

NOISE POLLUTION AT AIRPORTS—A SERIOUS PROBLEM IN THE SEVENTIES

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The Wright brothers' flight early in this century did not extend as far as the wingspan of a Boeing 747. Air transportation has grown rapidly since that December day at Kittyhawk. This growth has brought with it a host of benefits to users of air transportation and to the century as a whole. Along with the benefits, however, have come some problems. One of the most serious of the current problems is the environmental damage caused by aircraft noise.

Individuals living near airports are being constantly harassed by the noise of jets landing and taking off. Noise pollution has had the effect of placing a moratorium on airport construction, particularly in congested urban areas where new airports are vitally needed.¹ Airport operations, airlines, aircraft and engine manufacturers, the Federal Government, State and Local governments and other organizations have become deeply involved in attempting to find solutions to the noise problem.

One environmental protection method employed has been the use of nighttime curfews. The Federal Aviation Administration (FAA), which operates Washington National Airport, bans the use of jet aircraft from 11 p.m. until 7 a.m. Problems arise when local communities attempt to use their police power to impose such curfews. This problem centers on the conflict between the Federal government as the organization which manages the navigable airspace in country and State and Local governments attempting to protect their citizens from noise pollution.

This paper will first explore the general area of noise pollution caused by the airplane. Next, noise control efforts by the air industry and the Federal government will be reviewed. Efforts by individuals to control noise pollution and to seek damages when harmed by noise will be covered next followed by noise control efforts by local and state governments. The right of State and Local governments to use their police power to place nighttime curfews at airports will be covered in detail. Focus of this use of police power will be on the May 14, 1973 Supreme Court decision in *the City of Burbank v. Lockheed Air Terminal*.² In

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1. "The Airport Crisis: No Place to Land," *Business Week*, Sept. 30, 1972, p. 4.

2. *City of Burbank et al, v. Lockheed Air Terminal, Inc., et al*, Supreme Court of the United States, No. 71-1637, May 14, 1973.

closing, some suggestions will be made, in light of the Burbank decision, about what can be done to help solve some of the problems of noise pollution created by aircraft.

Noise Pollution

"Noise is any sound, independent of loudness, that may produce an undesired physiological or psychological effect in an individual and that may interfere with the social ends of an individual or group."³ Excessive noise in terms of high intensity for short periods of time or lower intensity for longer periods can cause destruction of some of the 17,000 irreplaceable hair cells of the inner ear.⁴

The "Report to the President and Congress on Noise" stated that there was evidence that exposure to noise can permanently damage the inner ear with resultant permanent hearing loss, created a temporary loss of hearing, interfere with speech communication, disrupt sleep, be a source of annoyance and interfere with the ability to perform complicated tasks.⁵ It has been suggested that noise can cause indigestion, heart disease, stomach ulcers, impaired vision, spinal meningitis and other diseases.⁶

Noise is generally measured in decibels (db) which range upward in logarithmic progression. What decibels cannot measure is the human response to noise. At a certain level of noise, one individual may go deaf while another will suffer no ill effects. Decibel measurement does not take into account the fact that high frequency noise is generally more annoying than low frequency noise. Perceived noise decibels (PNdb) and effective noise decibels (EPNdb) combine the decibel scale with other factors to better correlate sound with judged loudness or annoyance.

Noise Control—Air Industry

It has been recognized that aircraft noise is one of the main sources of noise pollution. Efforts to reduce aircraft noise pollution have been directed in two areas—quieter airplanes; and operational procedures which

3. "Report to the President and Congress on Noise," Senate Document No. 92-93, Washington, D.C., February, 1972, p. xxi.

4. Arnold W. Reitze, Jr., *Environmental Law*, 2nd Edition (North American International: Washington, D.C.), p. 3, B-1.

5. "Report to the President," op. cit., p. 1-59.

6. John H. Mecklin, "It's Time to Turn Off All That Noise," *Fortune*, October, 1969, p. 132.

7. Blumenthal, U.L., Russell, R.E. and Streckenbach, J.M. *Summary—Noise Reduction Research and Development*, The Boeing Company, Seattle, Washington, November, 1971.

take the noise away from the people.⁸

Quieter Airplanes—Major noise problems came with the jet airplane. Two of the most popular early jets, the Douglas DC-8 and the Boeing 707, were powered by Pratt and Whitney JT3D engines. High velocity exhaust caused a “jet roar.” Turbo fan engines were introduced to control the jet roar. Part of the air compressed by the fan moves through the primary part of the engine while the remainder bypasses the core and flows around. While the “fan jets” reduced the roar they increased the fan noise or “whine.” The JT3D engine is the major noise problem. These engines can be retrofitted to bring noise levels down to acceptable levels, but this would cost around \$1,000,000 a plane to accomplish.⁹

Newer engines create less problems. The JT8D engines used on the shorter range airplanes like the Boeing 727 and 737 and the DC-9 have fan ducts which are integral with the engine case and exhaust into the tailpipe along with the primary jet gases, thus allowing for successful retrofit.¹⁰ The JT9D engine used on the wide-body airplanes like the Boeing 747, DC-10 and L-1011 have reduced fan noise by various techniques employed in the design of the engine, and are the quietest engines now in commercial use.

Operational Procedures—Various flying procedures have been employed which are designed to take the noise away from the people. Such procedures include increased holding and maneuver altitudes, flight patterns which avoid congested areas, increased glide slope and increased altitude for glide slope intercept, two-segment approaches, and flap retractions on take-off.¹¹ At Washington National Airport all airplanes landing and taking off must follow the Anacostia or Potomac rivers in order to avoid flying over populated areas.

Noise Control—Federal Government

The Federal Government's interest in noise pollution goes back to the early 1950's in the Eisenhower Administration;¹² however, no major legislation was passed until 1968. In 1968 the Federal Aviation Act of 1958 was amended giving the FAA the power to set standards for aircraft

8. Peter M. Lynagh, “The Airport and the Environment,” *High Speed Ground Journal*, Spring, 1973, p. 58.

9. Segal, Migdon R. “Aircraft Noise: The Retrofitting Approach,” Library of Congress Congressional Research Service, Washington, D.C., March 28, 1972, p. 4-7.

10. “Aircraft Engine Noise,” Pratt and Whitney Aircraft, East Hartford, Connecticut.

11. *Op. cit.*, p. 16.

12. “The Airport and Its Neighbor,” *Report of the President's Airport Commission*, Washington, D.C., May 16, 1952, p. 4.

noise.¹³ The following year Part 36 of the Federal Aviation Act was passed which set specific formulas for measurement and evaluation of aircraft noise. Measurement is made at approach, take-off and sideline with 108 (EPNdb) being the maximum noise level allowable. These rules apply only to aircraft certified after December 1, 1967. Older planes, like the Boeing 707 powered with JT3D engines, and with an approach EPNdb of 121, are not affected.

The second major piece of Federal legislation was passed on October 27, 1972, "The Noise Control Act of 1972."¹⁴ This law requires the Administrator of the Environmental Protection Agency (EPA) to make a study of aircraft noise, such a study to come within nine months of the passage of the Act. Upon completion of the report, the EPA is to submit to the FAA proposed regulations for the control and abatement of aircraft noise.¹⁵

The Noise Control Act of 1972 amends section 611 of the Federal Aviation Act of 1958 (49 U.S.C. 1431) requiring the FAA to set standards of aircraft noise based on regulations prescribed by the EPA. The FAA can modify the proposed regulations of the EPA, and it is the FAA which has the final say in setting noise standards.

It should be pointed out that two stricter noise control measures were not included in the Noise Control Act. One was a provision which would require the EPA to set noise standards. In the minority view of Senator Muskie, ". . . The Federal Aviation Administration has had this (regulation of noise pollution) since its inception. It has had a specific legislative mandate for the past four years. And its record is wholly inadequate."¹⁶ The second measure not included in the Noise Control Act was a provision for the amendment of FAR 36 so that no aircraft could land at a U.S. airport after January 1, 1976 with noise levels in excess of 108 EPNdb. This would have forced the retrofit of older plans like the 707. In addition, new aircraft manufactured after the date of enactment of the Act would have to have had a noise level, at a minimum, 15 EPNdb's lower than those currently in effect under FAR 36.¹⁷

13. Public Law 90-411.

14. *Ibid.*, Sec. 7 (a).

15. "Report of the Committee on Public Works United States Senate Together with Minority Views to Accompany S-3342," 92nd Congress, No. 92-1160, September 19, 1972, p. 22.

16. *Ibid.*, p. 29.

17. Julia L. Sayles, "Aviation Noise: A Survey of Background and Legal Problems," Library of Congress Legislative Reference Service, August 14, 1968, p. LRS-2.

Noise Control—Individual Action

Early law followed the Roman maxim that owners were entitled to the complete use of the airspace above their land. This maxim was followed prior to the airplane and was used for cases like overhanging trees.¹⁸ The question of ownership of property above the ground was still an issue when Congress passed the "Air Commerce Act of 1926."¹⁹

This act attempted to separate that part of the airspace which was for public use and that which was for the owners' use. In defining "navigable airspace" Congress said that this means ". . . airspace above the minimum safe altitude of flights prescribed by the Secretary of Commerce."²⁰ The Secretary prescribed that air traffic must fly at altitudes of at least 1,000 feet above congested areas and at least 500 feet elsewhere. The question of ownership of the airspace was put to an end in 1946 when the Supreme Court rules in the *United States v. Causby*²¹ that ownership of the airspace had no place in the modern world.

If the ownership of the airspace is public property, what redress does the individual have against noise pollution? Four basic sources of relief are: A) Injunction; B) Trespass; C) Nuisance; D) Inverse Condemnation.

A) *Injunction*—Recourse in an injunction action would involve having the courts stop the construction or operation of an airport. There have been some cases where this has occurred, the most notable being the *Swetland Case*²² wherein the plaintiff succeeded in stopping the construction and operation of an airport near Cleveland. Injunctions have had limited success in stopping noise and in recent time have been almost non-existent.

B) *Trespass*—"The Trespass notion is predicated on a physical invasion of the airspace over one's property."²³ The Supreme Court decision in the *Causby Case* has made the collection of damages based on trespass very difficult. Thomas Causby was a chicken farmer who was located next to a military base and alleged that the noise scared his chickens to death and that his property had been taken without compensation.²⁴ As mentioned previously, the court ruled that the airspace was public domain and that, therefore, there had been no trespass.

C) *Nuisance*—"In contrast to a Trespass, a Nuisance may arise with-

18. Air Commerce Act of 1926, 44 Stat. 568 (1926).

19. *Ibid.*, pg. 574.

20. *United States vs. Causby*, 328 U.S. 256 (1946).

22. *Swetland vs. Curtiss Airports Corporation*, 41 F. 2nd 929 (1930).

23. Lyman M. Tondel, "Noise Litigation at Public Airports," *Journal of Air Law and Commerce*, Summer, 1966, p. 396.

24. *U.S. vs. Causby*, 328 U.S. 256.

out a physical invasion if the activity unreasonably interferes with the use and enjoyment of the property."²⁵ However, if a public or quasi-public facility like an airport is authorized by legislation, then, the question of "legalized" nuisance arises. This doctrine states that where such a facility is set up by legislation, damage claims are to be denied.²⁶ Since the doctrine of "legalized nuisance" comes into play in most cases, nuisance has had very limited success in damage cases.

D) *Inverse Condemnation*—Under this defense, plaintiffs claim that the noise created by the operation of the airport violates their rights under the Fifth or Fourteenth Amendments of the Constitution. Noise takes the individual's property without paying for the loss. In the *Causby* case, the decision finally rested on the fact Mr. Causby had his property taken away and was entitled to compensation. Inverse condemnation has been the most frequent recourse for the recovery of damages due to noise.²⁷

Three questions arise with respect to this Constitutional taking.

1) What constitutes a taking? The Supreme Court said in the *Causby* case that, "Flights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land."

2) To whom is the plaintiff to go to collect his damages? Are the airlines the offenders? Are the airport operators the offenders? Or is the Federal government the offender?

This question was answered by the Supreme Court in *Griggs v. Allegheny County*.²⁸ The Supreme Court said that the airport had taken the easement and that the plaintiff should look to the airport operator for relief.

3) Is there a taking if the airplane does not actually fly over the property? In *Batten v. United States*²⁹ the Court rules that there was no taking if there was no overflight. Federal Courts still adhere to the position that there will be no award of damages unless there is a physical invasion of the airspace. Some states have not adhered to the *Batten* conclusions, the most notable case being *Thornberg v. Portland*.³⁰ Here the Court ruled that the property was less desirable, not because of the plane flying over, but because of the noise. Plaintiffs were entitled to damages where their property was taken because of aircraft noise, and

25. Michael Stein, "Airport Noise Control," *Journal of Air Law and Commerce*, Summer, 1972, p. 490.

26. Tondel, *op. cit.*, p. 397.

27. *U.S. v. Causby*, 328 U.S. 266.

28. *Griggs v. Allegheny County*, 369 U.S. 84 (1962).

29. *Batten vs. United States*, 306 F. 2nd 580, Certiorari denied, 371 U.S. 955 (1963).

30. *Thornberg vs. Portland*, 233 OR. 178, 376 P. 2nd 100 (1962).

the exact position of the airplane did not matter.

The individual's recourse against noise pollution caused by airplanes landing and taking off seems to be to seek damages against airport operators, based on inverse condemnation, and usually only when there is a direct overflight.

Communities have attempted to protect their citizens by using their police power to force the airport operator to control noise pollution. In the exercises of their police power, the local governments run the risk of conflicting with the Federal government and its powers under the Commerce Clause and Supremacy clause of the Constitution.

Noise Control by Local Government

Local communities, states and municipalities have at various times attempted to exercise their police powers to control airport noise. In taking such action, the question that always arises is whether local communities are acting in an area which has been preempted by Congress. In essence, the conflict is between the local communities and their right to protect citizens from noise and the right of the Federal government to control and regulate commercial aviation. The legal situation can be delineated by looking at three recent cases.

Cedarhurst—In *Allegheny Airlines v. Village of Cedarhurst*,³¹ the village of Cedarhurst passed an ordinance forbidding air travel at less than 1,000 feet above the Village. Cedarhurst is located near John F. Kennedy (JFK) Airport in New York, and Allegheny Airlines plus nine other airlines, the Port of New York Authority, and the Air Line Pilots Association (ALPA) brought suit to declare the ordinance unconstitutional. The Court concluded that Congress did have a right to regulate air commerce and had been doing so since 1926, and that the Cedarhurst ordinance was unconstitutional in that it interfered with interstate commerce.

Hempstead—The issue in *American Airlines v. Town of Hempstead*³² was whether the town of Hempstead could pass an ordinance which set the maximum decibel tolerance for aircraft passing over the town going into or out of JFK Airport. Again, the Court ruled that such an ordinance placed an undue burden on interstate commerce and that as such was unconstitutional.

Hollywood-Burbank—In March of 1970, the City of Burbank passed an ordinance³³ which prohibited pilots of pure jet aircraft from taking

31. 132 F. Supp. 871 (E.D. N.Y.); 238 F. 2nd 812.

32. 272 F. Supp. 220 (E.D. N.Y.).

33. Burbank Municipal Code, ordinance No. 2216, Section 20-32.1, March 31, 1970.

off from the Hollywood-Burbank Airport between 11 p.m. of one day and 7 a.m. the next day. The ordinance also prohibited the operator of the airport, Lockheed Air Terminal, Inc., from allowing pure jet aircrafts from taking off during those hours.

Lockheed Air Terminal and Pacific Southwest Airlines brought suit to invalidate the city ordinance. The United States District Court in California ruled that "the federal government had so preempted fields of use of airspace and regulation of airspace and regulation of air traffic as to invalidate and preclude enforcement of such an ordinance."³⁴ The lower court also said that there would be a "very serious loss of efficiency as to the use of air space if a national curfew were imposed,"³⁵ and ruled that the curfew violated the commerce clause of the Constitution.

In the lower court case the Air Transport Association of America was an intervening plaintiff and the FAA filed an amicus curiae brief in support of the plaintiff. The State of California filed an amicus curiae brief in support of the defendants.

Appeal was made by the City of Burbank to the United States Court of Appeals, Ninth Circuit. The Court of Appeals did not concern itself with the issue of interference with interstate commerce but centered on the issue of preemption. The lower court's decision was upheld as the Court of Appeals ruled ". . . that the prevasiveness of federal regulation in the field of air commerce, the intensity of the national interest in that regulation, and the nature of air commerce itself compel the conclusion that state and local regulation in that area has been preempted."³⁶

In October of 1972 the Supreme Court granted certiorari.³⁷

The position of the City of Burbank is set forth in the summary statement in their brief before the Supreme Court.

"The quality of our environment has deteriorated to such an extent that the freedom to live in an atmosphere of peace and quiet has been severely restricted. The "domestic tranquility" which the framers of the Constitution sought to promote is no longer with us, not only in the area of noise but also in other areas of citizen need.

The primary reason for this is that Congress has by and large ceased to be responsive to the will of the people. To a large degree needed legislation is under the control of committees of the House and Senate. Individual members of Congress can, by delaying tactics and other means, frustrate the passage of necessary legislation. Special interest

34. *Lockheed Air Terminal vs. The City of Burbank*, 318 F. Supp. 914.

35. *Ibid.*, p. 927.

36. 457 F. 2nd 667.

37. *City of Burbank et. al. v. Lockheed Air Terminal, Inc. et. al.*, United States Supreme Court, October Term, 1972, No. 71-1637.

groups, such as the airlines, appear to have an unusual ability to block legislation in the area of concern to them.

We, therefore respectfully urge this Court to re-examine the preemption and conflict doctrines as presently enunciated and take upon itself the burden of defining those areas in which States and local governments may properly exercise their police powers, and the Courts may act, notwithstanding a declaration of Federal preemption. It is suggested that a proper rule would be that such State and local governmental enactments, and Court applied restraints, would be valid, provided it is demonstrated that the enactment or restraint in question is reasonable and necessary under the circumstances. Such a rule would find adequate support under the Ninth and Tenth Amendments.³⁸

Lockheed Air Terminal based its contention that the ordinance was unconstitutional on three factors.

1. Preemption—The federal regulatory scheme meets all three tests for preemption laid down in *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947), and subsequent cases. First, viewed in sequence, the 1958 Act, the 1968 Amendment, and the 1972 Noise Control Act constitute a complete and pervasive occupation of the fields of airspace management and the regulation of aircraft operations and aircraft noise. Second, the congressional statutes and regulations pertaining to management of the navigable airspace unquestionably touch a field in which the federal interest is dominant. Finally, it is clear that uncoordinated local regulation would produce a result inconsistent with the objective of federal law, which is to secure efficient as well as safe use of the navigable airspace.

The Burbank curfew ordinance intrudes into this exclusive federal domain. It would deny jet aircraft access to the navigable airspace for fully one-third of each day. As the district court concluded, the local imposition of curfews would cause a "very serious loss of efficiency" with the result that the statutory objectives would be "compromised" (C.L. 16, A. 404). Moreover, curfews would increase the already serious congestion problem and also actually increase, not relieve, the noise problem by pushing more flights into the periods of greatest annoyance.³⁹

2. Conflict—Lockheed claimed that there was a conflict between the Burbank ordinance and an FAA order which established a preferential runway system to curtail noise.⁴⁰

3. Commerce Clause—Lockheed contended that the ordinance would impose an undue burden on interstate commerce. Specifically, Lockheed

38. *Ibid.*, p. 21.

39. *Ibid.*, p. 22.

40. "Brief for the United States as Amicus Curiae," Supreme Court of the United States, October term, 1972.

contends that the Burbank curfew would lead to a nationwide rash of nighttime closings and would have a detrimental effect on the national air transportation system.⁴¹

It is interesting to note that the Department of Justice filed a "Brief For the United States as Amicus Curiae" on behalf of the City of Burbank.⁴² The Department of Justice contended that: 1) "Congress did not intend to preempt local regulation of aircraft noise by means of night curfew ordinances applicable to airports within the jurisdiction of local governments."⁴³ 2) "Burbank's ordinance is not in conflict with the tower chief's preferential runway order."⁴⁴ 3) "The validity of the Burbank ordinance should be assessed on the basis of its specific impact on commerce rather than on the basis of the theoretical impact of nationwide curfews."⁴⁵

On May 14, 1973, the Supreme Court, in a 5-4 decision, ruled in favor of Lockheed Air Terminal.⁴⁶ The Court based its decision on the issue of preemption and weighed heavily the Federal Aviation Act of 1958⁴⁷ and its amendments and the Noise Control Act of 1972.⁴⁸ The Court said that the FAA has been given broad authority to regulate air transportation and that the United States is to exercise sovereignty in the airspace.⁴⁹

The Noise Control Act of 1972 provides further evidence of the preemption by the FAA. The FAA is to publish proposed rules on noise control based on regulations proposed by the EPA. The Supreme Court said that the act ". . . reaffirms and reinforces the conclusion that the FAA, now in conjunction with EPA, has full control over aircraft noise preempting state and local control."⁵⁰ This preemption, the court said, was not written into law but was implied. *Rice v. Santa Fe Elevator Corp.*⁵¹ said that preemption occurs when the scheme of federal regulation is so pervasive as to make reasonable the inference that Congress left no room for the states to supplement it, or that Congress may touch on an area where the federal system is assumed in control.⁵² The Court felt that federal preemption is implied with respect to curfews to control noise.

In its decision the Court said that "If we were to uphold the Burbank

41. *Ibid.*, p. 12.

44. *Ibid.*, p. 49.

45. *Ibid.*, p. 53.

46. *City of Burbank v. Lockheed Air Terminal, Inc.*, Supreme Court of the United States, No. 71-1637, May 14, 1973.

47. 72 STAT. 737, 49 U.S.C. 1301.

48. 86 STAT. 1234.

49. Supreme Court, No. 71-1637, *op. cit.*, p. 3.

50. Supreme Court, No. 71-1637, *op. cit.* p. 9.

51. 331 U.S. 218.

52. *Ibid.*, p. 230.

ordinance and a significant number of municipalities followed suit, it is obvious that fractionalized control of the timing of take-offs and landings would severely limit the flexibility of the FAA in controlling air traffic flow.”⁵³ In order to control the airspace, the FAA must have control over practices which prohibit the use of airports during various hours of the night.

In the dissent, Mr. Justice Rehnquist, writing for the minority, felt that Congress did not intend that the Faa should preempt the powers of local governments in the area of noise control. Justice Rehnquist feels that the “Noise Control Act of 1972” maintains the status quo and at the controlling point is congressional intent in passing the “Federal Aviation Act of 1958.” He felt that this act does not preempt the regulation of aircraft noise, and that “the history of congressional action in this field demonstrates . . . an affirmative Congressional intent to allow local regulation.”

The *City of Burbank* case would seem to put an end to the issue of the rights of local governments to place curfews on airports. It may not be appropriate to do this at the moment. First, Hollywood-Burbank is a privately owned airport. Based on the Court’s opinion, operators of the airport could enforce curfews if they desired. Since most airports are operated by local or State governments future legal questions will arise with respect to curfews placed by local or state operated airports.

Second, the Supreme Court addressed itself to the issue of preemption. It failed to resolve the issue of conflict between FAA rules and local regulations. Likewise, no decision was forthcoming on the question of whether curfews place an undue burden on interstate commerce.

For the moment, the results of the *Cedarhurst*, *Hempstead* and *Burbank* cases indicate that the job of managing the airspace lies with the FAA and that noise control procedures must arise from the FAA and not through local regulation.

Conclusions

Noise pollution is a major problem which faces the United States in the 1970’s. One of the most prevalent forms of noise pollution is aircraft noise.

For individuals, the most successful route in collecting damages has been through inverse condemnation. This procedure is costly and only partially successful. Individuals should support efforts to provide proper zoning at airports and, where the issue is a new airport they should work

53. Supreme Court No. 71-1637, op. cit., p. 15.

to see that the airport is isolated. New airports should be located where noise will have a minimal impact.

Local communities should work with the operators of airports and the airlines serving the community to reach agreements which control noise, yet allow for the reasonable operation of the airport. Such an agreement might follow the pattern set at Minneapolis-St. Paul where the airlines and the City agreed to nighttime plans which would require airlines to limit their flights and use limited-impact runways.

The Federal Government and particularly the FAA, should work on and support programs which are aimed at noise reduction. In setting standards as required by the "Noise Control Act of 1972" the FAA should set standards as strict as possible as long as they are both technically and economically feasible. The Federal government should promote a program of retrofitting older, noisy airplanes. If it is impossible for the airlines to absorb the cost of retrofitting a 707, then perhaps a Federal program should be initiated with funds to come from a ticket tax at all United States Airports.

Aircraft manufacturers and the airlines in the fight against noise pollution must continue to support programs which are aimed at noise reduction. Airlines should also work closely with communities and airport operators to work out noise reduction plans which are agreeable to all sides.

Airplane noise is never going to disappear completely. This would require the abolition of air transportation altogether. Such an option may have been feasible in the 1930's when the Court ruled in favor of *Swetland*. Today, however, an airport is an integral part of any vibrant city. What is necessary is dedication on the part of all those involved and a willingness to cooperate in an endeavor which will maximize the societal benefits.