## **BOOK REVIEW**

THE FEDERAL AVIATION ADMINISTRATION. By Robert Burkhardt. Frederick A. Praeger. 1967. Pp. 249. \$5.95. Reviewed by John H. Martin\*

"Before there was a Federal Aviation Administration, there was a Federal Aviation Agency, and before there was a Federal Aviation Agency, there was a Civil Aeronautics Administration—and before that a Civil Aeronautics Authority, and before that a Bureau of Air Commerce, and before that there was an Aeronautics Branch in the Department of Commerce.

"Of course, before any of these, there were those magnificent Wright brothers, who started the whole thing on a sandy knoll not far from Kitty Hawk, North Carolina, on December 17, 1903."

Thus does Author Burkhardt outline the "begats" of what, to everyone interested in civil aviation, must surely be one of the most important of all federal agencies—the Federal Aviation Administration (FAA).

This is a highly readable book, the contents of which belie its rather dull title. In fact, the author has neatly combined the story of the FAA with a capsule history of the development of civil aviation over the past fifty years. Furthermore, Mr. Burkhardt, a professional journalist specializing in aviation matters, constantly drops small gems of information which could almost qualify one for participation in a TV quiz show:

Dwight D. Eisenhower was the first (and so far only) president to hold a pilot's license.

General William F. McKee was the first Air Force general to reach four star rank who never qualified as a pilot.

A North Central Airlines DC-3 was retired in March 1966 after nearly twenty-seven years of commercial service, 12 million air miles, 100,000 taxi miles, 8 million gallons of fuel, 25,000 spark plugs, 550 tires and 136 engines.

While the volume purports to be about the Federal Aviation Administration, it is, in fact, mostly about its immediate predecessor, the Federal Aviation Agency, since the Department of Transportation (of which the Administration is a part) was created only a short time before

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the book was published. This is really a distinction without a difference.

The first three chapters are primarily an historical outline of the struggle to create an organization and a structure adequate to handle the complexities of modern civil aviation.

Since the primary functions of the FAA are to regulate "air commerce in such a manner as to best promote its development and safety" and to control "the use of navigable airspace... in the interest of... safety," a fair portion of the book is devoted to air traffic control, air safety problems and the certification of airmen and aircraft—again with emphasis on the safety factor.

Most of the balance of the volume sets forth in concise and interesting detail some of the less publicized activities of the FAA, such as its international operations, its continuing relationship with the defense establishment in the area of air traffic control, its management of Dulles International and Washington National airports and its airport aid programs.

In Chapter XIII, Mr. Burkhardt outlines the history of the FAA's participation in the supersonic transport (SST) program beginning in late 1960 and culminating in the announcement of the "winners" (Boeing and General Electric) on December 31, 1966. Since the book was published in mid-1967, the author could not have foreseen the unfortunate events of later years that resulted in the loss of U.S. leadership in the field of advanced commercial transport aircraft, at least for the near future. Nor could he have known that the Boeing swing-wing design which, according to him, made the Boeing proposal clearly "out front in the design competition" would, after more than a year of further study and development, be abandoned only to be replaced by a fixed-wing remarkably similar to that originally proposed by Boeing's competitor in the SST competition.

There is also an interesting chapter on the first three Administrators of the FAA, Elwood R. Quesada, Najeeb E. Halaby, and William F. McKee. Both Quesada and McKee were retired General officers in the U.S. Air Force. One's overall impression is that Mr. Burkhardt rather favored "Pete" Quesada over his two successors.

Finally, the author has included as an appendix to his text a transcript of a tape recording made by Air Traffic Control (ATC) telling the story of how ATC, with the help of a United Airlines captain and the pilot of a Piper Aztec, succeeded in bringing a pilot (with two passengers), lost in the fog over Northern California, to a safe landing. A short quote from the opening scene of this little drama will not detract from the excitement of the whole:

RED BLUFF FLIGHT SERVICE STATION: Oakland Center, this is Red Bluff radio. We have a little problem with an air-

craft—Nan XYZ—not sure of his position. We can give him steers into Red Bluff. We want to know if you have any traffic.

OAKLAND AIR ROUTE TRAFFIC CONTROL CENTER: I have traffic at four thousand. Is he VFR?

RED BLUFF: Oh no. He's in the soup at two thousand.

OAKLAND: ATC requests XYZ contact the Oakland Center one one eight point four or one two five point seven now for radar identification and steers into Red Bluff.

NAN XYZ: This is XYZ. Where in the hell am I now?

OAKLAND: XYZ, climb and maintain four thousand, over.

XYZ: This is XYZ. I read you, and I am climbing out.

OAKLAND: Roger. XYZ, remain on this frequency. How much more fuel do you have? Over.

XYZ: About one-quarter of a tank—about three-quarters of an hour. I don't know where in hell I'm at.

OAKLAND: Roger, XYZ. What is your present heading?

XYZ: I am flying at twenty-nine degrees.

UNITED AIR LINES FLIGHT NO. 388: XYZ, this is United Air Lines. What is your estimated position? Over.

XYZ: I have no idea.

In pleasant contrast to many books about highly specialized organizations or industries which have their own private cant, Mr. Burkhardt consistently explains (and, where necessary, repeats) the meaning of the many acronyms associated with FAA's operation. This is, of course, a great help to the uninitiated reader.

In any book of this kind, a few errors of fact are likely to creep in. This one is no exception. However, since they are minor and of little interest to other than professionals in the field, they do not in any way detract from the total excellence of Mr. Burkhardt's effort.