;

State statutes should not be used as analogous statutes when they are antithetical to federal purposes;

The Shipping Acts were modeled on the ICA and for a similar purpose so that where the Shipping Acts did not provide a statute of limitations, the ICA statute should have been used as a benchmark;

The ICCTA replaces the ICA and the Shipping Acts and is designed to protect the interests of shipping, navigation and commerce in a similar manner; and

Therefore, the ICCTA should be used as the proper benchmark statute for maritime demurrage claims.

Thus, the *TAG* case settles for all time the appropriate analogous statute to be used as a benchmark for laches analysis in demurrage claims not brought directly under the ICCTA.

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Foreword: Transportation Law in the Post 9/11 World

Steven Kropp*

During the last twenty-five years dramatic changes have taken place in the transportation industry. Together the various components of the industry, which involve the movement of goods, people and information, have represented 16% of the gross domestic product, a substantial portion of the national economy.1 Deregulation of the airline and trucking industries, however, has led to profound consequences for both industries.2 In trucking, a highly unionized industry has become substantially less so.3 Contract negotiations between the Teamsters Union, represent-

* Professor Steven Kropp is a Visiting Associate Professor at the University of Denver College of Law and faculty advisor to the Transportation Law Journal. Professor Kropp teaches and writes in the areas of contracts, bankruptcy, and labor law. He also serves as a labor and commercial arbitrator. Professor Kropp received his B.A. from the University of Massachusetts, where he was elected to Phi Beta Kappa, his J.D. from Boston University and his LLM. from Columbia University. The author wishes to thank Tanya Bartholomew and Robert Hardaway for their helpful comments on an earlier draft and Diane Burkhardt for her usual excellent research assistance. This Foreword and the Student Notes were written during the winter of 2003 and scheduled for publication during the spring of 2004.


ing drivers, and most of a largely fragmented, competitive trucking industry over the National Master Freight Agreement (NMFA) once dominated the newspaper and television headlines.\textsuperscript{4} Membership in the Teamsters Union has fallen, however, from approximately two million members in 1979 to one million four hundred thousand members in 2002.\textsuperscript{5} Consequently, the Teamsters Union has become a less powerful force in the national economy.\textsuperscript{6}

The effects of deregulation on the airline industry have been just as significant. Ease of entrance, fare wars, and the increase in passenger traffic, have transformed an industry dedicated to a business and upper-class luxury clientele into a low-cost, mass consumer driven industry today.\textsuperscript{7} The consequences for the major U.S. carriers, however, have not been particularly positive: companies such as American, Braniff, Continental, Delta, Eastern, Northwest, Pan American, TWA, United, and U.S. Air have proved unable to compete successfully.\textsuperscript{8} These companies have operated on the traditional hub and spoke model. That model has proved economically ineffective under deregulation.\textsuperscript{9} Many of these ma-


\textsuperscript{6} Belzer, supra note 3, at 643-45, 653-54. UPS workers remain staunchly Teamster, Belzer, supra note 3, at 640, 651, and, with over 200,000 of them as members, are currently the largest single component of the Union. Teamsters Online: About the Teamsters: Teamster Facts and Demographics at 1 available at \url{http://www.teamster.org/about/demograph.htm}. [hereinafter Teamsters Online] (last accessed on 4/6/2004). Only 120,00 members are covered by the National Master Freight Agreement, Id., because long and short haul trucking companies increasingly are operated as double breasted companies or simply non-union. See George Feldman, supra note 5 at 540-41.


\textsuperscript{8} See Gregory P. Ripple, Note, \textit{Special Protection in the Airline Industry: The Historical Development of Section 1110 of the Bankruptcy Code}, 78 \textit{Notre Dame L. Rev.} 281, 284-286 (2002) (noting that Braniff, Eastern, Pan American, and TWA have ceased doing business); Mark C. Mathiesen, Comment, \textit{Bankruptcy of Airlines: Causes, Complaints, and Changes}, 61 J. Air L. & Com. 1017, 1018 n.6 & n. 7 (1996). These major carriers, plus Continental (twice), United, and U.S. Air have each filed for Chapter 11 bankruptcy in the years following deregulation. Ripple, supra note 8, at 285-86. Continental's initial filing was allegedly motivated less by financial problems than by its desire to terminate its labor agreements. See Ripple, supra note 8 at 284, n.17; Katz, supra note 7 at at 97; \textit{but see} In re Continental Airlines, 38 B.R. 67 (S.D. Tex. 1984) (holding Continental's collective bargaining agreements with its unions a leading contributor to its financial difficulties and denying the unions' motion to dismiss the bankruptcy proceedings).

jor carriers have filed for Chapter 11 or seriously flirted with the idea. By contrast, Southwest Airlines has emerged as the successful alternative; it is a low cost, low fare carrier, flying from point to point, cherry picking routes popular with the traveling public. Of the major carriers, Southwest also has the fastest turn-around time, the fewest number of aircraft, the aircraft with the youngest average age, and flies only one type of aircraft, the Boeing 737.

Three factors chiefly make up the cost structure in the airline industry: labor, the price of jet fuel, and the capital costs of buying or leasing planes. Because labor costs are a primary factor in the financial success of an airline, some commentators have blamed unionization, with its frequently high labor costs, as the principal cause for the major carriers economic problems. That seems a doubtful explanation, however. Southwest Airlines, for example, is the most heavily unionized carrier in the industry, yet it has remained a consistently profitable company. Thus, unionization is an unlikely explanation for the financial difficulties so many major carriers have faced. Nevertheless, several major carriers have entered Chapter 11 Bankruptcy in order to shed supposedly onerous labor contracts.

Not surprisingly, Jet Blue, Frontier, Air Tran, and others have emulated Southwest, with varying degrees of success. Indeed, even the major carriers have begun to adopt a two-tier model in which a low cost airline operates in tandem with a full-service carrier.

During the 1980's and 90's technological developments revolutionized the methods of transacting business locally and globally. These developments included widespread use of personal computers, the internet, the ability of companies to track sales and inventory enabling just in time

10. Gritta, supra note 9, at 63-64.
11. Dempsey, supra note 9, at 37-41.
12. Id. at 18, 23-25.
15. See generally cases and articles cite in note 8, supra. There has been a lively debate over whether deregulation constitutes the principal reason that the airline industry has failed to prosper. Compare Paul Stephen Dempsey, Flying Blind: The Failure of Airline Deregulation(1990) (arguing that deregulation has failed to achieve the benefits its proponents predicted) with Robert M. Hardaway, The FAA "Buy-Sell" Slot Rule: Airline Deregulation at the Crossroads, 52 J. Air Law & Comm., 9-14 (1986) (favoring deregulation as efficient and beneficial to consumers and urging that further competition be introduced into the industry).
supply chain management, the creation and thriving of web sites that allow the purchase of discount airline tickets and hotel reservations, and so forth.17

Against this backdrop of deregulation and technological change, which accelerated trends developing over two decades, occurred the horrific events that unfolded on September 11, 2001.

The terrorist attacks on the Twin Towers of the World Trade Center and the Pentagon on September 11, 2001 focused the nation and the world community on the global threat posed by militant Islamic terrorism. Those terrorists used passenger airplanes as weapons of war to deliberately kill as many innocent victims as possible. The challenges this terrorism posed to the transportation industries initially seemed to threaten the very survival of the airline and tourism and travel industries. A host of controversial and difficult legal and public policy issues arose in the wake of September 11th. These issues included security at our nation’s airports, our Canadian and Mexican borders, and our maritime ports; who should bear the financial costs of combating terrorism; and the proper scope of congressionally mandated funds used both to compensate victims of the terrorist attacks and to fund a partial bail out of the airline industry.

In this 30th anniversary issue of the Transportation Law Journal [Journal], the student editors of the Journal wrestle with these and related topics.18 Mr. Anthony Ryan in his Note, “How Airline Security Fees in a Post September 11, 2001 Environment Are Spiraling Out of Control” examines airline security fees and taxes that are assessed upon passengers to reduce the risk of terrorist attacks, and he recommends that the nation rather than the flying public subsidize aviation security. Mr. Berry White focuses on international aviation in “Beginning of a Redefined Industry: How the European Court of Justice’s Decision in the Open Skies Case Could Change the Global Aviation Industry.” He concludes that this


decision fosters the EU’s goals of creating a unified negotiating front and a common air traffic market in competition with the United States. Ms. Jessica Ramirez in her Note, “The Victims Compensation Fund”, analyzes the perceived inequities in the Congressionally mandated Victims Compensation Fund, and she contends that the fund is not an approach well suited for mass tort situations generally.

The emphasis in the next set of articles shifts from aviation to the trucking and maritime industries and border security. In “Border Crisis: Time for a New Collective Review of Tri-Nation Border Security,” Mr. Daniel Stiles confronts deficiencies in border security between the United States and its two largest trading partners, Canada and Mexico. He advocates a cooperative approach and the creation of a tri-nation border security agency to facilitate the transportation of goods across joint borders. Mr. Owen Bishop, in “A ‘Secure’ Package? Maritime Cargo Container Security After 9/11,” grapples with maritime security. In particular, he examines cargo container security at our nation’s major ports and at the largest foreign ports that handle a significant volume of the goods destined for the United States. A final student article by Ms. Chessa Bieri, “The Time Has Come for the Government to Develop and Implement a Transportation Plan for Yucca Mountain” rounds out the picture by looking at the debate over the transportation of hazardous, nuclear waste. She explores the controversial proposed nuclear waste receptacle in Nevada and the ramifications of transporting thousands of tons of radioactive material across the highways and railways of the United States. Altogether the Journal authors present a rich and varied look at the challenges faced by our society. We anticipate that these student articles will spark further dialogue and debate both in the pages of our Journal, as well as in the pages of other law reviews. On a personal note, I end my service as advisor to the Transportation Law Journal at the end of the 2003-2004 academic year. It has been a rewarding experience. I leave the Journal, however, in significantly better shape than when I first arrived as its advisor. We began Spring 2003, with no issues published in a year and a half. We finished 2003 five issues behind, with one issue published that Spring. This academic year we will have published four issues, due in large part to an outstanding editorial board and staff. The editorial board appointed for 2004-2005 is equally talented, and I am confident that they will continue to publish a mix of high quality academic and practical articles, produced on a prompt and responsible schedule.
I. INTRODUCTION

The four hijackings on September 11, 2001 created immeasurable losses to the families of the 2,749 victims in New York City, New York, the 189 victims in Virginia, and the 40 victims in Pennsylvania, their families, in addition to those people injured from these events.1 Additionally, those hijackings and the events that happened afterwards dramatically altered the aviation landscape in a number of ways. For the first time ever, the national airspace system (excluding military airspace) was shut down for three days.2 Nearly two million people were displaced who were part of air traffic that day, and all 460 commercial airports in the U.S. were closed.3 Within months, federal screeners started taking over the responsibilities of private airline screeners that were previously hired

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* JD Candidate 2005
3. See id.
by the airlines.\footnote{Security Screening Personnel, at 1, at http://www.aviationnet.com/screeners.html.}

This paper addresses two different fees that grew out of this period of dynamic change: the September 11th Security Fee (September 11 Fee) and the Aviation Security Infrastructure Fee (ASIF), and how these fees impact passengers and airlines. The fees were created by the Aviation and Transportation Security Act (ATSA) after the tragedies of September 11, 2001. These fees disproportionately tax short-haul and connecting flights, and hinder not only an industry just beginning to get its footing again, but also airline customers as well. This article explains how exorbitant airline security fees are not assessed proportionately to passengers, and may eventually threaten the successes and benefits of a deregulated aviation industry.

\section*{A. Early Development of Government Involvement in the Airline Industry}

After the 1980’s, aviation was dramatically different than it had been during its infancy and growth periods.\footnote{Id. at 331.} Rail carriers were the original framework from which the aviation industry was cultivated.\footnote{Id. at 333.} Federal airline regulation can be traced to rail carriers charging high rates on markets they served exclusively.\footnote{Id. at 331.} Small towns that were on the rail lines were often forced to pay these high rates in order to be served by rail.\footnote{Id. at 334.} After creating regulations in the rail industry in the late nineteenth century, Congress moved to regulate motor carriers in 1935 as competitive practices became so excessive that the industry as a whole suffered economic losses, and service was undependable.\footnote{Id. at 335.}

Air travel was added to the regulatory scheme in 1938 for many of the same reasons as motor carriers were included, specifically, in hopes of staving off excessive competition and helping to foster a young industry.\footnote{Id. at 335.} Deregulation of transportation began in the 1970’s under President Carter.\footnote{Id. at 339.} The Airline Deregulation Act of 1978 provided for the formal deregulation of the airline industry.\footnote{Id. at 340.} Restrictions on domestic routes and schedules were eliminated along with government controls over domestic rates. Eventually, the Civil Aeronautics Board (CAB) itself was
Airline Security Fees

255

disbanded as part of the Civil Aeronautics Board Sunset Act of 1984.\textsuperscript{13} Congress mandated that domestic route and rate restrictions be phased out over four years.\textsuperscript{14} It provided for complete elimination of restrictions on routes and new services by December 31, 1981, and the end of all rate regulation by January 1, 1983.\textsuperscript{15} The CAB began granting new route authority very quickly,\textsuperscript{16} and as such, within a year of the law going into effect, air carriers were able to serve essentially any domestic route.\textsuperscript{17}

B. AIRLINE TAXING BACKGROUND

The federal government has played a very large role in the financing and regulation of the airspace system in the U.S. since 1946, when the Federal Airport Act was created.\textsuperscript{18} The Federal Airport Act established an airport grant program aimed at developing civil airports nationwide.\textsuperscript{19} In 1970 (during regulation) the Federal Aviation Administration (FAA) created an excise-tax funded trust system to “[p]rovide for the expansion and improvement of the nation’s airport and airway system.”\textsuperscript{20} There are a plethora of taxes that are used to fund the Airport and Airway Trust Fund: a 7.5% passenger ticket tax; a $2 passenger flight segment fee; a 6.25% freight waybill tax; a $12 tax levied on all international arrivals and departures; a 7.5% frequent flyer award tax; and aviation fuel taxes including 4.3 cents per gallon on commercial aviation, 19.3 cents per gallon on general aviation gasoline, and 21.8 cents per gallon on general aviation jet fuel.\textsuperscript{21}

Additionally, since 1992, many airports have also been charging airline passengers a $3 fee known as a passenger facility charge (PFC), which the airlines collect as an add-on to the airfare.\textsuperscript{22} Beginning in 2001,

\begin{footnotes}
\footnotetext{15}{Id. at 2.}
\footnotetext{16}{Id.}
\footnotetext{17}{For two interesting articles giving a more thorough discussion of airline deregulation, see Paul Stephen Dempsey, The Rise and Fall of the Civil Aeronautics Board – Opening Wide The Floodgates of Entry, generally 11 Transp. L.J. 91 (1979); see also http://www.heritage.org/Research/Regulation/ BG1173.cfm.}
\footnotetext{18}{Carolyn P. Meade, Aviation Taxes: Can We Leave FAA Funding on Auto-Pilot?, 20 VA. Tax Rev. 191, 193 (2000).}
\footnotetext{19}{See id.}
\footnotetext{21}{20 VA. Tax Rev. 191, 193-94 (2000).}
\end{footnotes}
Congress authorized an increase in the maximum PFC rate that airports can charge passengers: $4.50 per segment, with a cap of $18 for a round-trip. These taxes must be pledged to specific capital improvements that will: (1) preserve or enhance safety, capacity or security of the national air transportation system; (2) reduce noise; or (3) enhance competition between or among air carriers. According to the Air Transport Association, every PFC is tied to specific capital improvement projects that have been approved by the FAA, and the fee expires when all of the money needed for the approved projects has been raised.

As of December 31, 2003, 341 airports were collecting PFCs – with 200 collecting the maximum of $4.50. Currently, more than $1.5 billion in PFCs are collected each year, and the FAA has already authorized the collection of more than $43.9 billion. While the intent of the PFC program has been focused on safety and capacity improvements, only 19% of funds that have been collected have been used for airport safety and capacity improvements.

Taxes other than the PFC go into the Aviation Trust Fund. The Treasury deposits all of these funds into the General Fund. The Budget Enforcement Act of 1990 divides non-defense federal government spending into two major categories: direct (mandatory) spending and discretionary spending. Direct spending only occurs with entitlements, like Social Security, while discretionary spending, as the name suggests, is at the discretion of Congress. This means that even if Congress decreases authorizations and appropriations for FAA programs, aviation users continue to pay taxes and build-up the trust fund.

The last authorization bill, AIR-21, was considered landmark legislation because it dramatically boosted FAA funding levels, and essentially guaranteed that the revenues channeled into the Airport and Airways Trust Fund would be used for their intended purpose of aviation, and not...
taken away by Congress. With the enactment of AIR-21, Congress raised the cap to $4.50, effective April 1, 2001. In addition to the cap per enplanement, the entire roundtrip journey has a statutory ceiling of $18. The $43.9 billion approved for collection is allocated as follows:

- Landside improvements (terminal, security)—34%
- Interest (payments on outstanding debt for eligible capital improvements)—31%
- Airside improvements (runways, taxiways, aprons, equipment, planning, or lighting)—18%
- Access (roads, rail, land, planning)—11%
- DEN (payoff of 1990s construction of Denver International Airport)—7%
- Noise abatement (land acquisition, soundproofing, monitoring, planning)—6%

C. THE IMPACT OF SEPTEMBER 11 ON THE TAX STRUCTURE

On November 19, 2001, Congress created the Aviation and Transportation Security Act (ATSA), establishing a new agency within the Department of Transportation. This new agency, the Transportation Security Administration (TSA), bears responsibility for aviation security. This Act became law on November 19, 2001 when President Bush signed the bill into law. Section 118 of ATSA, which added section 44940 to Title 49, U.S.C., requires that within 60 days of ATSA's enactment, or as soon as possible thereafter, TSA must impose uniform security service fees on passengers of domestic and foreign air carriers. The TSA promulgated a Final Rule, 66 FR 67698, and it was published in the Federal Register on December 31, 2001. Under this Rule, the TSA (still under the DOT at this time) can impose a security service fee of $2.50 per enplanement on passengers of domestic and foreign air carriers in air transportation, foreign air transportation, and intrastate air transportation originating at airports in the U.S. Passengers cannot be charged for more than two enplanements per one-way trip. Therefore, the cap for this fee is $10 round trip. This fee is also imposed on passengers using

40. Id. at 1.
41. Id.
frequent flyer awards, but not other non-revenue passengers.\textsuperscript{42}

These fees are to cover the costs of providing civil aviation security, namely:

- the salary, benefits, overtime, retirement and other costs of screening personnel, their supervisors and managers, and federal law enforcement personnel deployed at airport security screening locations;
- the costs of training such personnel and the acquisition, operation, and maintenance of equipment used by these personnel;
- the costs of performing background investigations of personnel;
- the costs of the federal air marshals program;
- the costs of performing civil aviation security research and development under Title 49, U.S.C.;
- the costs of federal security managers; and
- the costs of deploying federal law enforcement personnel.\textsuperscript{43}

The air carrier is responsible for collecting this tax.\textsuperscript{44} Air carriers and foreign carriers must remit the total amount of fees collected during a calendar month to the TSA by the last calendar day of the following month.\textsuperscript{45} Airlines can do this by paying through a “Do It Yourself” Internet payment site (http://diy.dot.gov) or by wire transfer.\textsuperscript{46} The TSA collected $970 million in fiscal year 2002 through this fee.\textsuperscript{47}

Additionally, the Aviation Security Infrastructure Fee (ASIF) was established to reimburse the TSA for the passenger and baggage screening costs that were previously incurred by the airlines themselves prior to the establishment of the TSA.\textsuperscript{48} Because the air carriers no longer have to incur the cost of screening passengers and property, the air carriers are required annually to remit the Aviation Security Infrastructure Fee to the TSA which should be equal to its 2000 calendar year costs for security screening.\textsuperscript{49}

To determine these fees, each air carrier was required by regulation to submit security screening cost information for the calendar year 2000.\textsuperscript{50} The air carriers are now paying a monthly fee based on that cost

\begin{thebibliography}{9}
\bibitem{42} Id. at 3.
\bibitem{43} Id.
\bibitem{44} 49 U.S.C. § 44940 (2003).
\bibitem{45} Id. at 3.
\bibitem{46} \textit{Instructions for Paying the September 11th Security Fee to the Transportation Security Administration} at http://www.dot.gov/911fees/feeinstr.htm.
\bibitem{47} Id.
\bibitem{49} Id. at 4.
\bibitem{50} Id.
\end{thebibliography}
The TSA based projections for this fee at approximately $750 million annually. Carriers, however, are certifying their costs in 2000 were only about $300 million, which is about $450 million less than previously estimated by both the airline industry and the TSA. In fiscal year 2002, airlines paid $240 million less than what was projected. As a result of these reduced estimates for income, the TSA requested that Congress set the annual fee at $750 million and requested changes to allow these fees to be assessed and collected in an equitable fashion among the carriers.

II. THE PROBLEMS WITH THE CURRENT TAX STRUCTURE

A. CONSTANT FLUX IN TAX RATES

Within a year after the September 11, 2001 attacks, Congress began discussing ways to provide more money for the TSA, already overrun at this point with debt. U.S. airlines won a small battle, however, in defeating a plan to double the passenger security fees from $10 to $20. It was originally part of a $30 billion supplemental bill and would have added up to $150 million to the Transportation Security Administration.

Congress in April temporarily lifted the security fee imposition of $2.50 per segment, beginning on June 1, 2003, as part of a $2.9 billion relief package to ease the impact of the war and terrorism on the airline industry. On October 1, 2003, the U.S. government reinstated its $2.50 security fee for all airline travelers departing from a U.S. airport.

As additional proof of the highly volatile nature of these rates, the September 11, 2001 fees were waived from June 1, 2003 through September 30, 2003, for a number of reasons including an anticipation of a drop in traffic due to concerns with U.S. conflict in Iraq, and a desire to provide relief for the airline industry. While the fees were waived, the ac-

51. Id.
52. Id.
53. Id.
54. Id.
55. Id.
57. Id.
58. Id.
tual level of security itself was not reduced. While the airlines did not have to pay the September 11, 2001 fee for four months, most consumers didn’t notice the difference. Most large US carriers raised their rates $10 per roundtrip to coincide with the suspension of the September 11, 2001 Fee. American Airlines initiated the increase for almost all fares, again effective the same day the fee was waived, and was matched immediately by Continental, Delta, United, US Airways, and Northwest. In fact, instead of consumers benefitting from a decrease in costs, their actual costs increased as a result of the $10 re-imposition, as the roundtrip September 11 fee was a “maximum” of $10 roundtrip with connection(s). Additionally, because the ASIF is based on 2000 security screeners’ costs, there was not an opportunity for additional revenue from an increase in passengers.

Passengers would have to pay up to $8 per airline segment as opposed to the current $2.50 per airline segment to cover the TSA’s budget annually. This means that a passenger on a round trip flight with a connection would pay $32 in security fees alone. These large potential increases in funding illustrate that airlines would lose any price competitive advantage over other modes of transportation.

B. IMPACT OF TAXES ON AN ALREADY HURTING INDUSTRY

Air Tran CEO Joseph B. Leonard stated that the federal government is taxing the airline passenger at the highest federal tax rates for any service or product including liquor and cigarettes. This forces fares up to levels that discourage travel for many, particularly bargain hunters and those who otherwise cannot afford to fly. Mr. Leonard argues that these new fees have a disproportionately negative impact on low fare carriers.

63. Id.
65. Id.
66. Id.
68. Id.
71. Id.
rriers and passengers seeking lower priced tickets and short haul markets, such as Air Tran. Mr. Leonard's statements before the U.S. Senate Aviation Subcommittee are relevant because they represent the views of one of the strongest low-fare airlines in the U.S.

The number of people flying commercially between 200 miles and 400 miles dropped 22 percent in the year after the attacks. As one newspaper article described it:

the bite is biggest bite on the cheapest flights with the most connections. For someone traveling nonstop, the taxes and fees account for 25.6 percent of a $100 fare, and 9 percent of a $900 fare. For a flight with one stop, the percentages range from 44.2% for a $100 fare to 11.1% on a $900.00 fare.

There are options in the near future for the ASIF, and the TSA is interested in working with the airlines. Beginning in fiscal year 2005, the TSA is allowed to changed the way it determines the per carrier limit for the ASIF. It may base the limit on market share or other appropriate measures instead of the screening costs from 2000. The TSA said it could define a carrier's ASIF share based on passenger enplanements, passenger revenue miles, tickets sold, or revenue. The TSA is soliciting comments on when the adjustment should be made, and how often ASIF limits should be reviewed. Some time after the 60 day comment period, the TSA will publish an interim final rule. Many carriers have said that the current system has not taken airline growth into account since 2000, and it provides unfair advantages to new carriers or those that spent less on security in 2000.

As mentioned earlier, the Aviation Trust Fund allows for funding for airports around the country. The DOT has stated that the Airline Trust Fund is not as plush as original estimates. DOT Inspector General

72. Id.
75. Id.
77. Id.
78. Id.
79. Id.
80. Id.
81. Id.
82. Id.
83. See website pertaining to the various aspects of the airline industry available at http://www.gaservingamerica.org/how_work/work_funding.htm
Kenneth Mead testified to the U.S. House Appropriations Committee on March 12, 2003 that aviation trust fund receipts in fiscal year 2004 are likely to be far less than projected. In April 2001, projected receipts were expected to be about $12.6 billion, and have now fallen to estimates around $10.2 billion. Nonetheless, the FAA still requests the same amount of money. Airports are concerned that trust money is being taken away from an already dwindling supply to pay for federally mandated security projects.

The reality is that the aviation industry today is a mixed bag. As Representative DeFazio, member of the House Transportation aviation subcommittee leadership stated last year, “[t]his committee would be here regardless of 9/11. The industry was in a dramatic downturn.” The airline industry was already facing a financial downturn as a result of reduced passenger demand, and high labor costs. The September 11, 2001 Fee and the ASIF are not “new” in the sense of an unexpected burden on air carriers and passengers: as highlighted, there are already numerous taxes and fees being assessed by local airports as well as the federal government. These new fees are inadequate, and do not meet the needs of either the federal government’s security demands, nor do they satisfy the airline industry, which had profit margins over the last two decades of around 1/2 %, compared to around 6% averaged for all industries. Today, some smaller and upstart airlines are taking advantage of lower cost numbers for security screeners in fiscal year 2000, where their ASIF costs are frozen. Unfortunately, the larger air carriers, which have lost passengers, are still paying the higher costs from fiscal year 2000. On the flip side, large carriers, operating long-haul flights through a hub-and-spoke system, experience a more proportionate burden of the September 11, 2001 fee. This is as opposed to the short-haul point-to-point airlines, which because of the reduced mileage at issue, end up having a disproportionate fee based on the cost of their ticket.

C. Price Breaks for Consumers

There is good news. The TSA is soliciting ideas for changing how the

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85. Id.
86. Id.
87. Id.
88. Id.
ASIF is charged, prompting new calls for fairness and proportionality among the airlines. The September 11, 2001 fee, however, does not seem to be going anywhere – as was evidenced in the spring and summer with proposals to double the fee. 92 There aren’t even guarantees that the flying public would notice a difference in cost for airline tickets, as the air carriers have already illustrated in the summer of 2003 that they are happy to keep the savings themselves. 93 Nonetheless, the aviation industry is disproportionately taxed compared to other industries, 94 and in the spirit of the deregulation that came about over 25 years ago, the airline industry is in dire need of restructuring, allowing airlines to continue to compete not only with themselves, but with the other modes of transportation.

III. Federal Funding for Aviation Security Should Come From all Beneficiaries, Not Just Aviation Users

The Congressional Budget Office (“CBO”) stated that user fees serve two distinct functions: 1) allocating resources and 2) distributing costs in line with benefits received. 95 Additionally, the CBO stated that user fees should raise funds in ways that are relatively easy to administer. 96 The CBO states that user fees should be tied fairly close to a good or service provided by the government to a specific class of users of that good or service. 97 While this specific study was focusing on taxes collected for the Aviation Trust Fund – the concept of security fees is analogous. 98 Fees assessed for security reasons should be somewhat easy to administer and be tied fairly closely with the service of providing security to that class. 99 In this case, one of the central questions to be resolved is who really is the user class, and what is the best way to assess fees for their safety?

In 1996 seven of the major airlines and 69 carriers of the Regional Airline Association developed a user fee plan. 100 Their complaint was simple: under the current ticket tax scheme, all passengers receive equal

92. Appropriators Scrap Doubling Passenger Security Fee, supra note 56.
93. See generally Several U.S. Majors Raise Domestic Base Fares, supra note 64, (stating the airline industry chose to raise fares rather than offer customer discounts).
94. Air Passenger Fees, Taxes Adding to Costs and to Some Worries, supra note 74, (stating that airline taxes on a $100 ticket can run up to 25.6% of the fare).
96. Id.
97. Id.
98. See Id.
99. Id. at 2.
100. Id. at 4.
benefit of FAA oversight, but some passengers inherently pay more into the system than others.\textsuperscript{101} Much of the complaint stems from the concept that the ticket tax, in this instance, is based on the price of a passenger's ticket, rather than the cost of the services provided by the FAA.\textsuperscript{102}

The airline's proposal asked for the 10\% ticket tax to be replaced with a charge for domestic flights that was more proportional to the services.\textsuperscript{103} Specifically, they advocated for a $2 fee per airplane seat, a $4.50 per passenger, and a $0.005 per passenger per nonstop origin and destination mile.\textsuperscript{104} The charge per seat (even if it's not occupied) is an attempt to charge the airline for the size of the aircraft.\textsuperscript{105} The airline's past proposal attempted to relate the user fee to the costs imposed on the air traffic control system by aircraft size, regardless of the number of seats occupied.\textsuperscript{106} The charge per mile is an attempt to reflect the amount of time en route and therefore the amount the aircraft used the air traffic control services.\textsuperscript{107}

Much of the animosity against this proposal by point-to-point providers, such as Southwest, could be because of the charge per mile. Because this charge would be "as the crow flies," a passenger flying from Washington, D.C. to San Francisco would be charged for the miles between the two cities regardless of whether the passenger has to connect in St. Louis, Minneapolis, or Atlanta.\textsuperscript{108} In this situation, it could have been cheaper for a passenger to fly through the solidified hub and spoke system on a larger carrier going through a hub – even it if was more miles in actual flight distance flown.

Airlines and airline passengers have been turned into involuntary tools in an assault on the United States, as was evidenced on September 11, 2001. Sadly, it was not only those passengers in the planes who became victims, but also bystanders in buildings in New York and Virginia. As such, the "users" that are paying up to $10 per round trip flight are helping fund a security system that not only is designed to protect the flying public, but also the public at large on the ground. This current tax is not an adequate representation of the intended use of security resources.

In the summer of 1996, Senator Fran Lautenberg (D-NJ) proposed a transfer of funds from the Department of Defense as recognition that

\begin{itemize}
  \item \textsuperscript{101} Id.
  \item \textsuperscript{102} Id.
  \item \textsuperscript{103} Id.
  \item \textsuperscript{104} Id.
  \item \textsuperscript{105} Id.
  \item \textsuperscript{106} Id.
  \item \textsuperscript{107} Id. at 4-5.
  \item \textsuperscript{108} Id. at 5.
\end{itemize}
terrorism is a national security threat. His proposal was in the aftermath of the crash of TWA Flight 800, which at the time was thought by many to be an act of terrorism. This illustrates that even five years before the deadly attacks of September 11, 2001 where three airplanes were used as terrorist tools to target individuals and buildings on the ground, airline security was recognized as a national threat.

The recognition that airlines and airline passengers are paying a disproportionate amount of funding for security is broad. Specifically, Kevin Mitchell, Chairman of the Business Travel Coalition testified before the U.S. Senate Committee on Commerce, Science, and Transportation in 2003 that, "[t]he airline industry, and its customers, are shouldering a disproportionate burden of what is, in part, a national security budget."\textsuperscript{111}

Accordingly, the majority of funding for airline security should come from sources other than traditional user fees as are already being assessed. The TSA has announced that it is reconsidering how the ASIF is being assessed – being that the older year 2000 models are inequitable for most airlines. The TSA should also reconsider rescinding the September 11, 2001 Security Fee. As noted from Admiral Loy, the Security Fee already does not pay for all the security services provided by the TSA.\textsuperscript{112} If the individual passengers must be charged for their portion of airline security, then it should be done in a more equitable fashion. As the fee currently exists, the passengers have to pay the same regardless if they are flying from Washington, D.C. to San Francisco, CA non-stop, or from Washington, D.C. to Richmond, VA. The amount of security being provided for these two hypothetical flights is not necessarily the same; an air marshal is much more likely to be on the transcontinental flight – one that, like in September 11, 2001 could be full of fuel to use as a terrorist weapon – compared to the regional jet that probably does not have an air marshal on board.\textsuperscript{113}

One possible solution could be to assess a security fee based on the mileage of the flight, such as $.005 per passenger mile. As noted in the


\textsuperscript{113} See Kit Miniclier, Foreign Airlines Jittery About Use of Sky Marshals U.S. Order Could Lead to Gunfire, \textit{Denver Post}, Jan. 4, 2004, at A.07, available at 2004 WL 59316350 (referring the chances of having an air marshal on a flight are minimal because there are approximately 30,000 domestic flights daily and only about 3,000 of those have air marshals aboard).
UT study, this could be an equitable way to pay for security that is more matched with the services provided.

In conclusion, airlines have grown dramatically since deregulation in 1978. Passengers have significantly cheaper flights than 25 years ago, and many options with air carriers. Competition continues to be strong, with a new wave of low-cost airlines growing rapidly. However, the aviation landscape has changed as a result of the terrorist attacks on September 11, 2001, and aviation security is no longer focused just on the airliners and their passengers, but instead how the planes can be turned into terrorist weapons able to attack anywhere in the United States. As such, we are all users, and just as we all contribute to the Department of Defense, we should all contribute to aviation safety. If all of the funding for aviation security is unable to come from this fund, then aviation security should be charged in a more equitable fashion – one based on miles flown or costs paid. Aviation has become a “darling” of deregulation, and a model for other industries – it benefits everyone to ensure the model thrives by protecting the aviation industry through fair taxation.
Beginning of a Redefined Industry: How the European Court of Justice’s Decision in the Open Skies Case Could Change the Global Aviation Industry

Berry White*

INTRODUCTION:

The air transport industry, for all its imperfections and peculiarities, represents perhaps the greatest achievement of technology and organization in the twentieth century—an achievement which should inspire admiration comparable to that of Dr. Samuel Johnson’s observation about the dog walking on its hind legs—"Sir, it is not done well; but you are surprised to find it done at all."¹

Both globalization and the events of September 11, 2001 have forced the airline industry to undergo some drastic changes. However, the industry’s biggest change of the last decade occurred with the recent Open Skies decision by the European Court of Justice ("ECJ").² The purpose of this article is to give an overview of what led up to the ECJ’s decision,

* JD Candidate, 2005.


the possible creation of the Transatlantic Common Aviation Area ("TCAA"), and where the industry might be heading in the future.

SECTION I: HOW INTERNATIONAL AVIATION REGULATION GOT STARTED

The Chicago Convention of 1944 established the modern international aviation legal structure. The original purpose for the Chicago Convention was to establish a "[m]ultilateral framework for openness, trade, and mutual co-operation [sic]." However, the Convention instead launched "[a] system largely based on individual national interests, embodied in treaties, executive agreements, and other documents collectively referred to as bilateral air services agreements, bilateral air transport agreements, or, just simply, bilateral agreements."5

One thousand delegates from 54 countries attended the Chicago Convention. The negotiations that took place "[c]reated a framework that permitted developing countries to strictly regulate traffic between their territories and other states and to nurture the development of their own national flag carriers." The result was a "[h]ighly regulated system based on bilateral, government-to-government negotiation." The system has come to comprise over 1,500 bilateral, highly detailed, and often contested individual agreements between countries covering mutual traffic rights.9

The Convention proposed five "freedoms" of the sky among the signatory nations, ultimately establishing two of them as part of the final charter:

(1) the right of a nation's airlines to fly over the territory of another nation in order to reach a third; and, (2) the right of a nation's airlines to make technical stops for fuel and maintenance, but not to load or unload passengers or cargo, in another nation while in transit to a third nation."10

The three freedoms that were not annexed were:

(1) the right of one nation's airlines to freely transport cargo and passengers from its home nation to a second nation; (2) the right of one nation's airlines

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4. Id.
5. Id.
7. Id. at 40.
8. Id. at 41.
9. Id.
States

posing views on the regulation of international transport. The United States supported a largely

allowed US carriers to fly from Britain to points in Continental Europe.19

and grow, rather than suffer in the face of heavy competition from U.S. carriers."

Bermuda II eliminated the "beyond rights," and, in addition, reduced the

they hoped would allow their nation's war-ravaged airline industry an opportunity to recover

ments allowed the airlines of each nation to operate international service
to and from designated gateway cities in each country.15 Although Ber­
muda I allowed airlines to operate an unlimited number of flights, the

agreement left responsibility for fare determination in the hands of the

International Air Transport Association.16 In addition, while the airlines

were free to set their own flight schedules, each nation retained the right
of ex post facto review of the other airlines' operations.17

However, in 1976 Great Britain renounced Bermuda I and negoti­
ated a more restrictive treaty known as Bermuda II.18 Bermuda I allowed US carriers to fly from Britain to points in Continental Europe.19

Bermuda II eliminated the "beyond rights," and, in addition, reduced the number of US carriers permitted to fly to London's Heathrow Airport to
two.20 Bermuda II helped enable British Airways' to capture more than sixty percent of U.S. - Britain air passenger traffic by 1997.21

In the 1990s, U.S. air carriers were facing economic hardships.22

Consequently, the established restrictive bilateral agreements were no

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11. Id. at 433.
12. Id.
13. Id.
14. See generally id. "The agreement represented a compromise between two sharply op­posing views on the regulation of international transport. The United States supported a largely unregulated aviation market; whereas, Britain sought greater governmental control. More, im­portantly, Bermuda I helped institute acceptance of governmental involvement in the regulation of international air service. . . . British negotiators sought to create a restrictive agreement, which they hoped would allow their nation's war-ravaged airline industry an opportunity to recover and grow, rather than suffer in the face of heavy competition from U.S. carriers." Id. at 433-34.
15. Id. at 434.
16. Id.
17. Id.
18. Id. at 435.
19. Id.
20. Id.
21. Id.
longer sufficient for the U.S. airline industry. Therefore, "liberal bilateral" agreements called "Open Skies" agreements were opened with the U.S.'s trading partners. The U.S. Department of Transportation concluded that "[t]he Open-Skies program represents a further progression along the path toward a truly open environment for international aviation services, an environment in which all participants ... will reap genuine and lasting benefits." It defined "Open Skies" to include the following basic elements:

1. Open entry on all routes;
2. Unrestricted capacity and frequency on all routes;
3. Unrestricted route and traffic rights, that is, the right to operate service between any point in the United States and any point in the European country, including no restrictions as to intermediate and beyond points, change of gauge, routing flexibility, coterminalization, or the right to carry Fifth Freedom traffic;
4. Double-disapproving pricing in Third and Fourth Freedom markets and (1) in intra-EC markets: price matching rights in third country markets, (2) in non intra-EC markets: price leadership in third-country markets to the extent that the Third and Fourth Freedom carriers in those markets have it;
5. Liberal charter arrangement (the least restrictive charter regulations of the two governments would apply, regardless of the origin of the flight);
6. Liberal cargo regime (criteria as comprehensive as those defined for the combination carriers);
7. Conversion and remittance arrangement (carriers would be able to convert earnings and remit in hard currency promptly and without restriction);
8. Open code-sharing opportunities;
9. Self-handling provisions (right of carrier to perform/control its airport functions going to support its operations);
10. Procompetitive provisions on commercial opportunities, user charges, fair competition and intermodal rights; and
11. Explicit commitment for nondiscriminatory operation of and access for computer reservation system.

These Open-Skies agreements often require the designated national carriers to be owned and controlled by nationals of the countries involved.

23. See generally id.
24. Id. at 374.
25. Id.
26. Id. at 374-75.
and include prohibitions on carriage by foreign operators. Usually, Open-Skies Agreements are a “precursor to airline partnerships and, more recently, these have been international airline alliances seeking antitrust immunity from the pertinent regulatory authorities.” As a result, member carriers “[a]re allowed not only to code-share, fix prices, capacity, and schedules, and take joint action on routes, but also to share revenues and costs, as well.” On November 5, 2002, the ECJ released judgments on these Open Skies.

SECTION II: OPEN SKIES CASE AND ITS IMPACT

A: WHAT IS THE ECJ

The ECJ was created by the six founding Member States of the European Communities in 1952 and was put in place to enforce the uniform Community law against individual defaulting Member States. The Court is currently comprised of 15 judges and 8 advocates general. The Member States, by common accord, appoint the judges and advocates general. The appointees are chosen from jurists who are “of recognized competence” and “whose independence is beyond doubt.”

As a guiding principle, “[T]he judges must ensure that Community law is not interpreted and applied differently in each Member State, that as a shared legal system it remains a Community system and that it is always identical for all circumstances.” The Court of Justice, in order to fulfill that role, “[h]as jurisdiction to hear disputes to which the Member States, the Community institutions, undertakings and individuals may be parties.”

B: BODY OF PRECEDENCE

The European Commission, since 1979, has tried to “obtain a mandate from the Council to open Community negotiations with third countries on behalf of the EU and its Member States.” The Commission urged EU Member States not to enter into new air transport agreements

29. Id.
32. Id.
33. Id.
34. Id.
35. Id.
36. Id.
with the U.S. in 1992.  

In order to guarantee equal opportunities for Community carriers and improve access to the U.S. domestic market, in 1995 the Commission proposed to the Council to open Community negotiations with the U.S. In June of 1996, a limited mandate to this effect was secured by the Commission. Negotiations between the Commission and the U.S. then commenced. However, the U.S. requested that market access had to be included in a negotiable package and that a partial agreement was unacceptable.

The Commission determined that the long run situation was not sustainable. The Commission's view was that without an agreement between the Community and the U.S., the internal market would be fragmented. In addition, the Community considered the Open Skies agreements with the individual Member States an infringement on Community laws and principles. In 1998, the Commission took legal action under Article 226 of the European Community Treaty against several Member States that signed Open Skies Agreements with the U.S. and against the United Kingdom with respect to the ownership and control clause in its bilateral agreement with the U.S.  

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class="citation"


38. Id.

39. Id. at 7.

40. Id. (The Commission was granted the right to carry out negotiations on behalf of the Community. "The mandate only allowed the Commission, assisted by a special committee appointed by the Council, to negotiate on soft rights e.g. ground-handling at airports, service, maintenance, computer reservation systems, code-sharing, ownership and control of air carriers, dispute resolution, leasing, environmental issues, competition issues, transitional measures. The Council explicitly excluded from the mandate negotiations regarding market access (i.e. traffic rights), capacity, carrier designation and pricing."") Id.

41. Id.

42. Id.

43. Id.

44. Id.

45. Id.

46. Id. ("In October 1999, the Netherlands, which had also signed the same type of agreement with the US, joined the action in support of the other Member States. In addition, the Commission has since started the procedure against the Netherlands, France, Italy and Portugal, all of which have concluded limited scope Open Skies agreements or regular Open Skies agreements with the US in recent years. However, the Commission has not yet submitted these latter cases to the Court.") Id. (article 226 provides: "1. If, during the transitional period, difficulties arise which are serious and liable to persist in any sector of the economy or which could bring about serious deterioration in the economic situation of a given area, a Member State may apply for authorisation [sic] to take protective measures in order to rectify the situation and adjust the sector concerned to the economy of the common market. 2. On application by the State concerned, the Commission shall, by emergency procedure, determine without delay the protective measures which it considers necessary, specifying the circumstances and the manner in which they are to be put into effect. 3. The measures authorised [sic] under paragraph 2 may involve..."
C. The Open Skies Case

The European Commission referred the Open Skies Agreements between the U.S. and the individual states to the ECJ as a violation of Community law because the agreements affect the internal market and would seriously prejudice possibilities to create an equitable US-European air transport regime. The ECJ was asked by the Commission to decide:

1. whether the Community had exclusive competence to negotiate and conclude open skies agreements with the U.S. and, if so, to what extent;
2. whether designation clauses violated the freedom of establishment enshrined in Article 43 EC (previously Article 52 of the Treaty). These so-called “ownership and control clauses” or “nationality clauses” are typically included in air services agreements and provide in principle that a party can only designate airlines that are substantially owned and/or effectively controlled by that party or by nationals of that party.

The Court:

reaffirmed prior judgments according to which the Community acquires exclusive external competence in the areas covered by its internal legislative acts where those have achieved complete harmonization, if and when these internal rules could be affected by Member States negotiating with third countries or if the internal rules include provisions governing external aspects.

But, the Court reaffirmed its holding of 1995, that the Community did not acquire exclusive competence to negotiate the Open Skies Agree-

derrogations from the rules of this Treaty, to such an extent and for such periods as are strictly necessary in order to attain the objectives referred to in paragraph 1. Priority shall be given to such measures as will least disturb the functioning of the common market." ) Treaty Establishing the European Community as Amended by Subsequent Treaties, Article 226 (March 25, 1957), at http://www.hri.org/docs/Rome57IPart6.html#Art226.

47. Lenz & Niejahr, supra note 2 at 158.
48. Id. (article 43 provides: “[w]ithin the framework of the provisions set out below, restrictions on the freedom of establishment of nationals of a Member State in the territory of another Member State shall be prohibited. Such prohibition shall also apply to restrictions on the setting up of agencies, branches, or subsidiaries by nationals of any Member State established in the territory of any Member State. Freedom of Establishment shall include the right to take up and pursue activities as self-employed persons and to set up and manage undertakings, in particular companies or firms within the meaning of the second paragraph of Article 58 (now 48), under the conditions laid down for its own nationals by the law of the country where such establishment is effected, subject to the provisions of the chapter relating to capital.” PAUL CRAIG & GRAINNE DU BORCA, EU LAW TEXT, CASES, AND MATERIAL 733 (Oxford University Press 1998).
49. Id.
The Community acquired exclusive competence to enter into commitments with third countries on the following elements:

1. relating to fares and rates to be charged by third country airlines on routes between Member States, by virtue of the prohibition for third country airlines to practise [sic] price leadership on intra-Community routes;
2. regarding obligations relating to computer reservation systems ("CRS's"), because the Community's rules relating to CRS's apply, subject to reciprocity, also to nationals of third countries that use or offer for use a CRS in the Community;
3. regarding slot allocation, since the internal rules for allocation of slots at Community airports apply, subject to reciprocity, to third country airlines. It should be noted that the Court did not find a violation of the Community's external competence by any of the seven Member States that had concluded Open Skies Agreements, as the Commission had failed to substantiate that these agreements included provisions relating to slot allocation.\(^{51}\)

The Court also held that the ownership and control clauses of the air service agreements, which are typically included in the bilateral agreements, violate the freedom of establishment protected in Article 43 EC.\(^{52}\)

The Court confirmed that the freedom of establishment obliges Member States to extend to nationals of other Member States the same treatment as that accorded to [its] own nationals, both as regards access to a commercial activity on first establishment and as regards the exercise of that activity. It held that under traditional ownership and control clauses Community airlines established in one Member State, but not substantially owned and/or effectively controlled by that Member State or its nationals may always be excluded from the benefit of the air services agreement with the U.S.\(^{53}\)

The Open Skies judgments adopted new proposals for a Community international air transport policy.\(^{54}\) The intention of the proposals is to "create a legal framework for handling all bilateral relationships between the Community and third countries in the field of air transport."\(^{55}\) The proposals call for the granting "[o]f a comprehensive mandate for negotiations of a Community air services agreement with the US" by the Council.\(^{56}\)

\(^{50}\) Id. at 158-59.

\(^{51}\) Id. at 159.

\(^{52}\) Id.

\(^{53}\) Id at 160.

\(^{54}\) Id. at 157.

\(^{55}\) Id.

\(^{56}\) Id. at 160.
As a reaction to the ECJ judgment, the Commission requested EU Member States to denounce the Open Skies agreements they had signed.\textsuperscript{57} In addition, the Commission asked “Member States to stop making any kind of international commitment in air transport that could be incompatible with Community law.”\textsuperscript{58}

**SECTION III: WHERE THE INDUSTRY GOES FROM THE DECISION**

**A. OPEN SKIES CASE DECISION IS A LARGE STEP IN CREATING THE TCAA**

The decision by the ECJ pushed the airline industry closer to a new realm of existence. For years, members of the European Union have made an argument for the formation of a Transatlantic Common Aviation Area ("TCAA").\textsuperscript{59} Additionally, the decision by the Transport Council to pass the responsibility of conducting key air transport negotiations to the European Commission was a step beyond the ECJ judgments.\textsuperscript{60}

The European Commission was granted “[a] mandate to begin negotiations on a new transatlantic air agreement” and “[a]greed that the Commission should open negotiations with other foreign states on airline ownership restrictions and that Member States should be permitted to continue bilateral negotiation subject to a degree of Community control.”\textsuperscript{61} The mandate package agreed upon consists of three different parts:

1. a Council decision on authorizing the Commission to open negotiations with the United States in the field of air transport.
2. a Council decision authorizing the Commission to open negotiations with third countries on the replacement of certain provisions in existing bilateral agreements with a Community agreement.
3. a proposal for a Regulation of the European parliament and of the Council on the negotiation and implementation of air service agreements between member States and third countries.\textsuperscript{62}

For the first time, representatives of the U.S. and the EU, the two

\textsuperscript{57} See ECJ Ruling on Open Skies Agreements v. Future International Air Transport, supra note 37 at 11.

\textsuperscript{58} Id.

\textsuperscript{59} See generally Towards a Transatlantic Common Aviation Area, AEA POLICY STATEMENT (Ass’n of European Airlines, Brussels), Sept. 1999 at 1, available at http://www.aviationtoday.com/reports/aeapolicystatement/pdf.

\textsuperscript{60} Press Release, EU Institutions, New Era for Air Transport: Loyola de Palacio Welcomes the Mandate Given to the European Commission for Negotiating an Open Aviation Area with the US (May 6, 2003), available at http://www.europa.eu/rapid/start/cgi/guesten.ksh.

\textsuperscript{61} Id.

\textsuperscript{62} Id. at 1-2.
largest aviation markets in the world, "[w]ill be able to discuss opening their markets and investment rules directly." The mandate covers issues regarding: "traffic rights, routes, capacity, frequency, slots, fares, application of competition rules, high standards of safety, and aviation security." The ECJ judgments combined with the Commission's mandated authority has moved the TCAA closer to a reality.

**B: WHAT IS THE TCAA**

The TCAA, at its core, reflects the EU's goal to "[c]reate a common EU traffic market that can compete against the United States." The TCAA's objective is to replace the fragmented regulatory regime that is currently in place. The current bilateral system is embodied in treaties based on individual national interests. The TCAA would, in theory, replace the individual national interests with a "[s]ystem that on the one hand gives airlines full commercial opportunities on an equal basis and on the other hand ensures that their activities will be governed by a common body of aviation rules avoiding any unnecessary regulation." The primary reason why the EU favors the creation of the TCAA is the greater bargaining power the EU would acquire to negotiate a more favorable air agreement, attaining larger access to the U.S. domestic air transportation market.

The Commission believes "[t]he only way for the EU to achieve a balanced outcome is by pooling the negotiating leverage of all EU Member States and arriving at a joint approach towards [an] external policy in this field." The bilateral agreements, in the view of the Commission, "[g]ive U.S. companies considerable operational opportunities in the European market, without gaining any rights of equal value for European airlines in the United States." The Commission views the EU market of equal size to that of the United States. However, in reality, there are many differences in the air travel markets.

There are many distinctions in the air travel markets of the U.S. and the EU, including things like the structural basis of the market, length of

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63. Id. at 2.
64. Id.
66. Towards a Transatlantic Common Aviation Area, supra note 60 at 1.
67. Rynerson, supra note 3 at 422.
68. Towards a Transatlantic Common Aviation Area, supra note 60 at 1.
70. Id.
71. Id.
travel, reason for traveling, competition, and demand. The entire European Economic Area is barely forty percent the area of the United States. Europe is thus 2.6 times smaller than the United States, while having 388 million inhabitants versus 267 million inhabitants for the U.S. Therefore, Europe has a much smaller area than that of the United States, its population density is much greater, and the largest share of its population and economic activity is concentrated in a region that represents less than fifteen percent of its total area. As a consequence, most trade and travel occurs between cities that are relatively close to one another, and the distances that must be covered are much shorter than in the United States, especially for business trips. With around fifty percent of the population and economic activity concentrated in a close area, competition by other means of transportation is high.

There is a split among three modes of transportation: road, rail, and air, with the selection between these modes determined by the distance traveled. As one comparison, over fifty percent of trips of distances up to 700 km are made in Europe by private car or coach. In the U.S., road travel accounts for greater than one-half of trips of distances up to 1,200 km in the U.S. Additionally, air transport accounts for over one-half of trips for distances over 1,200 km in both the United States and Europe. The principle difference between Europe and the United States is the large amount of passenger rail traffic in Europe for distances between 100 and 1,000 km, compared with the U.S., where rail passenger traffic is virtually non-existent. In Europe, the market share of rail transport has risen above that of air transport whenever a high speed train goes into service for distances less than 600 km. Thus, the market share for the airline industry is fragmented due to the growth of rail travel in Europe.

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72. See generally Jacques Pavaux & Michel Loupias, Air Transport Markets in Europe and the United States: A Comparison, Institute of Air Transport, (Inst. of Air Transp.), June 2001, available at http://www.iata.org/NR/ContentConnector/CS2000/Siteinterface/sites/mgr/file/ITA_full28063.pdf. The Institute of Air Transport released the market study comparing and contrasting the air transport markets in Europe and the United States in June of 2001 for the IATA. The study highlights how Europe and the US are two structurally different economic areas, what the competitive differences are in the two economic regions, the differences in the air travel markets, and includes a geographic, demographic, social, and political analysis.
73. Id. at 2.
74. Id.
75. Id. at 4.
76. Id.
77. Id. at 20.
78. Id.
79. Id.
80. Id.
81. Id. at 21.
According to the Institute of Air Transport, "within Europe, eighty percent of air traffic is performed on stage lengths of less than 1,000 km [compared to] ...the United States, [where] only fifty-eight percent of air traffic involves stage lengths of less than 1,000 km."82 The breakdown of why people travel in the EU and US are as follows:

As can be seen, the substantial differences between the two markets are the traveling for sightseeing/resort and visiting friends/relations sectors. The differences in reasons for traveling could have a substantial effect on mode of transportation chosen. In Europe, the air transport industry is more vulnerable to competition from trains than U.S. air transport would be.85 Creating the TCAA could increase the European airlines profitability due to access to the American market where competition from other modes of transportation is less.

The demand for air travel is greater in the U.S. than in the EU.86 In 1999, the United States domestic market had a total of 596 million pas-

82. Id. at 22.
83. Id. at 17.
84. Id. at 18.
85. Id. at 22.
86. See generally id. at 27.
sengers transported. In the same year, the European Union plus Switzerland only transported 359 million passengers. 87

As the graph shows, the passenger traffic in the domestic market of the U.S. is 1.7 times greater than in the EU. 90 The corresponding graph that indicates revenue is a drastic example of how different the EU and U.S. air transport markets actually are. With the EU gaining greater leverage by creating the TCAA, the EU will incontrovertibly demand access to the U.S. domestic air transport market.

87. Id.
88. Id. at 32.
89. Id. at 31.
90. Id. at 27.
SECTION IV: CONCLUSION

A. PROSPECTIVE IMPACT ON DOMESTIC EUROPEAN COMPETITION AND U.S. DOMESTIC IMPACT

The impact on the domestic European and domestic U.S. competition is determinative of how the Commission negotiates with the EU Member States. The future of the air transport industry is contingent upon who ends up with the negotiating power for Europe—the individual Member States or the Commission. If the Member States choose to retain the negotiating power left to them after the ECJ decision, the Member States will choose to ratify their current bilateral agreements with the U.S. For the individual Member States, choosing to ratify their bilateral agreements would be wise. These agreements were negotiated by the individual Member States with the U.S. and they are receiving the benefit of what was bargained. If the Member States choose to relinquish negotiating power to the Commission, the risk of the terms of a new agreement not being as favorable would be great. The Commission’s interest in negotiating a new bilateral agreement for the entire EU would not specifically take into account the benefits conferred upon the individual Member States as single entities. The Commission’s goal in a new bilateral agreement would be for the betterment of the EU, not the Member States as separate entities. Determining the specific impact on competition before a decision on who will have the power to negotiate the bilateral agreements would be nothing short of speculation. However, competitiveness in the domestic EU and domestic U.S. arenas undoubt­edly will not remain the same.

B. OVERALL OUTCOME

It seems as if the U.S.’s ability to exclude the American domestic airline industry from direct European competition could come to an end relatively soon. The Associate Deputy Secretary of Transportation, in regards to the recent ECJ decision, declared “[i]t’s all about Europe; not about the U.S.”91 However, Europe will not stay confined to the restrictive bilateral that solely benefit the U.S. if the TCAA materializes and attains as much leverage as it possibly could. Europe unequivocally will want access to the American domestic market when it can use the leverage attained through the TCAA. The U.S. does not want to give the EU access to the American domestic market; hence, the reason the U.S. wants to negotiate with the individual Member States as opposed to the

TCAA.92

The U.S.'s January 2003 initiative indicated that the U.S. government was prepared to negotiate the Open Skies agreements with the individual Member States to bring them into compliance with the ECJ decision.93 The terms indicated that the U.S. wants to negotiate with the individual Member States are "[t]he deletion of the intra-EU pricing and CRS provisions and change the nationality clause so that it passes muster under the EU principle of freedom of establishment."94 Apparently the U.S. decided to negotiate these provisions because:

-It preserves the existing Open Skies bilateral agreements, the rights that U.S. carriers enjoy under these Agreements, as well as the antitrust immunity conferred on U.S. carriers for cooperation with their European partners.
-It puts off the need for formal U.S.-EC TCAA-type negotiations.
-The changes are not 'costly' for the U.S. to make since where EU Open Skies bilaterals are involved, U.S. policy already treats fifth freedom like seventh freedom rights, and the U.S. has been liberal in waiving the substantial ownership and effective control requirement (as in the case of Swissair control of Sabena).
-It leaves open the possibility that the U.S. could strike and Open Skies deal with the UK ([if the UK were] to agree to a nationality clause consistent with the EU ['s] right of establishment principle).95

If the current Open Skies agreements could be brought into compliance with the ECJ decisions, the U.S. could delay the creation of the TCAA due to the Member States being in conformity.96 Hence, if the Member States are conforming to the ECJ decisions, the Commission most likely will not get as much deference on the necessity of creating the TCAA with the Member States. However, the animosity towards the Open Skies agreements from certain factions will still exist if the U.S. is capable of bargaining for a reprieve.

Members of the transportation industry have been extremely vocal in voicing their opinions towards the Open Skies agreements. As Richard Branson, the chairman of Virgin Atlantic Airways wrote:

[T]he one-sided U.S. version of open skies is not fair. It retains discrimination against non-U.S. airlines and protects the enormous U.S. domestic market from foreign competition. U.S. open skies are not the way forward. They represent the last gasps of the old, archaic bilateral sys-

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92. See generally id. at 6.
93. Id.
94. Id.
95. Id at 12.
96. See generally id.
We need to move on. . . . This industry is 100 years old, yet still beset by rules and regulations more characteristic of the 19th century than the 21st. It is about time the airline business was treated like the mature industry it clearly is.

We need complete—not partial—deregulation, including the removal of the restrictive ownership and control rules that have stopped me from setting up an airline in the U.S., denying U.S. consumers the benefits of increased competition. And let me be clear: With a change in U.S. law, Virgin America would become a reality. It never ceases to amaze me that in almost any other line of business, I can launch new companies with very few restrictions. But if I say want to establish a U.S. airline, based in the U.S. and employing U.S. staff, everyone throws their arms up in dismay. Yet few would deny that the U.S. airline industry needs more competition and investment.  

Pressure to create the TCAA and open the U.S. domestic air transport market will continue to mount. The decisions by the ECJ and the Commission are steps in an ever increasing movement to liberalize the air transport industry. Most likely sooner than later, the air transport industry will manifest into a truly global industry and the realization of the TCAA will occur.

The Victims Compensation Fund: A Model for Future Mass Casualty Situations

Jessica Ramirez*

I. INTRODUCTION

Americans and people around the world will remember where they were as the news flash came across televisions and radios that a plane had hit one of the twin towers of the World Trade Center in New York City. Initially there was speculation that this disaster was an accident, but when the second plane hit the other tower, there was no mistaking that the United States had fallen victim to a terrorist attack. Not only were the towers in New York attacked, but an American Airlines flight was intentionally crashed into the Pentagon, and a United Airlines flight crashed into a field in Pennsylvania. We have now learned that the United Airlines plane was headed for Washington when passengers aboard that plane realized their fate and chose to take a chance and overpower the hijackers. As one commentator has noted, "[t]he tragedy of September 11, 2001 has changed the way that Americans live."1 Americans are now subject to greater scrutiny in airports, hotels, concerts, sports events, and anywhere Americans gather in large numbers.2 Some of the most significant changes have come in the transportation industry, and more specifi-

* JD Candidate, 2004.
2. Id.
The aviation sector.\(^3\) Aviation is vital to our nation's economy and has been essential to Americans' sense of personal freedom.\(^4\)

One of the first legislative responses to the terrorist attacks of September 11, 2001, was the Air Transportation Safety and System Stabilization Act (ATSSSA),\(^5\) which was signed into law by President Bush on September 23, 2001.\(^6\) ATSSSA does not address aviation security, but it is designed to limit the financial impact of September 11 on the airline industry.\(^7\) The first order of business for the government was providing the airlines with $5 billion (plus up to $10 billion in loans) to compensate them for the losses incurred during the mandatory grounding the first three days following the attack, and to head off expected future losses resulting from reduced air traffic.\(^8\) The stated objective of ATSSSA was "[t]o preserve the continued viability of the United States air transportation system."\(^9\) There were several components constructed under the ATSSSA, including, the Victims Compensation Fund (hereinafter "the Fund").\(^10\)

The Fund was designed to provide an alternative to litigation for the victims of the September 11, 2001 attacks and their families.\(^11\) The manner in which the Fund was created and what the Fund provides is different from any other compensation scheme for terrorist attacks and mass casualty situations.\(^12\) Thus far, the Victims Compensation Fund has been successful in achieving its goal, being that a large percentage of those eligible applied for compensation from the Fund.\(^13\) However, the Fund has been criticized for failing to target those directly accountable for the attacks. Additional criticism stems from the fact that the creators of the fund have asked taxpaying citizens to step forward and pay the price for

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4. Id.


8. See id.


10. See Blair, supra text accompanying note 6.


12. See id. at 257 ("The program had momentum and offered a fresh alternative to the drawn out lawsuits that inevitably followed past aviation-related terrorist attacks, such as, the decade-long Pan Am-Lockerbie bombing lawsuit against Libya.").

the losses due to the September 11, 2001 attacks.\textsuperscript{14} While there are criticisms of the fund, in general the Fund has provided a legitimate means of compensation for those eligible in an expeditious manner, and established a new regime for mass tort compensation.

II. What is the Victims Compensation Fund?

A. What is the Victims Compensation Fund and what are the Requirements to Apply for the Fund

The Victim’s Compensation Fund was established by the government after the September 11, 2001, attacks and was designed to pay thousands of victims for the losses resulting from those attacks.\textsuperscript{15} In return, the victims and their families who made the choice to participate in the Fund were prohibited from seeking any type of compensation through litigation.\textsuperscript{16} In theory, the Fund would provide timely benefits with a simple process of fair and just awards.\textsuperscript{17}

In order to qualify for an award under the Fund, claimants must be individuals who were:

1. present at the World Trade Center, at the Pentagon, or at the site of the air crash at Shanksville, Pennsylvania; ... 2. members of the flight crew or passengers on the four flights that were the target of the terrorists attacks; or the personal representative of a decedent killed either at the World Trade Center, the Pentagon, or in the plane crash.\textsuperscript{18}

In order to be considered for compensation, the “[c]laimant must submit a claim form developed by the Special Master which requires: (1) information detailing the physical harm that claimant suffered; . . . (2) disclosure of any possible economic and non-economic losses; and (3) information about all collateral source compensation.”\textsuperscript{19}

B. The Special Master

The Attorney General selected Kenneth Feinberg, a veteran mediator, as Special Master of the Fund.\textsuperscript{20} The Special Master fulfills multiple roles for the Fund including the responsibility of being a surrogate defendant, and analyzing damages requests to ascertain whether or not such

\begin{itemize}
\item \textsuperscript{14} See Mariani, supra note 11, at 257 (discussing how taxpaying citizens are a continuous financial source for the Fund).
\item \textsuperscript{15} Mariani, supra note 11, at 253.
\item \textsuperscript{16} See id.
\item \textsuperscript{17} Id. at 256.
\item \textsuperscript{18} Lebow, supra note 3, at 243.
\item \textsuperscript{20} Mariani, supra note 11, at 256-57.
\end{itemize}
requests are exaggerated. The Special Master also acts as the judge, determining the awards given to each family, as well as being an advocate for those who are considering signing up for the Fund. By statute, the Special Master has the responsibility of “[a]dministering the compensation program [through] hearing officers and other administrative personnel” to be employed for that purpose. The statutory duty of the Special Master is straightforward: he “shall ... determine (1) the claimant’s eligibility, (2) the extent of harm (including economic and non-economic losses), and (3) the amount of compensation not later than 120 days after that date on which a claim is filed.” The statute forbids the Special Master from taking into consideration fault of any type by any person in making his awards. In fact, the only issues that the Special Master may consider are those dealing with the claimant’s evidence on eligibility and damages. The hearing officers will consider reports and testimony from expert witnesses and others on such matters as work history, earnings capacity, and family relationships. The hearing officers in the first instance and the Special Master in a final review are fully authorized to protect the government from fraudulent claims.

C. The Determination of Damages

In determining the amount to be rewarded to each victim, the Special Master must determine the claimant’s extent of harm, including economic and non-economic losses. Recoverable losses are defined by the act as including economic loss encompassing lost earnings or benefits related to employment, medical expenses, and replacement services, losses due to death, burial costs and loss of business or employment opportunities.

Non-economic losses include losses for physical and emotional pain, suffering, inconvenience, physical impairment, mental anguish, disfigurement, loss of enjoyment of life, loss of society and companionship, loss of consortium, hedonic damages, injury to reputation, and all other losses related to non-pecuniary reasons. From these awards, the Fund requires a deduction of compensation received by claimants from other

21. See id. at 258.
22. Id.
23. ATSSSA §§ 404(a)(1), 404(a)(2), 404(a)(3); see also Campbell, supra note 19, at 59.
24. ATSSSA §§ 405(b)(1), 405(b)(3); see also Campbell, supra note 19, at 59-60.
25. See ATSSSA § 405(b)(2); see also Campbell, supra note 19, at 63.
26. Campbell, supra note 19, at 63.
27. Id.
28. Id.
29. See id. at 86.
30. See id. at 86.
31. See id. at 85-86.
sources, such as, pension plans, life insurance policies, death benefits, and other governmental plans and programs. The non-economic damages are limited to $250,000 per decedent, and an additional $100,000 for each spouse and dependent.

Thus far, the Fund lists its average award after collateral offsets at $1.49 million, and the median award after offsets at $1.23 million. Initially, the Fund posted the average awards based on four income levels: (i) victims who received income of less than $50,000, the award ranged from $250,000-$2.7 million; (ii) victims who received income between $50,000-$100,000, the award ranged from $250,000 to $4.1 million; (iii) victims who received income between $100,000-$200,000, the award ranged from $250,000 to $4.5 million; and (iv) victims who received income over $200,000, the award ranged from $250,000 to $6.0 million. Even with the above numbers listed as possible awards, Special Master Kenneth Feinberg stated outright that awards from the Fund exceeding the $3 million mark will be rare and seldom appropriate.

However, Special Master Feinberg promised to provide sufficient compensation to ensure that victim’s families receive at least a minimum level of resources to help meet their needs and rebuild their lives. Accordingly, Special Master Feinberg stated that the families of the deceased should receive a minimum of $500,000 from a combination of the Victim Compensation Fund, other state and federal programs, life insurance policies, and other sources of compensation, with single decedents receiving a minimum of $300,000. While the monetary benefits listed above may seem generous for some families, the manner in which the money is disbursed causes problems amongst some who stand to receive nothing. If a decedent had a combination of life insurance and pension benefits in excess of the amount that his family would receive from the Fund, the family may in turn receive nothing from the Fund. So, despite the promise for sufficient compensation, there are those who arguably have a problem with the manner in which damages are being awarded.

III. PERCEIVED CRITICISMS OF THE VICTIMS COMPENSATION FUND

Criticisms of the Fund are primarily centered around three key ar-

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32. See Kenneth P. Nolan & Jeanne M. O'Grady, A Year Later-the September 11th Victim Compensation Fund, 17 Air & Space Law. 6,6 (2002).
34. Mariani, supra note 11, at 259.
35. Id. at 259-60.
36. Watters & Lawder, supra note 33, at 18.
37. Campbell, supra note 19, at 77.
38. Id.
39. Id.
eas: (i) the idea that those who are guilty go unpunished; (ii) the Fund being a one size fits all approach; and (iii) the costs associated with the Fund and its application similar to that of a no-fault scheme.

A. Guilty Go Unpunished

It will be a long road for the victims and families who have suffered losses and have chosen the path of litigation while they wait for the final outcome of the lawsuit. It will also be many years before the effect of the suits on the airlines will become obvious. While the majority of the victims and families have filed complaints with the Victim Compensation Fund, there are certainly those who believe that litigation is the only answer. Families who have made the choice to litigate show no concern for the amount of money they may or may not receive, but care more about making sure justice is had for the sake of their family members who perished in the September 11, 2001, tragedy.

"I've chosen to go to court rather than accept a payoff from the 9/11 Victims Compensation Fund. Instead, I want to know what went so wrong with our intelligence and security systems that a band of religious fanatics was able to turn four U.S. passenger jets into an enemy force, attack our cities and kill 3,000 civilians with terrifying ease. I want to know why two 110-story skyscrapers collapsed in less than two hours and why escape and rescue options were so limited."40

This statement, made by a woman who lost her husband at the World Trade Center, embodies the sentiment of many who suffered losses due to the September 11, 2001, attacks. Although the majority of families and victims have initiated the application process with the Fund, there is much criticism of the Fund and the manner in which it is operated by Special Master, Kenneth Feinberg. Initially, there were many individuals who believed the Fund was solely established as a cost saving mechanism for the airlines and that it was not intended, first and foremost, to benefit the victims and their families.41 This notion, along with the idea that families and victims are required to forfeit their right to sue those that may have been responsible, such as, the airlines, port authority, or any other domestic company, all lends to the belief that Congress did not intend to protect the families, rather that Congress set out to protect the airlines.


41. See Campbell, supra note 19, at 77 (discussing how the regulatory framework established by the Special Master supports a common compensatory scheme for each victim's family without taking into consideration each family's circumstances in order to maintain easy administration).
B. One Size Fits All Approach

A frequent refrain from families associated with other tragedies is that the victims and families of September 11, 2001, are receiving special treatment. As one commentator has framed the debate, “I’m sure that everyone has lost someone in their lifetime. Should they get compensation, too?” American citizens have been the victims of terrorist attacks many times before the events of September 11, 2001. For instance, the Oklahoma City Federal Building bomb, the U.S.S. Cole, the first World Trade Center bombing, and the bombing of Pan Am flight 103 over Lockerbie were all terrorist incidents before September 11, 2001. Until now there has never been a Fund created for the victims of various terrorist attacks. With respect to the Fund, debate continues among the public as to why these victims deserve compensation of any kind from the government.

C. The Costs Associated with the Victim Compensation Fund

Unlike the usual courtroom disputes that follow with traditional tort law, the issue of compensation for these 3,000 deaths has not been limited to the insurance adjuster and the defendant. Instead, 300 million tax-paying citizens are continuous underwriters of the Fund. In fact, the utilization of tax dollars to finance the Victims Compensation Fund raises serious concerns about the fairness of the Fund at the exclusion of victims of other terrorist attacks. Criticism of the Fund revolves around class issues such as the government putting a higher price tag on the life of a stockbroker versus that of a young electrician.

The Fund is a classic “no-fault” system similar to the no-fault auto insurance covering medical expenses and wage loss. There is no requirement to show liability or negligence in order to recover from the Fund. The Fund is structured to compensate victims and their families with average incomes for their economic damages quickly and inexpensively.

42. See Mariani, supra note 11 at 258.
44. Mariani, supra note 11, at 254.
45. Id. at 257.
46. Id.
48. See id. at 258.
49. See Watters & Lawder, supra note 33 at18.
50. Id.
51. Campbell, supra note 19, at 93.
IV. BENEFITS OF THE FUND

A. UNDOCUMENTED WORKERS

Among the victims of the September 11, 2001 attacks were undocumented workers. The families of the victims that were undocumented workers before September 11, 2001, have been afraid to come forward to claim their share of the losses for fear that they will face deportation. These families fear that they will be deported by the Immigration and Naturalization Services (INS), but INS has agreed to forego action against the families who come forward to seek payment from the Fund. The hope is that these individuals will come forward and receive the compensation they deserve.

While the government does not have to be concerned with the legal suits from these undocumented workers, the willingness of the Fund and the INS to work together ensures some form of justice for these individuals. Thus far, more than sixty families of undocumented workers from Central and South America have filed with the federal government. On the other hand, because the Fund will not allow a family member to file without evidence of a death certificate, there are some families who are unable to collect payment from the Fund because they cannot prove their relative(s) perished in the September 11, 2001, attacks.

(B) THE DIFFICULTIES WITH SUING THOSE BELIEVED RESPONSIBLE FOR THE SEPTEMBER 11, 2001, ATTACKS

There is also a large group of insurers who intend to file suit against certain individuals and organizations they feel are responsible for the losses of September 11, 2001, including Osama Bin Ladan, Al Qaeda, Saudi Arabia, Iraq and Iran. The lawsuits, brought by a variety of insurers, seek $300 billion in damages and recovery claims against property and other insurance policies. Additionally, the suit seeks to recover some of the above damages from assets belonging to the defendants and frozen by the United States government under anti-terrorism legislation. According to the firm representing the group of insurers, they have already paid out or reserved for more than $4 billion in claims. The central issue then becomes the prospective likelihood of these suits

52. Id.
53. See id.
54. See id.
55. See id.
57. Id.
58. Id.
59. Id.
prevailing, and the time and costs that must be expended in pursuing these claims – all issues that may prove daunting challenges to these insurers.60

(C) **Precludes the Feeding Frenzy for Private Attorneys**

With the enactment of the Victim Compensation Fund, the government is also hoping to limit individuals from retaining counsel because counsel may dissuade families and victims from seeking relief from the Fund.61 An attorney hired on a contingency basis stands to make more money through a lawsuit because there is a potential for higher damages awards.62 Attorneys may also push families towards a lawsuit because of the attention and publicity the suit may bring to the firm.63

(D) **Keeps Airlines Solvent Because It Allows Airlines Like Frontier to Recover the September 11, 2001, Attacks.**

The airline industry suffered a huge economic loss in the wake of the events of September 11, 2001.64 Air travel stopped for four days and then resumed very slowly.65 By the end of September 2001, domestic enplanements were down by 34% from September 2000, and international enplanements were down about 23%.66 Airline analysts estimated that airlines would be forced to reduce their output in 2001 by about 20% or $20 billion.67 Two years after the September 11, 2001 attacks, the airline industry is still far from recovery.68 Some of the after-effects of the terrorist attacks on the major airlines include mothballed planes, downsized services, and a continuous result of record losses.69

On October 2, 2002, in a statement before the Senate Commerce Science and Transportation Committee, Leo Mullin, Chief Executive Officer for Delta Airlines, spoke of the financial impact of September 11, 2001, on the airline industry. Mullin pointed out that in 2001, industry losses for nine major airlines totaled $7.4 billion, with these losses reaching $10 billion if Congress does not provide aid.70 Mr. Mullin went on to

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60. See id.
61. Mariani, supra note 11 at 268.
62. See id.
63. See id.
65. Id.
66. Id.
67. Id.
69. Id.
state that airline stock analysts' estimates for 2002 losses were as high as $7 billion, a most discouraging figure since it was projected that the airlines would recover in 2002. The impact of the Fund in this area can be stated quite simply. With total payouts of around $1.5 billion, the Fund has avoided pushing an industry already besieged by monetary issues into complete collapse. When coupled with internal competitive refinements like those undertaken by Frontier, the result has been a leaner and more competitive U.S. airline industry.

Despite these continued losses to some air carriers, others are finding ways to continue with business and demonstrate profits. Frontier Airlines, the number two carrier at Denver International Airport, announced that it will be the first carrier to pay back federal loans. The government provided the airlines with $5 billion in immediate aid and another $10 million to those air carriers who qualified to assist the airlines in a recovery following the impact of the September 11, 2001, attacks. Frontier made the announcement on December 22, 2003 and the company anticipates that the airline will make the last payment of $11.6 million. Initially, Frontier borrowed $70 million from the United States government, but has been able to pay back the loan due to an increase in profits for the last two quarters. Frontier attributes these profits to a change in pricing structure, making the pricing structure easier to understand and more computer friendly. Additionally, Frontier credits its employees for its success.

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71. See id.
72. Id.
73. Id.
75. Id.
76. See id.
77. See id.
78. Id.
79. Id.
V. Proposed Application of Victims Compensation Fund to All Future Mass Casualty Situations Where Terrorism is the Cause

A. Why Do We Have a Tort-based System?

In the immediate aftermath of the September 11, 2001 disaster, most Americans were surprised by what was perceived as the unprecedented and immediate governmental action resulting in the establishment of the Victims Compensation Fund.\textsuperscript{81} The Victim Compensation Fund has been described as "[t]he country’s largest experiment in paying mass victims and their families without placing blame."\textsuperscript{82} The main reason for establishing the Victim Compensation Fund was to provide compensation for the victims and the victim’s families who suffered losses from the September 11, 2001 terrorist attacks, while limiting the potential litigation against the airlines and other private entities. Congress created very strong incentives for those injured by the attack to keep the blame focused on the terrorists, as opposed to turning attention towards more readily identifiable entities with deeper pockets, such as the airlines whose planes were hijacked.\textsuperscript{83} As one response to this, Leo Boyle, the President of the National Association of American Trial Lawyers, requested a moratorium on civil lawsuits arising out of the events of September 11, 2001.\textsuperscript{84} Boyle has been quoted as saying that "[w]hat happened on September 11th was a mass murder, not a mass tort."\textsuperscript{85}

The Victim Compensation Fund is the first of its kind to establish a no-fault based recovery process for victims. In the past, we have seen other mass casualty incidents handled in the courtroom under the tort laws. Tort Law provides compensation for injured people and those who suffer property damage through normative decision making by juror, allocating responsibilities along the lines of fault and causation and through voluntary decisions by risk adverse parties and insurers.\textsuperscript{86} The concerns over tort liability and adverse jury verdicts help shape individual conduct into acceptable patterns of civic behavior.\textsuperscript{87} The United States founded
its legal principles upon fairness and the concept of stare decisis, which is the doctrine of precedent under which it is necessary for a court to follow earlier judicial decisions where the same points arise again in litigation. The question now becomes what does this legislative reaction to September 11, 2001 mean for the future of tort law and loss allocation?\textsuperscript{88} On one hand, the measures taken by the government appear necessary to preserve our air transportation system and insurance industry, and ensure that victims and their families receive some sort of compensation.\textsuperscript{89} On the other hand, opponents may criticize the measures undertaken by the government as an unfair subsidy for those affected industries that are able to spread the loss to the industries' consumers.\textsuperscript{90}

An important part of determining liability under current tort based law is foreseeability, or the lack thereof. The test for foreseeability is whether the defendant is aware of facts demonstrating that the plaintiff was exposed to an unreasonable risk of harm.\textsuperscript{91} As Justice Cardoza stated “[t]he risk reasonably to be perceived defines the duty to be obeyed, and risk imports relation; it is risk to another or to others within the range of apprehension.”\textsuperscript{92} With respect to the foreseeability of the airlines, it seems that the blame is being placed on the wrong individual or entity. Although September 11, 2001 was not the first hijacking or terrorist attack on the United States, it was the first of its kind in the method used. September 11, 2001 was the first time that our own airliners were used as the weapon of choice for a suicide attack, killing thousands of people. In addition, the box cutters used by the terrorists were not even considered weapons for security purposes at the time of the September 11, 2001 attacks.\textsuperscript{93} Principles such as foreseeability and causation will therefore be difficult to prove. For example, juries will be asked to determine if there is a breach of duty when a security company allows a passenger to board the plane carrying a box cutter, that at the time, was not prohibited on the aircraft.\textsuperscript{94}

In spite of the fact that no one anticipated the magnitude of the terrorist attacks on September 11, 2001 or the events that happened thereafter, the nation is now aware of possible increased security risks to its people. There is a potential that the standard of care and foreseeability that applies to businesses, including the airlines, will be increased. Since the attack, the government and media have warned the American people

\textsuperscript{88} Watters & Lawder, \textit{supra} note 43 at 810.
\textsuperscript{89} \textit{Id.}
\textsuperscript{90} \textit{Id.}
\textsuperscript{91} \textit{Id.} at 816.
\textsuperscript{92} \textit{Id.} at 816-17 (quoting \textit{Palsgraf v. Long Island R.R., Co.}, 162 N.E. 99, 100 (N.Y. 1928)).
\textsuperscript{93} \textit{See id.} at 813.
\textsuperscript{94} \textit{See id.}
of the likelihood and possible mode of the next terrorist attack. Furthermore, the foreseeability of terrorism—the risk reasonably to be perceived—has increased significantly. The formerly unthinkable is now a distinct possibility, and this heightened foreseeability has infused the duty to protect with a heightened standard of care. The implication of the long-term viability of future application of the standard of care has changed.

B. ACCOUNTABILITY

Irene Golinski, whose husband Ron, died at the Pentagon said she is leaning towards filing a suit for damages. She notes succinctly that for her, “[i]t’s not about money, it’s about accountability.” In her opinion, taking a check from the Fund does not give answers, but, alternatively, litigation may provide answers about the airlines and other parties involved. The Victim Compensation Fund has provided families and victims with compensation, but it has not answered the questions about why this horrible event occurred, and what could have been done to prevent it from ever happening. Seemingly, the answer to who is accountable for these losses can best be solved through our traditional tort system.

At the forefront of the accountability argument is that the government had some idea about a possible attack prior to September 11, 2001. During a daylong hearing on Capitol Hill, many disclosures regarding the vulnerable airline security system at the time of the September 11, 2001 attacks were made. The hearings focused on the screening procedures, inadequate background information on the potential terrorists, and a lack of communication between intelligence agencies, the FAA, and the airlines. It was reported that 9 of the 19 hijackers triggered security concerns, and were subjected to additional screening on September 11, 2001. According to the National Commission investigating the events of September 11, 2001, these individuals were allowed to board the planes because officials were focused on checking for explosives. Agents at Newark International Airport flagged one of the hijackers boarding the

95. Watters & Lawder, supra note 43, at 810.
96. Id. at 817.
97. Id.
98. Getlin, supra note 80 at A16.
99. Id.
100. Id.
102. See id.
103. Id.
104. Id.
United Airlines flight 93 that crashed in Pennsylvania.\textsuperscript{105} The report states that although the hijacker's bag was screened for explosives and subsequently boarded on the airplane, the hijacker himself boarded the plane without any difficulty.\textsuperscript{106} All five of the hijackers boarded American Airlines flight 77 that crashed into the Pentagon were singled out for security reasons, but again they were allowed to board with no further questions.\textsuperscript{107} One had no bags; the others were held until it was confirmed that they had boarded; and three of them set off the security alarms, but after being checked with metal-detection hand wands or explosive detectors they were allowed to proceed.\textsuperscript{108}

Some families hope that by filing a lawsuit they will uncover information about government and corporate missteps that allowed the hijackers to carry out their plot, while other families dislike the idea that taxpayers should foot the bill for the death of their loved ones.\textsuperscript{109} With taxpayers footing the bill for the Victim Compensation Fund, it is difficult to determine whether or not the right people are held responsible for the September 11, 2001 attacks. In the wake of the nation's largest budget deficit, the idea of allowing taxpayers to pay for the losses of other mass casualty situations becomes less sensible.\textsuperscript{110}

With respect to this budget issue, in February 2004, President Bush announced a $2.4 trillion budget that promises to cut the deficit over the coming five years.\textsuperscript{111} The fiscal blueprint going before Congress, estimates that the budget deficit in the current fiscal year, ending September 30, will reach a record $521 billion, from $375 billion last year.\textsuperscript{112} On President Bush's watch, the budget surplus built up by President Clinton has been replaced by what the President's accountants anticipate will be about $1.35 trillion in deficit spending over the next five years.\textsuperscript{113} President Bush described the deficit as a reflection of the happenings that have shaped his presidency, such as the recession, the September 11th attacks, and the war in Iraq.\textsuperscript{114}

\begin{thebibliography}{9}
\bibitem{105} Id.
\bibitem{106} Id.
\bibitem{107} Id.
\bibitem{108} Id.
\bibitem{111} Id.
\bibitem{112} Id.
\bibitem{113} Id.
\bibitem{114} Id.
\end{thebibliography}
C. SYMPATHY NO LONGER AN ISSUE

When the nation woke up to the shock and horror of September 11, 2001 there was an outpouring of sympathy for the victims and their families. Everyone spoke of uniting behind our government, and most importantly, our President, as we stepped out to fight a long battle. While the outpouring of sympathy and hope remains for the victims and families who suffered extraordinary losses, there is now a demand for information on why this happened and why our country was unable to prevent the occurrence. As discussed earlier, there have been calls for hearings to shed light on the events leading up to the attack. There were intelligence reports dating back to March of 1998 about the possible use of airliners for suicide terrorist hijackings, but all the intelligence was discounted.115

Despite the support remaining for the victims and the families who still suffer from September 11, 2001 there is a plea for answers as to why the United States fell victim to such a horrific attack on its own soil.

VI. THE VICTIMS COMPENSATION FUND TODAY

Monday December 22, 2003, was the last date for those wishing to take advantage of the Victims Compensation Fund.116 All those victims who chose to apply for the Fund had to do so on or before the December 22 deadline. As of December 22, 2003, 2,838 eligible victims had filed preliminary applications on behalf of those victims who had died, or approximately ninety-five percent of those eligible.117 This number compared to the 1,800 who had filed one month earlier.118 Federal officials stated that the program had achieved its two goals of “(1) offering billions of dollars in compensation to families and to injured victims, (2) while protecting the airlines from potentially ruinous litigation.”119 There are many reasons contributing to the increase in the number of relatives applying on behalf of victims during the last few weeks before the deadline. Some victims and family members did not know the Fund existed, and therefore, failed to take advantage of opportunities, while others were so grief stricken that the application process seemed overwhelming.120 Thus far, the fund has made 1,800 payments ranging from $250,000 to $6.9 million to families and victims of the September 11 at-

115. See id.
116. See Relatives of Victims Rush to File for 9/11 Fund, supra note 13 (“Officials with the federal Victim Compensation Fund . . . said applications had come in by the hundreds as the hours to the midnight deadline wound down Monday [December 22, 2003]”).
117. Id.
118. Id.
119. Id.
120. See id.
tacks.121 These 1,800 payments have totaled roughly $1.5 billion in spending for the Fund.122

VII. CONCLUSION

By most accounts the Victim Compensation Fund has been successful. With over 95 percent of those who were eligible for the Fund applying, it has achieved its goal. There are many benefits that the Victim Compensation Fund provides, such as providing an alternative to litigation, allowing undocumented workers to recover benefits, preventing a feeding frenzy for private attorneys, and giving the airlines the opportunity to recover from the losses suffered because of the September 11th attacks. While these benefits have made a significant difference, the Fund has received much criticism.

Those who have chosen to litigate believe that someone or something should be held accountable for the tragic events of September 11, 2001. For these victims it is not about the money that they might receive if they are triumphant in the traditional tort litigation system, but it is about answers. An additional concern is that taxpayers should not be responsible for the lack of care exercised by the airlines and the remaining defendants. Many of the families are angered by the idea that the Fund places a higher value on the lives of those individuals who made a higher wage versus those who worked for next to nothing. Furthermore, there are those families who have suffered losses at the hands of other terrorist attacks and have not been given the opportunity to benefit from such a Fund.

As a nation, we are in a time where there is a serious call for answers about how and why September 11, 2001 happened, and the subsequent events that have brought us to war in Iraq. The unique implications of September 11, 2001 for the airline transportation industry have undeniably changed the landscape of competition for at least the next decade, and as one of the principle remedies involved in recovering from this attack, the Fund represents a model of compensation to suit the new realities of the 21st century. Thus far, it is fair to say that the Fund should not be applied to all mass casualty situations below the magnitude of another September 11th style attack, but in those situations reflective of this new form of asymmetrical warfare, it remains a viable alternate to tradition tort litigation to allow a nation to promptly recover from attack.

121. Id.
122. Id.
Border Crisis: Time for a New Collective Review of Tri-Nation Border Security

Daniel C. Stiles*

I. INTRODUCTION

This article will highlight the impact of the tragic events of September 11, 2001 on the land-based transportation of goods across the borders between the United States and its two largest trading partners: Canada and Mexico. Additionally, this article provides an introductory analysis of a tri-nation border security agency that would likely facilitate implementation of the new policies and regulations facing the transportation industry.

The article begins in Part I with an introduction of the nature of land-based trade between the United States, Canada, and Mexico, including the problems encountered as a result of the implementation of new security regulations. Part II of the article identifies some of the new regulations placed upon transportation of goods internationally between the United States, Canada, and Mexico. Part III of the article sets forth the tri-nation border security agency and some specific legal issues and challenges raised by its implementation.

II. BACKGROUND

"As the world's largest trading nation, the United States relies heavily on a vast transportation network to expedite the flow of goods and

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* JD Candidate, 2004
people to and from its trading partners." At least one commentator has noted that the "nation's economic growth is dependent on increasing international commerce and decreasing the impediments of borders." Nonetheless, over 400 laws arising from more than 40 federal agencies regulate the U.S. cross-border transportation network. Even before the attacks of September 11, 2001, the vast volume of trade and traffic on the United States' borders put immense pressure on the ability of the U.S. Customs and Border Patrol to balance enforcing our nation's laws with facilitating international trade.

In the wake of September 11, 2001, the challenge of balancing the nation's security needs with facilitating international transportation of goods rose to a new level. September 11, 2001 imposed a new and critical focus on border management in which security and trade facilitation became mutually reinforcing priorities. This new and focused risk-based border management approach is aimed at enabling low-risk people and goods to move efficiently while at the same time focusing resources on high-risk travelers and cargo.

Improving security of transportation of goods between the United States, Mexico, and Canada presents a daunting challenge. Several core challenges remain at the forefront of the development of transportation security policy, including: (1) the best way to "harden" low-volume, high-risk ports of entry that pose a significant threat to overall border security; (2) the best way to develop and deploy non-intrusive technology to detect the implements of terrorism; and (3), the best way to recruit, train, and house the additional Customs officers at the nation's borders. Furthermore, as U.S. international trade continues its expected growth, "domestic transportation issues, including port access and cargo security, will need to be evaluated on a continuing basis." Perhaps the greatest challenge involves maintaining the right balance between enhanced border security and the smooth flow of legitimate trade and travel expected in our just-in-time global economy. To address these and other

4. Id at 19.
5. Id.
8. Id.
challenges facing land-based trade, the Governments and industries of
the United States, Canada, and Mexico will need to work "[t]ogether for
solutions that will prevent terrorist attacks while maintaining an efficient
flow of goods."9

A. TRADE ACROSS THE UNITED STATES' LAND BORDERS

Since the implementation of the North American Free Trade Agree-
ment (NAFTA) in 1994, trade between the United States, Canada, and
Mexico has increased dramatically.10 "NAFTA is a regional agreement
between the Government of Canada, the Government of the United
Mexican States and the Government of the United States of America"
that implemented a free trade area.11 A core objective of NAFTA is to
eliminate barriers to trade in, and facilitate the cross-border movement
of, goods and services between the territories of the parties to the agree-
ment.12 As a result of NAFTA, trade between the U.S. and Mexico has
expanded threefold, and fourfold between the U.S. and Canada.13

For example, in the period from November 2002 to November 2003,
the total value of exports by surface modes of transportation to Canada
was over $166 billion.14 Imports into the United States across the Cana-
dian border totaled over $222 billion.15 During the same period, the total
value of exports by surface modes of transportation to Mexico was over
$92 billion.16 Imports into the United States from Mexico totaled nearly
$124 billion.17

More important to this article is that fact that two-thirds of all
NAFTA Trade is transported by trucks through various points of entry
along the northern and southern borders to the United States.18 In fiscal
year 2001, the California-Mexico ports of entry alone processed 1.2 mil-
lion commercial trucks carrying goods with a value topping $22 billion.19
The Arizona-Mexico border processed over 336,000 commercial trucks.20

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15. Id.
17. Id.
19. Id. at 10
20. Improving Security and Facilitating Commerce at the Southern Border, Committee on
Before September 11, 2001 $1.3 billion in trade crossed the U.S./Canadian border each day.21 The service port of entry in Blain, Washington alone processed nearly 800,000 commercial trucks in 2001.22 Together, these statistics present a snapshot of the immense economic importance of maintaining the secure and efficient flow of goods across the United States' land borders with Canada and Mexico. Furthermore, the staggering number of vehicles crossing the border each year illustrates the enormous resources required by each of the United States, Canada, and Mexico to maintain the right balance between border security and the smooth flow of legitimate trade and travel.

B. LENGTHY DELAYS AND REDUCED COMMERCIAL TRAFFIC

In the hours following the September 11, 2001 attacks, our nation's ports were placed on high security alert.23 The tightening of security at the Nation's borders after the terrorist attacks resulted in a serious slowdown in international trade.24 For example, total trade with Canada by all land modes of transportation declined by approximately $24 billion between 2000 and 2002.25 Similarly, total trade with Mexico by all land modes of transportation declined by over $11 billion between 2000 and 2002.26

Not surprisingly, intensification of border inspection procedures led to lengthy border crossing wait times.27 Traffic delays in turn resulted in a lower overall number of border crossings.28 For example, in the southern United States, during the initial weeks following the attacks of September 11, 2001, truckers were experiencing wait times in excess of two hours at the San Ysidro Port of Entry.29 While wait times have gradually

22. Id.
23. Freight Growth and Concerns, supra note 6, at 9.
26. $11 billion represents the approximate difference between the total trade with Mexico by all land modes of transportation in 2002 and 2001 reported by the United States Bureau of Transportation Statistics at: http://www.bts.gov/ntda/tbscd/reports/annual02/nat_m2002.html and http://www.bts.gov/ntda/tbscd/reports/annual01/nat_m2000.html.
27. Transborder Surface Transportation Data, supra note 17, at 9.
28. Id.
29. Id.
been reduced to an average of forty-five minutes at the world's busiest port of entry, San Ysidro, the delay is not insignificant.\textsuperscript{30} As recently as October 20, 2003, at the Otay Mesa port of entry not too far from San Ysidro, commercial trucks experienced wait times of up to four hours.\textsuperscript{31}

The northern ports of entry between the United States and Canada have presented similar problems for the transportation of goods across the border since September 11, 2001. Despite increased temporary staff at the 128 ports of entry along the U.S./Canadian border, "[l]ong lines have plagued both travelers and international commerce."\textsuperscript{32} However, some northern ports have been able to "[r]educe waiting times at the border to the levels they were at prior to the September 11, 2001 attacks."\textsuperscript{33} Thus, both reduced commercial traffic and delays at border crossings persist in the wake of the terrorist attacks of September 11, 2001.

III. CURRENT POLICIES

The security of the nation's borders remains at the forefront of United States' policy agenda. Most policy makers agree that "it would be counterproductive and damaging to the U.S. economy to inspect 100% of the 7 million sea containers or the 11 million trucks that arrive in the United States every year."\textsuperscript{34} Yet, the United States' heightened sense of urgency in dealing with the terrorist threat in the wake of the attacks of September 11, 2001 led Congress to consider numerous proposals to increase security at the nation's ports.\textsuperscript{35} Some 30,000 different ideas have been presented to the United States Customs Service to develop a solution for providing tighter security and at the same time facilitating the flow of commerce at the Nation's borders.\textsuperscript{36}

While some of the ideas proposed to customs have been implemented, the combined effect of the long delays at some border crossings and the reduction in commercial traffic continues to raise concerns about

\textsuperscript{30} Id.

\textsuperscript{31} Crossing Over; Truckers Protest Long Waits at the Border, SAN DIEGO UNION-TRIB., Oct. 20, 2003.

\textsuperscript{32} Improving Security, supra note 3, at 9.

\textsuperscript{33} Id. at 24.


\textsuperscript{35} Improving Security, supra note 3, at 1.

the effect of the United States' heightened security policies on trade. Early efforts at meeting the new security needs of the United States and combating its effect on the transportation of goods entailed basic increases in the number of staff at the ports of entry. Over the course of the past two years, there have been countless meetings between industry leaders, government agencies, members of the U.S. Congress and Senate, and community members to develop strategies to meet the twin goals of increased security and facilitation of the transportation of goods across the border. As a result of these meetings, numerous laws creating new agencies and programs have been passed in the wake of September 11, 2001 with these dual objectives in.

A common theme among the current initiatives being implemented by the United States is to push the zone of customs inspection activities outward from U.S. points of entry to foreign points of origin. In particular, several of the new programs, including the Customs-Trade Partnership Against Terrorism (C-TPAT) and the Advance Cargo Information initiative, are aimed at extending our nation's zone of security against the threat of terrorism and facilitating the transportation of goods across the border. The C-TPAT and Advance Cargo Information programs are discussed briefly in turn.

A. CUSTOMS-TRADE PARTNERSHIP AGAINST TERRORISM

C-TPAT is a "[j]oint government-business initiative to build cooperative relationships that will strengthen overall supply chain and border security." The underlying principle of C-TPAT is that "businesses take significant steps towards policing themselves at international borders in exchange for a quicker trip through customs." As a condition to participating in C-TPAT, companies must enter into an agreement with the U.S. Customs and Border Protection (CBP). The agreement between a company and the CBP requires the company to:

37. Id. at 1.
38. Improving Security, supra note 3, at 1.
39. Id. at 2.
40. Id. at 1.
42. Id.
45. C-PAT Fact Sheet, supra note 43.
(1) conduct a comprehensive self-assessment of supply chain security using the C-TPAT security guidelines jointly developed by Customs and the trade community; (2) submit a supply chain security profile questionnaire to Customs; (3) develop and implement a program to enhance security throughout the supply chain in accordance with C-TPAT guidelines; and (4) communicate C-TPAT guidelines to other companies in the supply chain and work toward building the guidelines into relationships with these companies.46

There are several perceived benefits to the C-TPAT program. The greatest benefit of the program to companies transporting goods across the border is a reduction in the number of inspections and access to a "fast lane" through border crossings.47 High technology dedicated travel lanes “[w]ill be made available only to those large firms willing to dedicate extra resources to securing their shipments to the United States.”48 Additionally, the partnership between CBP and the trade industry allows the CBP to facilitate the flow of low-risk traffic by focusing inspection resources on high-risk traffic.49 As of August 2003, over 3,400 companies are participating in the C-TPAT program.50

B. Advance Cargo Information

Critical to expediting the transportation of goods across the Nation’s borders in the face of heightened security, is advance collection of cargo information. On November 20, 2003, the Department of Homeland Security announced rules pursuant to the Trade Act of 2002 regarding collection of advance cargo information.51 The new rules require companies transporting goods across the U.S. border to file electronically information regarding their shipment prior to arrival at a U.S. port of entry.52 The required data includes details of what goods are being moved and the identities of shippers and receivers.53

The timeline for submitting electronic data about cargo to the CBP varies depending on the mode of transportation. Air and courier services are now required to submit information four hours prior to arrival in the

46. Id.
49. Id.
50. Id.
52. Id.
United States.\textsuperscript{54} Shippers with cargo traveling by rail and ocean going vessels are required to submit information two or twenty-four hours, respectively, prior to arrival at a U.S. port of entry.\textsuperscript{55} Truckers will be required to submit advance electronic information about their cargo either thirty minutes prior to arrival, if they are a part of the Free and Secure Trade (FAST) program, or one hour prior to arrival if they are non-FAST.\textsuperscript{56}

The information gathered from transportation companies is "transmitted to a CBP data center in Northern Virginia called the National Targeting Center."\textsuperscript{57} Various law enforcement and commercial databases will be linked to an automated targeting system that will process the advance cargo information.\textsuperscript{58} Access to advance information will allow the CBP to target high-risk cargo for inspection at ports of entry.\textsuperscript{59} By allowing the CBP to focus on high-risk cargo, low-risk cargo will once again flow smoothly between the United States, Canada, and Mexico.

\section*{C. Problems with the New Trade Security Policies}

The new C-TPAT and advance cargo information policies will present several challenges to the transportation of goods between the United States, Canada, and Mexico. For example, the expected mid-2004 implementation of the rule will require transportation companies to rapidly assimilate the new reporting requirements into their business processes. In addition to businesses not being ready to submit advance cargo information, a tremendous amount of resources will be necessary for the United States to process the information being submitted. Whether the United States will be able to effectively process and use the vast amount of information collected to thereby provide heightened security remains to be seen.

Specific to the trucking industry, the Chamber of Commerce and the American Trucking Association (ATA) have expressed concerns about problems trucking companies may have meeting the C-TPAT and advance cargo information requirements. Unlike the limited number of rail, air, and seagoing carriers in operation, the trucking industry includes numerous companies, large and small. In fact, "[eighty] percent of U.S. trucking firms operate five or fewer trucks, and... most are unable to

\begin{thebibliography}{99}
\bibitem{54} Department of Homeland Security, \textit{supra} note 51.
\bibitem{55} Id.
\bibitem{56} Id.
\bibitem{57} John Mintz, \textit{supra} note 53.
\bibitem{59} Id.
\end{thebibliography}
collate and transmit data electronically to government agencies."  

Additionally, the ATA is concerned about "truckers’ ability to communicate quickly with CBP once their loads have been cleared for border crossing."  

Often, trucking firms require an immediate decision "[t]o prevent disruptions in the supply chain and to keep on schedule to satisfy the time-sensitive demands of... just-in-time manufacturing."  

Thus, implementation of new programs like C-TPAT and advance cargo information will present challenges to the transportation of goods between the United States, Canada, and Mexico.

IV. POLICY ALTERNATIVES FOR THE FUTURE: COOPERATIVE APPROACHES TO BORDER SECURITY

The United States, Canada, and Mexico "[s]hare a common border and common objectives: to ensure that the border is open for business, but closed to crime."  

Because of the above stated objectives, "[s]ecurity now involves cooperation as never before."  

However, "[a]sking for local, state, and national law enforcement agencies to interact toward common goals in a seamless fashion would have seemed just five years ago to have been asking for the moon."  

Not only are law enforcement agencies in the United States, Canada, and Mexico responsible for enforcing different laws, they each operate within their own complex bureaucracy. Yet, there are calls for "a ‘trilateral future’ in which the North American security perimeter includes all three countries."  

Before such a "trilateral future" may exist, a significant amount of trust, respect, and cooperation between all three countries will be required to bridge existing political, legal, and cultural gaps.

However, cooperation between the United States, Canada, and Mexico in border security initiatives is not a new concept. For example, since 1997, U.S. and Canadian law enforcement agencies have worked together to improve security along the Northern border under a program called the Integrated Border Enforcement Team.  

After the terrorist attacks of

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61. Id.
62. Id.
65. Id.
66. Id.
September 11, 2001, the U.S. Department of Homeland Security made efforts to collaborate with Canada and Mexico in border security programs by entering into “Smart Border” agreements.68 One of the intended purposes of the “Smart Border” agreements is to address the reduced commercial traffic and congestion along the Nation’s borders since September 11, 2001.69 The Smart Border agreements between the United States, Canada, and Mexico include initiatives to harmonize port of entry operation, share border facilities, jointly train officers, and share customs database information.70 Thus, cooperation between the United States, Canada, and Mexico is part of a current strategy to secure the Nation’s borders while facilitating the flow of goods.

A. THE TRI-NATIONAL BORDER SECURITY AGENCY

The time is ripe to build upon existing cooperative border security initiatives, such as the U.S. Department of Homeland Security’s “Smart Border” Action Plan, by creating a tri-national border security agency. In the wake of the attacks of September 11, 2001, Val Meredith, a member of the Canadian Parliament, first suggested a bi-national border management agency to the U.S. Committee on Government Reform.71 Meredith suggested that the bi-national agency between Canada and the United States should ultimately become a tri-national agency with the inclusion of Mexico.72

The tri-national border security agency (Agency) would be funded pro rata by the United States, Canada, and Mexico. The U.S. Customs and Border Protection (CBP) officials and their counterparts from Canada and Mexico would staff the Agency.73 The United States, Canada, and Mexico would each appoint senior managers to the Agency.74 Military and security organizations from each country would also have liaison officers to the tri-national border security agency as needed.75 Finally, the tri-national border security agency would be housed in a joint head-

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70. The White House, supra note 68.
71. Committee on Government Reform, supra note 67 at 56 (written submission of Val Meredith, M.P.).
72. Id.
73. Id.
74. Id. at 57 (written submission of Val Meredith, M.P.).
75. Id.
quarters and operate out of joint border facilities.\textsuperscript{76}

The recent United States "Smart Border" agreements have laid the groundwork for a tri-national agency and include some of the Agency's programs, as first suggested by Meredith. Using a common database, the Agency would be able to monitor the entry of people into and out of the North American continent.\textsuperscript{77} Each country would contribute information to the shared database. For example, the United States would share information from the C-PTAT and advance cargo information programs with the Agency database. The transportation of low-risk cargo by companies participating in an automated pre-clearance program, much like the CBP's new advance electronic cargo information requirements, would be expedited with minimal delay using Intelligent Transportation System technology.\textsuperscript{78}

B. INTEGRATION OF A TRI-NATIONAL BORDER AGENCY WITH INTERNATIONAL LAWS

As discussed earlier in this article, over 400 laws arising from more than forty federal agencies regulate the cross-border transportation network.\textsuperscript{79} To be effective at reducing duplicative border security efforts and providing smooth and rapid transportation of goods internationally, a tri-national border security agency would require unified or substantially similar customs regulations between the United States, Canada, and Mexico.

However, harmonization of portions of the laws of the United States, Canada, and Mexico is not an unthinkable task. For example, the implementation of NAFTA required harmonization of international laws by requiring the United States, Canada, and Mexico to conform many of their domestic trade laws to implement a free trade zone.\textsuperscript{80} Furthermore, one of the core objectives of NAFTA was to "[e]stablish a framework for further trilateral, regional and multilateral cooperation to expand and enhance the benefits..." of the tri-nation agreement.\textsuperscript{81} Accordingly, NAFTA has provided a framework for the successful harmonization of trade security laws between the United States, Canada, and Mexico.

Like the harmonization of trade regulations in the domestic laws of the United States, Canada, and Mexico for NAFTA, the creation of a tri-national border security agency will require the three nations to conform their land border customs security laws. Similar to the gradual imple-

\textsuperscript{76} Id.
\textsuperscript{77} Id.
\textsuperscript{78} Id. at 56 (written submission of Val Meredith, M.P.).
\textsuperscript{79} Id. at 21 (statement of Thomas W. Hardy).
\textsuperscript{80} "What is NAFTA", supra note 12.
\textsuperscript{81} Id.
implementation of uniform trade regulations in NAFTA, harmonization of customs laws necessary to support a tri-national border security agency has already begun. For example, the United States and Canada are working to align customs processes for all commercial shipments by 2005. 82 Efforts are underway to harmonize the Canadian 24-hour rule, which requires transmission of manifest information for sea cargo to customs 24 hours in advance of loading, with the current United States’ 24-hour rule. 83 Furthermore, in July 2003, Canada and the United States announced proposed harmonized rules for advance electronic cargo reporting for rail, air and highway modes of transportation of goods internationally. 84 Thus, the harmonization of laws for existing programs provides a roadmap to facilitate the changes in law that will be required in the United States, Canada, and Mexico to support a tri-national border agency.

C. CHALLENGES FACING A TRI-NATIONAL BORDER AGENCY

Even ten years after the implementation of NAFTA, its benefits are still being debated. 85 However, the controversy surrounding the success or failure of NAFTA is not centered on the ability of the United States, Canada, and Mexico to harmonize their trade laws. 86 Rather, NAFTA’s critics focus on the fact “[t]hat NAFTA’s impact on the U.S. economy has varied dramatically from place to place and industry to industry.” 87 More importantly, NAFTA critics argue that NAFTA “[f]ailed to address problems created by massive industrialization . . .” along the nation’s borders, including the steady stream of trucks that clog the highways. 88

A common perception among nations, including Canada and Mexico, is that the terrorist attacks of September 11, 2001 “[b]rought a new single-mindedness to U.S. foreign and domestic policy. . . .” 89 Furthermore, the “economic and power differential between the U.S. and Mexico” often lead to Mexican sensitivity about U.S. influence. 90 Similarly, Canadian think tanks have expressed that “[w]ithout Canadian coopera-

83. Id.
84. Id.
86. Id.
87. Id.
88. Id.
90. Garcia, supra note 64.
tion in tightening administration along the border, the process will be frustrating, costly and unproductive" to both the United States and Canada. Accordingly, a cooperative approach to the formation and implementation of a tri-national border security agency will be critical to its success.

"[C]ommon border security must be assured without hampering commerce and travel" between the United States and Canada. Similar to the concerns raised by U.S. trucking companies to the new regulations currently being implemented by the CBP, Canadian and Mexican companies will likely be apprehensive about the imposition of new regulations in their respective nations. For example, Canadian and Mexican trucking companies will likely share concerns similar to that of American trucking companies, discussed supra, about their ability to implement C-PTAT and advance cargo information requirements.

Furthermore, enforcement of a tri-national border agency's regulations may conflict with existing informal working agreements between companies and border communities. Thus, any planning for the Agency should include the input from the municipalities, counties, provinces, and states in all three countries that share the border.

D. Benefits of a Tri-National Border Agency

A tri-national border security agency would provide a unified front to citizens and commerce at the borders between the United States, Canada, and Mexico. The greatest perceived benefit of a tri-national agency would be avoiding duplication of efforts. By sharing information and avoiding duplicative efforts, the Agency would provide intensified and efficient security at the Nation's ports. The Agency would also "[e]nsure that there is appropriate infrastructure ... at land crossings, to separate low-risk, pre-cleared individuals and goods, from those that are not." Knowledge management and shared databases of high-risk cargo between the United States, Canada, and Mexico will better enable the United States to ensure the safe and efficient flow of goods across the border. More importantly, the harmonized regulations fostered by the

91. The Globe and Mail, supra note 89.
92. Committee on Government Reform, supra note 67, at 8 (statement of Congressman Rick Larsen).
94. Id.
95. Id.
96. Id.
97. Id.
creation of the Agency will simplify the cross-border transportation of goods.

V. Conclusion

The terrorist attacks of September 11, 2001, changed the face of our nation's borders for the companies who transport and rely upon the goods that cross our borders each day. The heightened security and inspection of commercial cargo has led to increased wait times and delays in the transportation of goods across the border. New programs like C-TPAT and the advanced electronic cargo information requirements promise to balance the competing needs of heightened security with facilitating the transportation of goods. However, consideration of policy alternatives like cooperative approaches to border security and the creation of a tri-national border security agency will ensure the future facilitation of transportation of goods across the border.

Owen Bishop*

I. BACKGROUND

On September 11, 2001, the world fundamentally changed. The United States witnessed the worst terrorist attack in the nation's history with the catastrophe at the World Trade Center in New York, the attack on the Pentagon in Washington, D.C., and the tragic airline crash in Pennsylvania. As a result of these senseless tragedies, America was compelled to reexamine its homeland and international security policies and procedures.

After the terrorist attacks against the United States on September 11, 2001, President George W. Bush and the United States Congress determined that the numerous agencies and entities involved in domestic security and preparedness needed to be better coordinated with one another. As a result, President Bush created an Executive Office of Homeland Security to protect the United States against future terrorist threats to the homeland. After realizing that the Office of Homeland Security lacked certain capabilities and powers necessary to be effective in protecting the homeland, the President proposed the creation of a new Department of Homeland Security.1 On January 24, 2003, former

* JD Candidate 2005
Pennsylvania Governor Tom Ridge was sworn in as the first Secretary of the newly created Department of Homeland Security. As discussed on the Department of Homeland Security’s website, “[t]he creation of the Department of Homeland Security (DHS) [was] the most significant transformation of the U.S. government since 1947, when Harry S. Truman merged the various branches of the U.S. Armed Forces into the Department of Defense to better coordinate the nation’s defense against military threats.” One of the primary missions of the DHS is to secure and protect the United States’ transportation system, including aviation, mass transit, maritime and port security, pipelines, and surface transportation.

Maritime security is a critical component of the homeland security mission. The maritime security mission includes protecting the nation’s ports and waterways from a terrorist attack, as well as improving the security of international shipping and commerce. One of the most important components of maritime security, and the topic of this paper, concerns the area of cargo container security.

This paper begins with an introduction to several of the entities involved in maritime security, including an overview of the Maritime Transportation Security Act of 2002. Next, major pragmatic implications, both legal and fiscal, of the new policy will be examined. Finally, the paper concludes with recommendations for enhanced partnership of private and public sector actors to offset the significant cost of these new cargo container security initiatives and programs.

II. OVERVIEW OF ENTITIES AND POLICIES INVOLVED IN MARITIME SECURITY

A) BUREAU OF CUSTOMS AND BORDER PROTECTION AND THE UNITED STATES COAST GUARD

The Bureau of Customs and Border Protection (CBP) and the United States Coast Guard are the two U.S. governmental entities primarily responsible for maritime security, including cargo container security. As a new agency within the Department of Homeland Security, CBP was created to consolidate the various U.S. agencies responsible for border

protection and security. The agencies now within CBP include U.S. Customs, the Border Patrol, the Immigration and Naturalization Service, and agriculture inspectors from the U.S. Department of Agriculture.6 The Coast Guard is responsible for protecting more than 361 ports and 95,000 miles of coastline.7 The Coast Guard's homeland security role includes the need to:

- Protect ports, the flow of commerce, and the marine transportation system from terrorism;
- Maintain maritime border security against illegal drugs, illegal aliens, firearms, and weapons of mass destruction;
- Ensure that we can rapidly deploy and resupply our military assets, both by keeping Coast Guard units at a high state of readiness, and by keeping marine transportation open for the transit assets and personnel from other branches of the armed forces;
- Protect against illegal fishing and indiscriminate destruction of living marine resources, prevention and response to oil and hazardous material spills—both accidental and intentional;
- Coordinate efforts and intelligence with federal, state, and local agencies.8

In the area of homeland security:

The Coast Guard serves as: (1) the lead federal agency for Maritime Homeland Security when responses require civil authorities; (2) the Federal Maritime Security Coordinator in U.S. ports as designated by the Maritime Transportation Security Act of 2002; (3) a supporting agency to the Federal Emergency Management Agency for declared disasters or emergencies under the Federal Response Plan; (4) a supporting agency to the lead federal agency for specific events under the provisions of the current U.S. Government Interagency Domestic Terrorism Concept of Operations Plan and its projected replacement by the Federal Incident Management Plan; and (5) as a supporting or supported commander for military operations conducted under Title 10.9

The Coast Guard occupies a unique role in homeland security because of its dual role as both an armed force and a law enforcement agency. “Since the Coast Guard is simultaneously, and at all times, both an armed force of the United States (14 U.S.C. 1), and a law enforcement...

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8. Id.
agency (14 U.S.C. 89), its capabilities are extremely relevant, valuable, and needed for Maritime Homeland Security, whether the threat is termed a military or terrorist attack."

B) International Maritime Organization

In addition to the domestic entities involved in maritime security, the International Maritime Organization (IMO) provides an international forum for cooperation and coordination in the maritime industry. The IMO, an agency of the United Nations, was established during an international conference in 1948. The IMO is one of the smallest United Nations' agencies with a staff of approximately 300 people. The major missions of the IMO are:

[T]o provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships.

The IMO also handles administrative and legal matters related to these missions, including security and safety issues.

The September 11, 2001 terrorist attacks on the United States created a much stronger emphasis on improving international security coordination in all modes of transportation, including international shipping. Through a recent diplomatic conference, the IMO created a new, comprehensive security regime for international shipping that will enter into force in July 2004. The focus of this new security regime is strengthening maritime security, while also preventing and suppressing acts of terrorism in the shipping industry. On December 12, 2002, "[t]he diplomatic conference of the IMO . . . modified the SOLAS [Safety of Life at Sea, one of the most important international maritime treaties] and initiated the ISPS [International Ship and Port Facility Security] Code." As a leading

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10. Id.
12. Id.
13. Id.
14. Id.
16. Id.
maritime organization, the IMO has an important role to play in the global war on terrorism, and in strengthening security measures in the international shipping industry.

C) THE EUROPEAN UNION

The European Union has also recognized the devastating impact that an act of terrorism could have on the maritime industry. In a recent press release, the European Commission stated that "[t]here is a need to enhance the security of the entire maritime transport chain, from the supplier to the consumer."18 As a result, the European Commission also recently "[a]dopted a communication and a proposal for a regulation to ensure the obligatory application throughout the European Union (EU) of the highest security standards on maritime transport, as agreed in the International Maritime Organization applicable to international commercial shipping, and to port facilities serving them."19

D) MARITIME TRANSPORTATION SECURITY ACT OF 2002

On November 25, 2002, President Bush signed the Maritime Transportation Security Act (MTSA) of 2002.20 This landmark legislation was passed to protect the nation’s ports and waterways by minimizing the risks of a terrorist attack. Among other things, the MTSA requires security plans for facilities and vessels that may be involved in any type of transportation security incident; an increase in the inspection level and use of technology for containerized cargo; the pursuit of international cooperation in enhancing maritime security; and the use of a risk-based system to better target those sectors of the maritime industry that have a higher risk of involvement in a transportation security incident.21

The MTSA is focused on improving maritime security throughout the world, due to the unique international nature of the shipping industry. The MTSA discusses the implementation of an automatic identification system, the use of a long-range vessel tracking system, the importance of secure systems of transportation, as well as the effective sharing of maritime intelligence.22 The MTSA also specifically states that, "[c]urrent inspection levels of containerized cargo are insufficient to counter potential security risks. . .[and] technology is not currently adequately deployed to

18. Id.
19. Id.
21. Id.
allow for the non-intrusive inspection of containerized cargo.” CBP and the Coast Guard have taken the lead roles in implementing the MTSA. CBP has taken the primary role in implementing improvements in cargo container security and inspections. The Coast Guard has taken the main role in implementing security improvements to protect America’s ports and waterways.

E) BUREAU OF CUSTOMS AND BORDER PROTECTION INITIATIVES

CBP has taken a lead role in strengthening maritime security, especially cargo container security. CBP has developed several specific programs, including the Container Security Initiative (CSI), the Customs-Trade Partnership Against Terrorism (C-TPAT), and Operation Safe Commerce (OSC). These programs were created to address potential security vulnerabilities created by ocean container trade and to deal with the possibility that potential terrorists could exploit these vulnerabilities to covertly transport, and potentially detonate, Weapons of Mass Destruction (WMDs) in the United States. Originally announced in January 2002, CSI allows CBP personnel to assist their foreign counterparts in screening cargo containers at CSI-designated foreign seaports. The main goal of these inspections is to identify and examine high-risk containers prior to their arrival at U.S. ports.

U.S. Customs initiated C-TPAT in November 2001, with the goal of improving the physical security of containers as they move through international commerce. As the U.S. Customs Service has defined it, “[u]nder C-TPAT, Customs officials work in partnership with private industry by reviewing supply chain security plans and recommending improvements.” In exchange for their participation, C-TPAT member businesses receive the benefit of a reduced likelihood that containers traveling along their international supply chains will be stopped and inspected for WMDs or held up for additional inspections.

In February 2002, the Department of Homeland Security as a test project to recognize and identify any potential security risks in an end-to-end supply chain initiated Operation Safe Commerce (OSC). The initial pilot project was conducted along a shipping route between the

25. Id.
26. Id.
27. Id. at 2-3
28. Id. at 3.
29. Id.
30. Transportation Security Administration, Business Opportunities: Operation Safe Com
England area of the United States and Eastern Europe. OSC was designed as a cooperative effort between the business community, the federal government, and the maritime industry to evaluate and develop best practices for the safe and efficient transportation of containerized cargo.32


The Container Security Initiative (CSI) is a program created by CBP. The goal of CSI is to extend the United States’ zone of security outward from the United States’ coasts by increasing the security of cargo containers and ships before they physically enter U.S. ports. Under CSI, maritime cargo containers that are identified as high-risk containers are examined at foreign ports before these containers are shipped to the United States. CSI consists of four core elements:

1. Establish security criteria for identifying high-risk containers based on advance information.
2. Pre-screen containers at the earliest possible point.
3. Use technology to quickly pre-screen high-risk containers.
4. Develop secure and “smart” containers.33

Increased security is critical in the area of containerized shipping, since “[a]bout ninety percent of the world’s trade is transported in cargo containers.”34 In the United States alone, “[a]most half of incoming trade (by value) arrives by containers onboard ships. Nearly seven million cargo containers arrive on ships and are offloaded at U.S. seaports each year.”35

The initial phase of CSI worked to implement the program at the top twenty foreign ports, as determined by the volume of containers shipped to the United States. The initial phase of CSI focused on these ports specifically because “[a]bout two-thirds of all the containers that are transported to the U.S. by sea come from or through...” these top twenty ports.36 CBP sends their inspectors to these foreign seaports to develop productive partnerships between CBP officials and their host nation

31. Id.
32. Id.
34. Id.
35. Id.
36. Id.
counterparts to target high-risk cargo containers. CBP has had great success in developing relationships with other countries, which helps secure the participation of these countries in the CSI program. Currently, “CSI is the only formal program in operation today designed to detect weapons of mass destruction and to deter terrorists from exploiting the vulnerabilities of containerized cargo.” At present, CSI is currently operational in numerous foreign port locations. CSI has been successful in improving the security of maritime cargo containers coming into United States’ ports, and, as the program continues to expand, maritime security will continue to improve.

2. **Customs-Trade Partnership Against Terrorism (C-TPAT)**

The Customs-Trade Partnership Against Terrorism (C-TPAT) is an initiative to build cooperative relationships between private business industries and the government. The major purpose of C-TPAT is to improve the overall economic security of both the United States and the global communities by protecting the worldwide supply chain and


40. *Id.*

**CSI PORT LOCATIONS:**
**IN THE WESTERN HEMISPHERE:**
- Montreal, Vancouver & Halifax, Canada
**IN EUROPE:**
- Rotterdam, The Netherlands
- Bremerhaven & Hamburg, Germany
- Antwerp, Belgium
- Le Havre, France
- Goteborg, Sweden
- La Spezia and Genoa, Italy
- Felixstowe, United Kingdom
**IN ASIA AND THE EAST:**
- Singapore
- Yokohama, Japan
- Hong Kong
- Busan, South Korea

Ports that are coming to CSI soon include:
**IN EUROPE:**
- Algeciras, Spain
**IN ASIA AND THE EAST:**
- Tokyo, Nagoya, Kobe and Osaka, Japan
- Shanghai & Shenzhen, China
- Laem Chabang, Thailand
- Port Kelang and Tanjung Pelepas, Malaysia
- Colombo, Sri Lanka
**IN AFRICA:**
- Durban, South Africa
strengthening the United States' border security. C-TPAT is unique because it recognizes that the highest level of security can best be achieved through close cooperation with the ultimate owners of the supply chain — importers, carriers, brokers, warehouse operators and manufacturers. C-TPAT businesses assist in improving economic security by reviewing the integrity of their security practices and communicating their security guidelines to their business partners within their supply chains. C-TPAT members receive the following benefits:

- A reduced number of inspections (reduced border times);
- An assigned account manager (if one is not already assigned);
- Access to the C-TPAT membership list;
- Eligibility for account-based processes (bimonthly/monthly payments, e.g.);
- An emphasis on self-policing, not Customs verification.

There are several steps that a company must take to become a C-TPAT member firm. The first step consists of a company signing an agreement with CBP. Through this agreement, a company signifies its commitment to enhancing its supply chain security by embracing C-TPAT security recommendations. A C-TPAT company also agrees to work closely with its service providers throughout its supply chain to enhance overall security procedures and processes. After signing the agreement, the second step a company must take is to review its supply chain security practices, using the C-TPAT industry security recommendations as a guideline. A company must document its observations in a security profile. The security profile is intended to be an executive summary of the company’s current and future supply chain security practices and vulnerabilities, as well as an indication of how these recommendations were communicated to its business partners overseas. After successfully completing all of these steps, a company is eligible to become a certified C-TPAT member business.

The C-TPAT program has thus far been successful in actively involv-
ing private businesses in the improvement of cargo security. According to C-TPAT officials, in January 2003, approximately 1,700 companies had signed C-TPAT agreements, becoming C-TPAT members and receiving the benefits of a partially reduced risk score.\(^{49}\) By May 2003, the number of agreements signed nearly doubled to 3,355.\(^{50}\) The C-TPAT program should continue to grow, thereby improving the overall security of the global maritime supply chain. A companion program, Operation Safe Commerce, is designed to benefit both the CSI and C-TPAT programs.

3. **Operation Safe Commerce**

In February 2002, the Department of Homeland Security initiated a test project in New England called Operation Safe Commerce (OSC).\(^{51}\) The OSC pilot project was designed to recognize and identify any potential security risks in an end-to-end supply chain.\(^{52}\) OSC examined the security procedures and vulnerabilities in an end-to-end supply chain for a containerized shipment entering the New England area of the United States from an Eastern European point of origin.\(^{53}\) With the tremendous success of the preliminary OSC pilot project, an Executive Steering Committee (ESC) was formed to manage and coordinate additional maritime container security efforts.\(^{54}\) This ESC is made up of numerous federal agencies, including the Transportation Security Administration, the United States Coast Guard, Customs and Border Protection, the Department of Commerce, the Justice Department, the State Department, and the Department of Transportation.\(^{55}\) Also, due to the success of the New England OSC project, Congress provided funds for additional OSC pilot projects at the three largest U.S. container loading centers. These three centers are the Port Authority of New York and New Jersey, the Ports of Los Angeles and Long Beach, and the Ports of Seattle and Tacoma.\(^{56}\)

The OSC project is designed as a cooperative public-private partnership between the business community, the federal government, and the maritime industry to develop and share best practices for the safe and efficient transportation of containerized cargo.\(^{57}\) A major goal of OSC is to improve the security of the global supply chain while facilitating the

\(^{49}\) *Id.*

\(^{50}\) *Id.* at 23-24.


\(^{52}\) *Id.*

\(^{53}\) *Id.*

\(^{54}\) *Id.*

\(^{55}\) *Id.*


\(^{57}\) *Id.*
efficiency of maritime commerce.\textsuperscript{58} OSC projects are designed to examine existing technologies and current business practices, and to discover important and beneficial information on container supply chain security deficiencies from point of origin to point of destination.\textsuperscript{59} For example, these projects evaluate and analyze supply chain security through the use of container tracking and tracing technology, non-intrusive detection strategies (such as x-rays and thermo-imaging), and improved security seal concepts.\textsuperscript{60} Integrating other container security programs currently in operation, such as CBP’s Customs Trade Partnership Against Terrorism (C-TPAT) and Container Security Initiative (CSI), and the U.S. Department of Transportation’s Intelligent Transportation System, is of particular importance in developing a synergistic focus on container security.\textsuperscript{61} The other main entity involved in maritime security, the U.S. Coast Guard, also has initiatives designed to improve and strengthen U.S. homeland security, as discussed below.

4. United States Coast Guard Initiatives

The United States Coast Guard defines its homeland security mission as “[t]o protect the U.S. Maritime domain and the U.S. Marine Transportation System and deny their use and exploitation by terrorists as a means for attacks on U.S. territory, population, and critical infrastructure.”\textsuperscript{62} The Coast Guard has implemented two specific initiatives, the 24-Hour Rule and the Automatic Identification Systems.\textsuperscript{63} These initiatives were created to address potential security vulnerabilities created by ocean container trade in the maritime industry.

a. 24-Hour Rule

The 24-Hour Rule is designed to provide U.S. authorities, especially the Coast Guard, with detailed information concerning the contents of the cargo that is on board any vessel coming to a U.S. port, prior to that vessel’s arrival in port. For any vessel, “manifests listing the contents of containers must be submitted to federal officials 24 hours before those containers are loaded onto ships” bound for U.S. ports.\textsuperscript{64} The main purpose of the 24-Hour Rule is to push the United States’ borders outward

\begin{itemize}
  \item \textsuperscript{58} Id.
  \item \textsuperscript{59} Id.
  \item \textsuperscript{60} Id.
  \item \textsuperscript{61} Id.
  \item \textsuperscript{64} Deborah Schoch, Los Angeles; Hahn Calls for U.S. Funds to Shore Up Waterfront Secur-
by providing a much better opportunity for the Coast Guard to intercept any vessel of interest prior to that vessel's arrival in a U.S. port.\textsuperscript{65} Additionally, the 24-Hour Rule assists legitimate maritime commerce by providing vessels that have followed the proper reporting procedures with an efficient process once such vessel arrives in a U.S. port.

b. Automatic Identification Systems

Automatic Identification Systems (AIS) provide detailed vessel information to agencies, such as the Coast Guard, for use in tracking and monitoring maritime vessels. The Coast Guard has been a strong advocate of AIS equipment because it is a system that automatically sends detailed ship information to other ships and shore-based agencies.\textsuperscript{66} The Coast Guard believes that “[i]nstalling AIS equipment on certain vessels traveling in [both U.S. and international] waters will allow comprehensive, virtually instantaneous vessel tracking and monitoring, increasing security and safety in shipping channels.”\textsuperscript{67} Again, like the 24-Hour Rule, the use of Automatic Identification Systems will increase U.S. homeland security, while also maintaining the efficiency of legitimate, international maritime commerce.

III. LEGAL AND FINANCIAL IMPLICATIONS OF COMPLIANCE WITH CBP INITIATIVES

A. LEGAL IMPLICATIONS OF NON-COMPLIANCE

There are significant legal implications associated with complying with CBP programs and initiatives. If a business fails to comply, the legal implications can be serious, potentially resulting in both civil and criminal penalties. As previously mentioned, Customs is one of the main governmental agencies responsible for legal compliance with maritime security programs and initiatives.

Since the founding of the Federal government under the U.S. Constitution in 1789, the enforcement of the Customs, navigation and related laws has been an important function of the Customs Service.\textsuperscript{68} Today, Customs has full authority to assess penalties and liquidated damage

\textsuperscript{65} The mayor responds to an investigation by ABC News in which it smuggled uranium into Los Angeles Harbor on a ship from Indonesia, Los Angeles Times, Sept. 12, 2003, § B, at 3.

\textsuperscript{66} U.S. Customs and Border Protection, supra note 63.


claims, seize merchandise for violation of Customs or other laws enforced by Customs, remit forfeitures, mitigate penalties, decide petitions, and cancel claims. 69 Willful negligence makes an individual or business subject to significant penalties, as contained in 19 U.S.C. 1618. 70 Customs has the authority to publish guidelines relating to the terms and conditions, as well as the penalties, for violations of Customs' laws, as contained in 19 U.S.C. 1623(c). 71 Under these laws, Customs has a significant ability to enforce the customs laws of the United States against any potential offenders and a meaningful role to play in the enforcement of CBP programs and initiatives.

In addition to Customs, the U.S. Coast Guard is the other chief enforcement agency with jurisdiction and authority to enforce compliance with laws related to maritime commerce. Under Title 33 of the Code of Federal Regulations, which concerns Navigation and Navigable Waters, the Coast Guard may pursue civil or criminal penalties against an offender, as outlined below:

(a) Civil and criminal penalty. Violation of any order or other requirement imposed under section 101.405 of this part is punishable by the civil and criminal penalties prescribed in 33 U.S.C. 1232 or 50 U.S.C. 192, as appropriate. 72

(b) Civil penalty. As provided in U.S.C. 70117, any person who does not comply with any other applicable requirement under this subchapter, includ-

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69. Id.
70. Tariff Act of 1930, 19 U.S.C.S. § 1618 (Law. Co-op. 2003) ("Whenever any person interested in any vessel, vehicle, aircraft, merchandise, or baggage seized under the provisions of this chapter, or who has incurred, or is alleged to have incurred, any fine or penalty thereunder, files with the Secretary of the Treasury if under the customs laws, and with the Commandant of the Coast Guard or the Commissioner of Customs, as the case may be, if under the navigation laws, before the sale of such vessel, vehicle, aircraft, merchandise, or baggage a petition for the remission or mitigation of such fine, penalty, or forfeiture, the Secretary of the Treasury, the Commandant of the Coast Guard, or the Commissioner of Customs, if he finds that such fine, penalty, or forfeiture was incurred without willful negligence or without any intention on the part of the petitioner to defraud the revenue or to violate the law, or finds the existence of such mitigating circumstances as to justify the remission or mitigation of such fine, penalty, or forfeiture, may remit or mitigate the same upon such terms and conditions as he deems reasonable and just, or order discontinuance of any prosecution relating thereto. In order to enable him to ascertain the facts, the Secretary of the Treasury may issue a commission to any customs officer to take testimony upon such petition: Provided, That nothing in this section shall be construed to deprive any person of an award of compensation made before the filing of such petition").
71. Tariff Act of 1930, 19 U.S.C.S. § 1623(c) (Law. Co-op. 2003) ("The Secretary of the Treasury may authorize the cancellation of any bond provided for in this section, or of any charge that may have been made against such bond, in the event of a breach of any condition of the bond, upon the payment of such lesser amount or penalty or upon such other terms and conditions as he may deem sufficient. In order to assure uniform, reasonable, and equitable decisions, the Secretary of the Treasury shall publish guidelines establishing standards for setting the terms and conditions for cancellation of bonds or charges thereunder").
ing a Maritime Security Directive, shall be liable to the U.S. for a civil penalty of not more than $25,000 for each violation. Enforcement and administration of this provision will be in accordance with 33 CFR 1.07.73

Additionally, there are penalties for violations of arrival, reporting, entry, and clearance requirements relating to maritime commerce discussed in the Tariff Act of 1930.74 The Tariff Act defines unlawful acts as follows:

**Unlawful acts**

It is unlawful — (1) to fail to comply with section 1431, 1433, or 1434 of this title or section 91 of the Appendix to Title 46; (2) to present or transmit, electronically or otherwise, any forged, altered or false document, paper, information, data or manifest to the Customs Service under section 1431, 1433(d), or 1434 of this title or section 91 of the Appendix to Title 46 without revealing the facts; (3) to fail to make entry or to obtain clearance as required by section 1434 or 1644 of this title, section 91 of the Appendix to Title 46, or section 1509 of the Appendix to Title 49; or (4) to fail to comply with, or violate, any regulation prescribed under any section referred to in any of the paragraphs (1) through (3).75

**Civil penalty**

Any master, person in charge of a vehicle, or aircraft pilot who commits any violation listed in subsection (a) of this section is liable for a civil penalty of $5,000 for the first violation, and $10,000 for each subsequent violation, and any conveyance used in connection with any such violation is subject to seizure and forfeiture.76

**Criminal penalty**

In addition to being liable for a civil penalty under subsection (b) of this section, any master, person in charge of a vehicle, or aircraft pilot who intentionally commits any violation listed in subsection (a) of this section is, upon conviction, liable for a fine of not more than $2,000 or imprisonment for 1 year, or both; except that if the conveyance has, or is discovered to have had, on board any merchandise (other than sea stores or the equivalent for conveyances other than vessels) the importation of which into the United States is prohibited, such individual is liable for an additional fine of not more than $10,000 or imprisonment for not more than 5 years, or both.77

**Additional civil penalty**

If any merchandise (other than sea stores or the equivalent for conveyances other than a vessel) is imported or brought into the United States in or aboard a conveyance which was not properly reported or entered,

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75. See id. § 1436 (a).
76. See id. § 1436 (b).
77. See id. § 1436 (c).
the master, person in charge of a vehicle, or aircraft pilot shall be liable for a civil penalty equal to the value of the merchandise and the merchandise may be seized and forfeited unless properly entered by the importer or consignee. If the merchandise consists of any controlled substance listed in section 1584 of this title, the master, individual in charge of a vehicle, or pilot shall be liable to the penalties prescribed in that section.78

It is apparent from these various laws that there are significant civil and criminal legal implications associated with failing to comply with CBP programs and initiatives. If a business or vessel fails to follow these laws related to maritime commerce, there are also significant financial implications associated with non-compliance.

B. FINANCIAL IMPLICATIONS OF NON-COMPLIANCE

The financial implications of compliance with CBP programs are significant, since ninety-five percent of U.S. international cargo by volume is transported on the ocean.79 As a starting point of analysis, the sheer volume of international shipping commerce conducted carries with it a heavy price tag for even incidental cost outlays. For example, thirty years ago, imports and exports accounted for only eight percent of U.S. Gross Domestic Product, or GDP.80 By 1999, foreign trade was almost twenty seven percent of GDP.81 Economists predict that trade will double by 2010.82 Also, according to U.S. Customs, the volume of important cargo moving through U.S. ports will more than double by the year 2020.83 Port activity contributed $74.8 billion to U.S. GDP, and personal income of $52.7 billion in 1996.84 Also, Customs revenues collected in FY 2000 totaled $24.4 billion.85 Roughly seventy percent, or $17.1 billion, is attributable to seaport activity.86

The CBP programs reviewed in this paper are fairly recent developments. As a result, most of the information concerning the financial implications of compliance with these programs is still being gathered and compiled. The one area in which sufficient information is currently available is the financial impact of compliance with the 24-Hour Rule.

78. See id. § 1436 (d).
80. Id.
81. Id.
82. Id.
84. Id.
85. Id.
86. Id.
Compliance with the 24-Hour Rule is considered a matter of National Security. As a result, on May 4, 2003, CBP ports were authorized to assess monetary penalties for serious and flagrant violations of the timely submission of cargo information. Each individual CBP seaport is responsible for reviewing and enforcing the timeliness of these cargo declaration submissions. CBP ports have also been responsible for initiating “Do Not Load” messages for cargo whenever an “invalid” cargo description is used. A “Do Not Load” message essentially prevents the cargo in question from being loaded onto a vessel until the cargo can be properly inspected to ensure that it does not contain prohibited or dangerous items.

CBP ports are also authorized to issue monetary penalties for questionable cargo that has been loaded on board a vessel without providing CBP a 24-hour time frame in which to place a “Do Not Load” message on the questionable cargo. Vessels found to be in violation of the 24-Hour Rule may be subject to CBP penalties and liquidated damages for violation of manifest requirements. These penalties are enforceable against both masters of vessels and Non-Vessel Operating Common Carriers (NVOCCs). Masters of vessels may be assessed penalties under 19 USC 1436 (penalties of $5,000 per first violation and $10,000 for any subsequent violation attributable to the master). NVOCCs may incur claims for liquidated damages of $5,000 per vessel in accordance with 19 CFR 113.64(c) and 19 CFR 4.7(b) and/or 19 CFR 4.7a(c).

The financial implications associated with non-compliance with CBP programs and initiatives can be significant. A business that receives a “Do Not Load” message on its cargo stands to lose hundreds of thousands, if not millions, of dollars. A business or vessel that fails to comply with CBP programs and policies can be fined substantial amounts. While exact figures are still being compiled, it is reasonable to say that the overall financial implications are considerable.

88. Id.
89. Id.
90. Id.
91. Id.
92. Id.
93. Id.
94. Id.
IV. Who Should Bear the Burden of Paying the Increased Costs of These Programs?

A. Magnitude of Funding for Maritime Security Programs and Initiatives

One of the most serious criticisms leveled in the area of maritime security relates to the funding, or what some see as the lack thereof, for new programs and initiatives. A recent Atlanta Journal article stated that, "[t]he homeland security budget provides $125 million in port security grants. Coast Guard officials say they need $1 billion, though they aren't sure because they won't be finished assessing security needs at the nation's 55 major ports until the end of next year."95 In a Los Angeles Times article, Peter Dailey, the maritime director of the Port of San Francisco said, "[f]rom our standpoint, we're glad the Coast Guard released their interim rules for security requirements. A lot's been done in American ports to upgrade their security plans. [However], the big question is going to be funding."96 A New York Times article from June 2003, written by Paul Krugman, stated, "[p]ort security, identified as a top concern from the very beginning, has so far received only one-tenth as much money as the Coast Guard says is needed."97 The Coast Guard, which spearheads port safety, estimates that ports will need to invest $1.125 billion in the first year alone and $5.399 billion over the next decade.98

At present, more than ninety-five percent of all international trade is conducted by ship, with approximately $738 billion of cargo moving through U.S. ports each year.99 For example, the ports of Los Angeles and Long Beach are the nation's busiest container seaports, with approximately three million containers entering the country annually.100 Only an estimated two to four percent of those containers are opened and searched by hand.101 As Rear Admiral Larry Hereth, the Coast Guard's director of port security recently said, "[p]orts are big, complex, diverse operations that have lots of opportunities and lots of targets there because of the hazardous nature of cargo moved, [and] because of the peo-

95. OUR OPINIONS: Don't let nation's security fall prey to fickle funding, ATLANTA JOURNAL-CONSTITUTION, Editorial, Sept. 26, 2003 at 14A.
98. John Schmid, Feds announce huge security upgrade for nation's ports; Cost to plug holes in U.S. defenses will reach many billions, MILWAUKEE JOURNAL SENTINEL, Jul. 2, 2003, at 01D.
99. Susannah Rosenblatt supra note 96.
100. Deborah Schoch, supra note 64.
101. Id.
ple involved.”\textsuperscript{102} The fact that such a small percentage of containers are inspected at the nation’s two busiest ports should raise some homeland security concerns.

\section*{B. Who Bears the Cost?}

There is a philosophical debate regarding the most appropriate entity to pay for the increased costs of these new CBP programs. Should the government, both at the federal and state levels, (and indirectly taxpayers), find dedicated funding to finance these programs? Or, should the individual businesses that utilize these CBP programs be responsible for paying the financial costs?

The federal government is directly responsible for the creation and implementation of the new CBP programs through the U.S. Department of Homeland Security. These programs were created to strengthen the homeland security of the United States, and few would argue that these programs have not been successful in improving U.S. national security. Also, every U.S. citizen benefits from the enhanced domestic and international security that these programs create in the United States and abroad. However, it can be argued that not every U.S. citizen is directly involved in the maritime industry, although few would argue with the idea that most U.S. citizens are \textit{indirectly} involved in this industry through their use and/or purchase of goods that move through the maritime commerce supply chain.\textsuperscript{103} Therefore, since the majority of Americans benefit in some degree from international commerce, there is a strong argument that the government should pick up the costs of these new government-initiated programs.

As a competing variable, the business community, especially those businesses involved in maritime commerce, arguably face the greatest impact from the new regulations. CSI and C-TPAT have changed the way that companies must do business. The 24-Hour Rule and AIS have also fundamentally changed the way that shippers, and those involved in maritime commerce, must conduct their business affairs and practices. These new programs have already added significant expenses to the cost of doing business in an industry. The implementation of these new programs requires a significant amount of investment in equipment, in addition to compliance assurance and review. It is important to be aware of the costs associated with complying with these CBP programs so that current and prospective businesses are not priced out of being competitive and profitable as a result of new program regulations and reporting requirements. It is also important to note that most businesses will ultimately pass along

\textsuperscript{102} Susannah Rosenblatt, \textit{supra} note 96.

\textsuperscript{103} See generally American Ass’n of Port Authorities, \textit{supra} note 78.
any additional costs to consumers. This could have a negative impact on the overall U.S. economy if consumers are unable to purchase the same volume of good due to increased prices for these goods.

Since the area of enhanced maritime cargo container security is still in its early development stage, it may prove helpful to look at other programs in evaluating the most appropriate funding allocations for improved security. The best area of comparison in the transportation sector is enhanced airline security. On November 19, 2001, President George W. Bush signed into law the Aviation and Transportation Security Act (ATSA).104 The ATSA created the Transportation Security Administration (TSA), a new agency with primary responsibility for aviation security.105 As part of its new duties, the TSA took over responsibility for passenger screening and overall airline security from private security contractors hired by the airlines.106

To help fund the costs of enhanced airline security, the ATSA created the September 11th Security Fee (Security Fee) and the Aviation Security Infrastructure Fee (ASIF).107 As part of its new duties, the TSA was required to impose a uniform Security Fee on passengers of domestic and foreign air carriers.108 As an example of this cost-sharing arrangement, the ASIF was established to reimburse the TSA for passenger and baggage screening costs, items previously the fiscal responsibility of the airlines.109

The cost-sharing between the TSA, the airlines, and airlines travelers has been fairly successful. People have continued to fly and airline security has been enhanced since September 11, 2001. A similar cost-sharing program could work in the maritime cargo container industry. Costs could be shared between the shippers, the businesses that utilize the shippers' services, the government, and even the end consumers.

However, one significant difference between maritime and aviation is the much smaller number of passengers in the maritime industry than in the airline industry. As a result, the most appropriate funding balance between government funding and user fees will look much different in the maritime industry than the balance does in the airline industry. Businesses could be responsible for a minimum user fee based on their respective use of the programs, but the larger share would need to be

105. See id. § 101.
106. See id. § 108.
funded by the government. This funding allocation would likely provide the most appropriate environment to ensure that the programs are funded in an equitable and fair manner, while also encouraging a pro-growth and pro-job creation economy.

V. Conclusion

There has been a very visible commitment to provide funding for aviation security improvements and upgrades. The emphasis on aviation security is a natural focal point as a result of the tragedies of September 11, 2001, and the use of aircraft in the worst terrorist attack in the history of the United States. While the same level of financial commitment has not yet been made to the area of maritime security, significant progress in improving maritime security, specifically cargo container security, is occurring through programs and initiatives like CSI, C-TPAT, OSC, the 24-Hour Rule, and the installation and use of Automated Identification Systems. The legal and financial implications of CBP programs on businesses and other entities involved in maritime commerce are significant, and the impacts of these programs must be carefully evaluated and reviewed by both the business community and the governmental sector to make sure that the programs are achieving the desired balance between increased security and efficient commerce.

While additional funding will be required to further strengthen our homeland security in the area of maritime commerce, the appropriate source of this additional funding is still being debated. With the United States' multi-modal system of transportation, it is critical to examine and implement a comprehensive solution to cargo container security in order to truly strengthen U.S. homeland security and domestic preparedness. Hopefully, the successful accomplishments of CBP and Coast Guard programs as possible precursors for an integrated security system can serve as models for cargo container security initiatives in the other modes of transportation.
The Time Has Come For The Government To Develop and Implement a Transportation Plan For Yucca Mountain

Chessa Bieri*

I. INTRODUCTION

This article will explore the twenty-year debate over the Yucca Mountain repository, specifically the issues surrounding the transportation of hazardous waste. The Yucca Mountain Project is a proposed storage site for nuclear waste in the Nevada desert. This article will examine both opponent's contentions as well as the arguments of supporters of this controversial program. As a critical part of any proposed centralized shipment and storage of nuclear waste, the additional constraints imposed on the transportation industry as a result of the terrorist attacks of September 11, 2001, will also be examined.

II. BACKGROUND

In the summer of 2002, Congress voted on the historic Yucca Mountain bill that will no doubt affect all Americans for thousands of years. The Yucca Mountain Project began in 1987 when Congress chose a desolate, uninhabited area in the Nevada desert 100 miles north of Las...
Vegas.\textsuperscript{2} This area in Nevada was chosen over spots in three other states as the safest receptacle for all of the nation's nuclear waste.\textsuperscript{3} The Department of Energy deemed the desert site suitable after more than fifteen years of analysis;\textsuperscript{4} President Bush then subsequently endorsed the Department's recommendation.\textsuperscript{5} It is estimated that by the project's conclusion, more than 77,000 tons of nuclear waste will be housed in sealed underground tunnels of the hollowed out volcano called Yucca Mountain.\textsuperscript{6}

This project spurned fierce opposition from the state of Nevada along with many environmental groups including the Sierra Club, the U.S. Public Interest Research Group, Physicians for Social Responsibility and several political heavyweights.\textsuperscript{7} These critics contend that the nuclear waste should be stored in concrete casks and kept in the existing temporary facilities to avoid transporting this hazardous radioactive material across the rails and highways of this country.\textsuperscript{8}

However, the Bush Administration along with the Department of Energy argue that the Yucca Mountain site is the safest and most efficient way to deal with the growing amount of nuclear waste in this country.\textsuperscript{9} Yucca supporters contend that the nation must create a central, secure, and remote location for more than 77,000 tons of the most radioactive nuclear waste.\textsuperscript{10}

Currently, all of the nation's nuclear waste is stored in over 100 different temporary facilities in 39 states around the country in above-ground storage facilities.\textsuperscript{11} Most of this waste is in the form of radioactive rods of uranium pellets that are no longer efficient for nuclear power but will remain radioactive and highly dangerous for thousands of years.\textsuperscript{12}

A. Timeline of the Important Events Surrounding the Yucca Mountain Project

1973: Testing began at Yucca Mountain as part of a nationwide

\begin{itemize}
\item \textsuperscript{2} 25 Vt. L. Rev. 815, 816-817 (2001).
\item \textsuperscript{3} Gooden, \textit{supra} note 1, at 103.
\item \textsuperscript{4} Recommendation Notice, 67 Fed. Reg. 9048-50 (Feb. 27, 2002).
\item \textsuperscript{5} Gooden, \textit{supra} note 1, at 109.
\item \textsuperscript{6} \textit{Id.} at 106.
\item \textsuperscript{7} Tom Gorman, \textit{The Nation Ads Aim to Sway Senators on Yucca Dump}, L.A. Times, Apr. 17, 2002, at A22.
\item \textsuperscript{8} Gooden, \textit{supra} note 1, at 110-11.
\item \textsuperscript{9} Notice, \textit{supra} note 4, at 9051-9052.
\item \textsuperscript{10} Energy Secretary Approves Nevada Site as Nuclear Waste Repository, 19 No. 21 Andrews Toxic Chemicals Litig. Rep. 13 (Jan. 25, 2002).
\item \textsuperscript{11} Notice, \textit{supra} note 4, at 9051.
\item \textsuperscript{12} Tom Gorman, \textit{The Nation Nevada Governor Vetoes Nuclear Waste Dump Site Environment: Hauling Spent Fuel to Yucca Mountain is dangerous, Guinn warns. Congress can override the decision}, L.A. Times, Apr. 9, 2002, at A10.
\end{itemize}
search for a nuclear waste storage site.  

1982: Congress ordered the development of a permanent storage receptacle for commercial radioactive waste. The Government promised the nuclear industry it would take responsibility for the storage of nuclear waste. Potential storage sites were being evaluated in Nevada, Texas, and Washington State.

1987: Congress selected Yucca Mountain in Nevada as the lone site to be tested and evaluated. 

1994-1996: The Department of Energy was sued by the nuclear industry because it would not meet the 1998 deadline for accepting nuclear waste. A Federal Court held that the government was liable if it failed to meet the deadline.

2001: The Department of Energy estimated that the cost for research, construction, operation, and the 100-year monitoring of the Yucca Mountain site would probably exceed $58 billion.

Feb. 2002: The Bush Administration endorsed the Department of Energy’s recommendation of the Yucca Mountain Site and will apply for a permit in 2004 to begin construction from the nuclear Regulatory Commission. The licensing process will probably take up to four years. Assuming a construction permit is granted by the Nuclear Regulatory Commission, the facility is optimistically projected to be completed by 2010.

April 2002: Under a 1982 federal nuclear waste law, the state of Nevada vetoed President Bush’s endorsement of Yucca Mountain, leaving Congress to decide this issue. 


July 2002: The U.S. Senate followed the house and voted 60-39 to override Nevada’s veto. President Bush signed the bill making Yucca Mountain site would probably exceed $58 billion. 

14. Id. at 102.
15. Id.
16. Id. at 103.
17. Id. 103.
18. Id. at 106-07.
19. Id. at 107.
22. Greg Schneider & Eric Pianan, Nuclear Dump’s Foes Hopeful; Reid, Now No.2 Senate Leader, Organizes Against Yucca Mountain, WASH. POST, June 13, 2001, at E01.
B. Opposition to the Yucca Mountain Project

The intense debate over the safety, the politics, and the details surrounding the Yucca Mountain project has raged for nearly twenty years. Obvious opponents to the project are the politicians from Nevada and their constituents. Nevada and other opponents are concerned about the validity of the testing, the motives of the Department of Energy and the Bush Administration, and the specific details outlining the transportation of the waste and the subsequent storage.

Opponents argue that there are problems with the site itself. Originally, the waste was to be protected by the geological structure on the site; specifically, the rock would protect the environment. Recently however, the Department of Energy has emphasized the need for human engineering focusing on corrosion-resistant canisters to store the waste. Opponents contend that this shift from the protection by the natural environment to an increased need for human engineering means that the site is not appropriate for a project with such potential hazardous risks.

Additionally, opponents are concerned that there is no way for the Department of Energy to estimate what sort of weather and climate changes may occur over the next 10,000 years. Climate can affect the amount of water that may run through Yucca Mountain and reach the tunnels that are housing the radioactive materials. As one example of this, an increase in global warming might increase the amount of rainfall in the area, shifting the position of the rock and allowing more moisture to collect on the canisters, causing corrosion. Opponents fear the potential that increased water levels and canister corrosion will allow waste to seep into the groundwater and contaminate the drinking water.

While the Department of Energy estimates that contaminated water would not reach the surface of the land for at least 500 years, opponents argue that it could happen in as little as 300 years. Opponents such as Robert Loux, executive director of Nevada’s Agency of Nuclear Projects, contend that although tests are not complete, the tests that are ongoing

27. Gooden, supra note 1, at 116-117.
28. Id. at 115-117.
29. Purdy, supra note 20.
30. Id.
31. Id.
32. Id.
33. Id.
are biased and politically motivated.34 “I don’t think the degree of uncertainty about the site is reaching the people at the top levels,” said Frishman. As he continued, “Just 40% of DOE’s claims about Yucca Mountain are based on actual data, the rest are expert guesses.”35 Obviously, supporters disagree.

Many opponents believe that once the Department of Energy selected Yucca Mountain as its chosen site, it swept all safety concerns under the rug in order to make the site work.36 The focus is no longer on analyzing the suitability of Yucca Mountain as a waste repository, but on making the site work at any cost.37 Opponents also believe that the Department of Energy is trying to prevent the public from learning of all the potential problems and safety concerns in order to meet the government’s need to rapidly provide a storage facility to accommodate the growing amount of nuclear waste.38 Thus, opponents maintain that the motivation for the Yucca Mountain project is politically motivated.39

In addition to geologic and climate concerns, opponents also question the capacity of the Yucca Mountain project.40 The Department of Energy has stated that Yucca Mountain could hold up to 128,000 tons of radioactive waste, despite a 1982 federal law mandating that any permanent waste receptacle must not hold more than 70,000 tons of waste.41 Some Department of Energy experts believe that the site may hold up to 140,000 tons.42 Also, the Department of Energy has stated that the design of Yucca Mountain will change and evolve over the next few years to accommodate any changes that may impact safety.43 This concerns opponents because they only have a vague idea as to what the Department of Energy is actually proposing.44 Opponents maintain that this gives the Department far too much freedom from scrutiny and regulations.45 Finally, all of the storage space at Yucca Mountain will be reserved the day it is deemed operational.46 Opponents question whether the government will try to expand the site or open an independent site elsewhere.47 There is too much ambiguity and too few concrete answers for the

34. Id.
35. Id.
37. Id.
38. Id.
40. Purdy, supra note 20.
41. Id.
42. Id.
43. Id.
44. Id.
45. Id.
46. Id.
47. Purdy, supra note 20.
C. SUPPORT FOR THE YUCCA MOUNTAIN PROJECT

The Yucca Mountain Repository would provide a storage receptacle for thousands of tons of radioactive waste that is currently paralyzing the nation’s nuclear power plants.\(^49\) Yucca Mountain would enable the nuclear power plants to free up space to increase America's energy supply.\(^50\) As one newspaper article describes it, “[n]uclear power provides 20% of the nation’s electricity; emits no airborne pollution or greenhouse gases; and now gives us one of the cheapest forms of power generation we have. Securing these benefits requires finding a permanent, safe and secure site for nuclear waster.”\(^51\)

Supporters argue that there have been ample scientific studies conducted that support the Yucca Mountain project.\(^52\) Since the 1950s, scientists have been conducting experiments to determine the best method for storing waste.\(^53\) The studies included burying the waste in the Artic ice, inserting waste into ocean trenches where it might sink into the earth’s mantle, and sending the waste into space.\(^54\) It was determined that burying the waste into geologic rock formations was the most effective method.\(^55\)

Additionally, the Department of Energy has spent over $7 billion to ensure the Yucca Mountain site is suitable.\(^56\) The Department contends that Yucca Mountain will meet strict EPA standards even under extreme conditions such as an earthquake or any volcanic activity.\(^57\) Also, the climate and its characteristics are an advantage to the project.\(^58\) The water table is more than 2000 feet below the surface, so the storage facility could reach as far as 1000 feet down, minimizing the possibility that any contaminants could reach the surface and eliminating any need for pumping out water.\(^59\) Further, the arid climate supports the project. The area receives less than seven inches of rainfall per year and at least 95% of that moisture evaporates.\(^60\) Thus, supporters argue that Yucca Moun-

\(^{48}\) Id.  
\(^{49}\) Notice, supra note 4, at 9051.  
\(^{50}\) Id. at 9061.  
\(^{51}\) Spencer Abraham, One Safe Site is Best, WASH. POST, March 26, 2002, at A19.  
\(^{52}\) Notice, supra note 4, at 9051.  
\(^{53}\) Id. at 9051.  
\(^{54}\) Id.  
\(^{55}\) Id.  
\(^{56}\) Purdy, supra note 20.  
\(^{57}\) Abraham, supra note 51.  
\(^{58}\) Notice, supra note 4, at 9059.  
\(^{59}\) Gooden, supra note 1, at 103.  
\(^{60}\) Notice, supra note 4, at 9059.
tain is the safest and most suitable site for this repository.

Proponents also maintain that a central repository for the nation's radioactive waste is far safer than the current 100-plus different sites.\textsuperscript{61} Yucca Mountain will provide a centralized, secure, and underground receptacle for all of the waste that has been accumulating across America.\textsuperscript{62} The threat of contamination will be confined to one heavily monitored site rather than over a hundred sites near populated areas.

II. THE TIME HAS COME FOR THE DEPARTMENT OF ENERGY TO DEVELOP AND IMPLEMENT A TRANSPORTATION PLAN FOR YUCCA MOUNTAIN

A. MANY GOVERNMENT ENTITIES ALREADY POSSESS THE REQUISITE REGULATORY EXPERIENCE IN HANDLING NUCLEAR WASTE AND ARE CAPABLE OF SAFELY TRANSPORTING THIS WASTE ACROSS THE COUNTRY

The Department of Energy, the Environmental Protection Agency, the Department of Transportation, and the Transportation Safety Administration all have studied and created methods to ensure the safe handling and transport of hazardous materials. The USA Patriot Act, the Department of Transportation's Risk Management Self-Evaluation Framework, certain EPA provisions, and the recent changes to the Transportation Security Administration are recent governmental measures that have been implemented to increase and ensure the safety of the transportation of radioactive waste.

1. USA Patriot Act

On October 26, 2001 President Bush signed into law an Act entitled the "Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001," also known as the Patriot Act.\textsuperscript{63} The Act included over one thousand sections and 342 pages.\textsuperscript{64}

One section that the Patriot Act focused on was imposing stricter requirements for transporting hazardous materials.\textsuperscript{65} First, the Patriot Act placed more stringent requirements on drivers carrying hazardous materials.\textsuperscript{66} The Act required background checks including an inquiry of

\begin{footnotes}
\item[61] Id. at 9050.
\item[62] Id. at 9050-9051.
\item[64] Id.
\item[66] Id.
\end{footnotes}
criminal, immigration and FBI records on all commercial drivers. The checks also will verify that the driver is a U.S. citizen or a lawful permanent resident.

2. EPA Provisions Concerning the Transportation of Hazardous Materials

The purpose of the Environmental Protection Agency is to ensure the protection of individual health and the health of the environment. After the events of September 11, 2001, the EPA has joined the Department of Homeland Security in its counterterrorism planning and response activities. The EPA’s Criminal Enforcement Program employs a group of engineers, analysts, environmental and computer experts who conduct experiments and investigations concerning terrorist activities. These groups provide “[d]etection of terrorist activities, evaluation of terrorist and counter terrorism activities, investigation of safe operations at crime scenes involving chemicals, toxic substances and toxic materials, and resources to respond to terrorist attacks involving chemical/biological weapons of mass destruction.”

In addition to the EPA’s Criminal Enforcement Program, the EPA has legislation that helps to ensure the safety of transporting hazardous materials. The EPA’s Clean Water Act imposes strict criminal penalties and liability for endangerment for anyone who knowingly releases a hazardous material into the air that puts a person in imminent danger of serious bodily injury or death. Stiff penalties such as fines up to $1,000,000 and imprisonment for up to fifteen years can be imposed for knowing endangerment.

Also, the Chemical Security Act of 2003 requires the EPA to review and monitor high risk facilities included in section 112(r) of the Clean Air Act such as nuclear power plants near heavily populated areas. The EPA must monitor and regulate the risk of contamination by these facilities including the storage of hazardous materials, safety, security, and

67. Id.  
68. Id.  
70. Id.  
71. Id.  
72. Id.  
75. Id.  
containment. This legislation highlights the EPA's concern over the safety of these current nuclear storage facilities. The EPA has stated that at least 123 plants each keep amounts of toxic chemicals that, if released, could form deadly vapor clouds that would put more than one million people in danger.

3. The Department of Transportation's Risk Management Self-Evaluation Framework (RMSEF)

RMSEF was developed by the U.S. Department of Transportation to enhance the security of hazardous materials shipments against acts of terrorism or sabotage.

The Department of Transportation has recognized the heightened risk of terrorism surrounding the transportation of hazardous materials and has made its security and safety a priority. RMSEF is a voluntary tool that helps carriers, emergency responders, storage facilities, and government officials manage, evaluate, and safeguard against terrorist attacks.

RMSEF provides a step-by-step process for assessing and reducing security risks when transporting hazardous materials. The initial step is scoping. Scoping involves a facility or carrier identifying its greatest potential threats such as an attack on its radioactive cargo or eliminating driver's license fraud by conducting an intensive employee screening process. Outlining the scope of activities to be considered in terms of safety and security also includes the screening of the shipper, container manufacturer, local emergency response, and law enforcement agencies involved in the security of the hazardous materials transportation process.

RMSEF's second step in the process is knowledge of the operations. This involves collecting detailed information about the quantities of the materials, the handling of the materials, the routes, and the security precautions employed. Having a working knowledge of this information enables facilities to compare their safety procedures with industry

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77. Id.
78. John Podesta, Secrecy is a Real Enemy to Us All; True Homeland Security Comes Only From an Informed Public, ORLANDO SENTINEL, March 16, 2003 at G6.
80. Id.
81. Id.
82. Id.
83. Id.
84. Id.
85. Id.
86. Id.
87. Id.
standards and other facilities.\textsuperscript{88}

Steps three, four, and five are the assessment of a facility’s operations and security risks, the strategy, and action used to address those risks.\textsuperscript{89} The assessment includes identifying where potential weaknesses exist in the transportation process.\textsuperscript{90} These areas may include employee training, changing routes, or enhancing emergency responses.\textsuperscript{91} The strategy involves developing a plan outlining specific preventative actions to reduce risk, and the action is the implementation of that plan.\textsuperscript{92}

Steps six and seven include verification and evaluation of the plan developed in step four.\textsuperscript{93} Independent inspectors can be requested to evaluate the facility’s plan, and any security breaches would then be immediately addressed.\textsuperscript{94} The final step, evaluation, determines whether the plan is effective in reducing security risks.\textsuperscript{95} A facility’s performance logs may provide relevant information such as the incidence of theft or property damage to determine whether improvements have resulted from implementation of the security plans.\textsuperscript{96} The National Tank Truck Carriers Association often publishes industry standards regarding safety related information that facilities may compare to their own safety procedures.\textsuperscript{97} RMSEF encourages regular evaluations and assessments of existing plans.\textsuperscript{98}

4. \textit{Changes at the Transportation Security Administration}

Created in the wake of September 11, 2001, the Transportation Security Administration was developed by legislation designed to improve airline travel as well as the transportation of commerce.\textsuperscript{99} The TSA has struggled to define its mission as to whether it is a law enforcement agency or an agency designed to create new safety plans for transportation.\textsuperscript{100} Amid widespread criticism of mismanagement and waste, both Republicans and Democrats are frustrated with the agency’s inability to define its goals and manage its costs.\textsuperscript{101}

\textsuperscript{88} Id.
\textsuperscript{89} Id.
\textsuperscript{90} Id.
\textsuperscript{91} Id.
\textsuperscript{92} Id.
\textsuperscript{93} Id.
\textsuperscript{94} Id.
\textsuperscript{95} Id.
\textsuperscript{96} Id.
\textsuperscript{97} Id.
\textsuperscript{98} Id.
\textsuperscript{100} Air Marshals; Confusion at Homeland Security, \textit{Star-Trib.}, August 11, 2003, at 14A.
\textsuperscript{101} Id.
However, the TSA, part of the Department of Homeland Security, was given the difficult task of overseeing and securing the transportation of both the American public and American goods.102 After the terrorist attacks, no one could appreciate the tall task undertaken by the TSA.103 Despite its rocky beginnings, the TSA has demonstrated that it is serious in creating and implementing measures that will ensure the safety of transportation.104 The Department of Homeland Security and the TSA will provide a safer environment for the traveling public and the transportation of commerce.105 Simply, the increased scrutiny and attention surrounding transportation will promote more precautionary procedures.106 In this climate of uncertainty over terrorism, the American public will demand nothing less.107

Thus, the increasing activities of the Department of Energy, the Environmental Protection Agency, the Department of Transportation, and the Transportation Security Administration demonstrate the government's focus and efforts on ensuring the safe transportation of hazardous materials. The American public must be aware and reassured that the government recognizes the potential dangers and will not enter into the transportation of hazardous materials lightly or unprepared.

B. Waste Consolidation is Already Happening Without the Regulation or Scrutiny by the Government

The Yucca Mountain Repository must proceed for other security reasons. Nuclear waste is accumulating at such a rapid rate, that power companies are looking at alternative storage options that are far more dangerous than the federally regulated Yucca Mountain.108 One option that power plants are considering is multiplying the existing onsite temporary storage.109 These power plants were designed to generate power, not store waste.110 So, the temporary storage receptacles that are currently being used are not intended for permanent storage.111 Accumulat-

102. Id.
104. Id.
105. Id.
106. Id.
107. Air Marshalls, supra, note 100.
109. Tom Meersman, Nuclear Waste is Here To Stay; Casks will be at Prairie Island until at least 2038, STAR TRIB., April 7, 2003, at 1A.
ing more waste than these temporary storage containers were designed to hold is a disaster waiting to happen. The nuclear industry says that by 2010, 79 of the nation's power plants will be out of space in their cooling pools. Scientists have studied the storage receptacles at Yucca Mountain for over twenty years, and this technology will be far more secure than stuffing these overflowing temporary containers.

Remember, that these power plants are often situated near major cities and waterways, and the degree of security varies widely between each particular facility. After the terror attacks of September 11, 2001, the Nuclear Regulatory Commission ordered power plants to increase their monitoring and security, but there is debate over whether all facilities are complying. Storing the waste 1000 feet underground at Yucca Mountain is preferable to the temporary storage in 39 states. When the waste is placed in specially designed chambers beneath the desert, the radioactive materials provide a much less attractive target that is almost impossible for terrorists to reach. The risk of terror attacks and the further deterioration of the over-stuffed temporary storage facilities far outweigh the risk of transporting and storing this waste into one centralized receptacle.

Additionally, if Yucca Mountain is not opened and the reactors run out of space to store the radioactive waste, the power plants will be forced to shut down. This will leave the taxpaying consumer with higher rates for energy and energy shortages. The time has come for Yucca Mountain. The Department of Energy sums it up by stating that it is the smartest thing to do in the interests of national security and environmental protection. It is a national issue of the utmost urgency as radioactive fuel accumulates.

More frightening than the power companies cramming this radioactive material into temporary containers near large cities is the potential for this waste to be dumped on Indian reservations. Specifically, the Goshute Indian Tribe in Skull Valley, Utah has struck a deal with several

112. Remez, supra note 108.
113. Id.
118. Id.
119. Id.
121. Id.
122. Id.
123. Drinkard, supra at note 115.
power companies called Private Fuel Storage to house over 40,000 tons of the nation’s nuclear waste until a permanent receptacle is built.124 Private Fuel Storage and the Goshutes have agreed to store the waste on the reservation until a permanent receptacle opens.125 The Goshutes are a sovereign nation and the issue of nuclear waste on their reservation is between them, Private Fuel Storage and the Federal Nuclear Regulatory Commission.126 Utah legislators and residents are understandably upset, but with no control over Indian land, they are left to wait for the Nuclear Regulatory Commission to decide whether to license the Goshute’s waste storage facility.127 If the NRC grants the license, the site could be operational in 2005.128

The Department of Energy has spent billions of dollars and over twenty years testing the appropriateness of Yucca Mountain. Because of the delays in building a permanent centralized nuclear waste storage facility, a few nuclear companies and an Indian tribe in Utah are making decisions that will impact the entire country’s safety and nuclear waste policy.129 They are developing a plan to deal with the looming waste-storage crisis.130 The nation cannot let independent parties control the issue of nuclear waste. The extensive testing and regulations required by the federal government will not be matched by private entities. The government will ensure that a federal waste-storage facility such as Yucca Mountain is far safer than any temporary site on an Indian reservation. Americans cannot afford to wait any longer for Yucca Mountain – our safety and security is at stake.

C. TERRORISTS’ WINDOW IS SHRINKING

Terrorist attacks are unpredictable, but the terrorists are not going to wait until the nation has approved and constructed a permanent centralized nuclear waste repository. Terrorists will attack the nations’ weaknesses, and those weaknesses are the 100-plus different nuclear power plants situated near large metropolitan areas. Although the Nuclear Regulatory Commission ordered these Nuclear power plants to increase their security after the September 11, 2001 attacks, there is no adequate security plan in place. These facilities are in jeopardy now.

126. Dan Egan, Nuclear Waste Plan Divides Poor Tribes in Desolate Land, MILWAUKEE J. SENTINEL, September 29, 2002, at 1A.
127. Seabrook, supra note 125.
128. Id.
129. Egan, supra note 126.
130. Id.
After a recent visit to Prairie Island, a power plant near Minneapolis, Minnesota, a state representative was less than impressed with the presence of security at the plant. Representative Jean Wagenious said that she inadvertently carried a double bladed pocketknife through scanning machines and security screenings. This type of security breach is extremely troublesome in the wake of September 11, 2001. The number of existing nuclear storage facilities makes consistent heavy security very difficult. These 100-plus different known sites are prime targets for terrorists. One centralized facility is much easier to monitor and secure and will decrease the risk of a terrorist attack. Under the current system of different nuclear sites spread throughout the county, the terror threat is high.

III. WAITING FOR A Viable Transportation Plan IS NOT A Safe Option

A. The Government Has the Research to Develop a Suitable Transportation Plan

Opponents fear the Department of Energy's plan for transporting the hazardous materials to Yucca Mountain. The Department of Energy plans to transport more than 77,000 tons of nuclear waste from over 78 different temporary sites to Yucca Mountain's permanent storage facility. Opponents believe that thousands of shipments traveling by road and by rail through heavily populated areas threaten to expose millions of people to this highly toxic nuclear waste from an accident or a terrorist attack. As one newspaper columnist described it, "[w]ith over 50,000 nuclear trucks and trainloads moving through our streets, even the government admits nuclear accidents are inevitable." But the biggest concern regarding the transportation of this hazardous material is the Department of Energy's failure to present a detailed transportation plan. The Department feels that it is premature to outline a transportation plan until it completes all of its research and submits its permit request to the Nuclear Regulatory Commission sometime in 2004.

However, it would be foolish for the government to wait to present a transportation plan in light of all of the work that has been done to ensure the safe transportation of hazardous materials. The nation needs to

131. Meersman, supra note 109.
132. Id.
133. Notice, supra note 4.
hear a long-standing plan, and the government has the resources to outline it. The actions previously discussed by the Department of Energy, the Environmental Protection Agency, the Department of Transportation, and the Transportation Security Administration in section II of this article provide more than enough information to provide the public with a detailed transportation plan. The government is aware of the cost and risks of transporting this waste. The risks of not transporting the waste to Yucca Mountain far outweigh the risks associated with transporting hazardous waste.

B. THE TRANSPORTATION OF HAZARDOUS WASTE IS SAFE

Opponents argue that since September 11, 2001 and the increased threat of terrorist activity against the United States, transporting nuclear waste to Yucca Mountain would be dangerous because of potential terror attacks or accidents. However, supporters contend that this nation has been transporting radioactive materials for more than thirty years over 1.6 million miles without any contamination or release of hazardous radiation. Plutonium contaminated waste is shipped daily in the United States. These operations have been carried out with absolute safety and security. People do not realize that highly radioactive materials are routinely shipped across the nation with no incident. Over the past 40 years, there have been over 3000 shipments of nuclear waste by rail and truck without a single instance of contamination.

Further, many more shipments of nuclear waste have occurred abroad. Transporting waste is not a new endeavor; the world has been transporting nuclear waste for many years. As noted in a Washington Post article, “Europe has already safely moved about as much nuclear material from place to place as we expect to ship over the entire active life of the Yucca Mountain project.”

Additonal safety enhancements come in the form of special containers called casks developed by the government to contain the waste during shipping. These casks have survived tests that have smashed them into concrete walls at 80 mph and had them being hit by locomotives going up to 120 mph. They have been exposed to extreme temperatures, fire,
and icy waters and have remained intact. These casks have proven to be virtually indestructible. Thus, the government must implement a specific transportation plan using the new research coupled with the existing methods that have successfully transported waste for over forty years. The current system of relying on temporary storage of nuclear waste in 39 states leaves the nation for more vulnerable than relying on one centralized site.

The Bush Administration and the Department of Energy are urging the public to be patient. They state that this is just the beginning of the process, and they are just "[s]eeking permission to have independent experts at the Nuclear Regulatory Commission objectively and scientifically decide whether to approve construction of the repository. That will take at least three years and yet more scientific studies." The Department of Energy urges the Yucca Mountain opponents to understand that this problem of waste storage will not vanish, and it is the nation’s responsibility to seek a viable solution.

IV. CONCLUSION

The risks associated with Yucca Mountain are worth the result. Imagine one site containing all of the nation’s radioactive waste, freeing up space for increased energy and preventing millions of people from the possible contamination from nearby waste storage. While there is no guarantee that a terrorist attack or an accident would never occur, there is no guarantee that the existing sites will be safe from an attack either. A lone target – a centralized, secure, underground repository with continuous monitoring is far safer than over 100 different targets with varying degrees of security.

Finally, the government has spent in excess of $7 billion over the last 20 years studying the suitability of Yucca Mountain. The licensing process is the next step. Opponents must concede that something must be done to relieve the build-up of nuclear waste, and the Yucca Mountain Project must proceed as a viable and logical solution. There is no perfect, absolutely safe, non-controversial site or solution. However, Yucca Mountain and its concrete tunnels buried deep underground, surrounded by heavy security, and far from population centers is the best that could be found.

147. Id.
148. Abraham, supra note 51.
149. See generally, Abrahams, supra, note 51.