

Winter 1993

Air Transportation Challenges of the 1990s Part II

Henry R. Lehrer Ph.D.

Follow this and additional works at: <https://commons.erau.edu/jaaer>

Scholarly Commons Citation

Lehrer, H. R. (1993). Air Transportation Challenges of the 1990s Part II. *Journal of Aviation/Aerospace Education & Research*, 3(2). Retrieved from <https://commons.erau.edu/jaaer/vol3/iss2/5>

This Editorial is brought to you for free and open access by the Journals at Scholarly Commons. It has been accepted for inclusion in Journal of Aviation/Aerospace Education & Research by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.

EDITORIAL

AIR TRANSPORTATION CHALLENGES OF THE 1990s

PART II

This is the second in a series of editorials about the challenges of the air transportation system in the 1990s. The editorial that appeared in the fall 1992 issue of JAAER covered traffic demand, profitability, fleet renewals, and fare economies. This issue, the subjects are:

- A. Airspace and Airport Capacity*
- B. Noise and Environmental Issues*
- C. New Aircraft Technology*

Airports and the airspace around them are becoming more congested every day. This congestion contributes greatly to strained system capacity and increased delay. Although many major metropolitan areas have felt the strain, a classic example might be the New York area where the three major airports, (La Guardia, Kennedy, and Newark) are some of the most heavily utilized in the country. Year after year - and 1992 was probably no exception - these three airports continue to board about 25% of all the passengers enplaned each year in this country.

While such traffic is a strong producer of revenues for the Port Authority of New York and New Jersey, these airports continue to contribute over 40% of the delay within the entire air transportation system. Various ideas have come from within the industry to solve the problem. Among the solutions offered are wayports, airport privatization, passenger facility charges, as well as many other combinations that directly relate to the problem, relate somewhat, or are not related in the least to finding an answer. Things are probably not going to be solved with more concrete in the form of runways as the Not in my Backyard (NIMBY) and Build Absolutely Nothing Anywhere Near Anything Else (BANANA) factions become more vocal and less compromising. Perhaps with a new administration in Washington, an answer will

be forthcoming.

The solution of noise and environmental issues associated with airports and the air transportation system is an issue that is becoming more important daily. Although noise and landside congestion come to mind as obvious problems that must be solved, there are other sources of pollution and environmental degradation that require our attention. Specifically, the *ICAO Journal* (1992, August) lists a plethora of aviation related environmental issues which include noise from airport engine testing, from sonic boom, and from enroute flight operations; aircraft engine air pollution and airport access traffic emissions are also included. ICAO also identifies various airport construction environmental issues such as loss of land, soil erosion, water table diminution, river course alteration, wet lands

loss, and significant impact on flora and fauna. Completing the list are several pollution problems around airports such as water pollution from inadequate treatment of contaminants in airport waste water, leakage of underground storage tanks, improper disposal of harmful materials used in aircraft servicing and maintenance, as well as from waste from the airport and incoming aircraft, and the ever present possibility of accidents or incidents with hazardous cargo or fuel spills.

Finally, the implementation of new aircraft technology has had a significant impact on the air transportation system, particularly in the airplanes that are being flown. Air carriers are now regularly using two-engine, two-man crew airplane flying extended-over-

water operations using the Extended Twin-engine Operations (ETOPS) rule. Such operations account for 1 in 3 crossings of the North Atlantic and since 1985 there have been only 13 precautionary engine shutdowns by US operators.

Additionally, the possibility of new aircraft designed to meet the needs of the air carriers, such as the Boeing 777 or the double-deck behemoths envisioned on several manufacturers drawing boards, bring a whole new set of problems.

The next issue of JAAER will discuss the three final challenges of the 1990s, regulatory concerns, airway congestion, and the globalization of the air transportation system.

HRL