EPA Proposes Quieting of Jet Airplanes

NOTE: In the past, the Environmental Protection Agency (EPA) coordinated all federal noise control activities through its Office of Noise Abatement and Control. However, in 1981, the Administration at that time concluded that noise issues were best handled at the State or local government level. As a result, the EPA phased out the office's funding in 1982 as part of a shift in federal noise control policy to transfer the primary responsibility of regulating noise to state and local governments. However, the Noise Control Act of 1972 and the Quiet Communities Act of 1978 were not rescinded by Congress and remain in effect today, although essentially unfunded. View more information about resources on noise pollution.

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A proposal to quiet the jet aircraft flown by commercial air carriers, corporations and individuals has been submitted to the Federal Aviation Administration by the Environmental Protection Agency.

To meet the proposed standard, U.S. commercial air carriers would need to spend up to $880 million over a four-year period. The carriers would be required to retrofit about 1,800 airplanes with new jet engine housings (nacelles) lined with sound absorbing material. The cost to similarly backfit the businessmen's jet fleet of 650 airplanes was estimated by EPA at $300 million over a four-year period.

An estimated 16 million Americans are now subjected to a wide range of aircraft noise. Such noise can interfere with the normal use of homes and yards and poses a particularly serious problem for such institutions as schools and hospitals.

Civil lawsuits totaling billions of dollars have been filed by citizens seeking relief from jet aircraft noise against airports in such cities as New York, Chicago, Los Angeles and Washington, D.C.

Russell E. Train, EPA Administrator, said EPA's proposals, if adopted by FAA, will bring varying degrees of relief to all of the 16 million people adversely affected by airplane noise. "The most significant relief," he said, "will be provided to the approximately 1.5 million Americans residing or working near flight paths, because they are subjected to the most severe levels of jet noise."

The total cost to retrofit the rest of the world's fleet, assuming that they would all operate from U.S. airports at some time, would be up to $720 million.

Train said the cost of quieting the U.S. commercial air carrier fleet could be recovered by additional fare charges averaging less than $2 per ticket over a period of 6 to 9 years. The principal alternative to quieting the jet engines--namely, rezoning around airports and insulating houses--would cost more than $5 billion, he said.
The proposed EPA regulations break down as follows:

1. After June 30, 1976, at least half of engine-nacelle combinations for the airplanes of an airline fleet must enable them to meet FAA noise level requirements for new airplanes specified in Federal aviation regulations part 36 (FAR 36).* New jet airplanes such as the Douglas DC 10, the Boeing 747 and the Lockheed 1011 are much quieter than such older in-use airplanes as the Boeing 707 and the Douglas DC 8. These newer planes would not require retrofit.

2. After June 30, 1978, all engine nacelle combinations must be quieted and therefore all civil subsonic turbojet engine powered airplanes must comply with the noise level requirements of FAR 36.

3. In addition, each airline operator would be required to supply FAA the data necessary to compute a fleet noise level for his fleet. The purpose is to establish a total noise level, annually for each fleet, so that when adequate technology becomes available, a basis is established for determining any additional reductions that should be made. The computation of fleet noise level, using data already being supplied by the airlines to FAA, is a simple exercise in calculation with very minimal costs involved.

Under the Noise Control Act of 1972, the EPA is required to submit to the FAA proposed aircraft noise control regulations which it determines are necessary to protect public health and welfare. Upon such submittal, FAA is required to publish the proposed regulations in a notice of proposed rulemaking and to hold public hearings. Subsequently, the FAA is required to promulgate the proposed regulations or to publish a notice explaining why it has decided not to do so.

EPA has now submitted four proposals to FAA: those announced today--jet airplane retrofit and fleet noise levels--and, previously, proposals to reduce noise from small propeller-driven airplanes and to require pilots to fly higher minimum altitudes than they are now required to fly.

In March 1974, the FAA proposed retrofit regulations essentially similar to the EPA proposal, but final regulations have not yet been promulgated.

* The FAA regulation placing a noise ceiling on newly manufactured jet airplanes permits levels which range between 93 and 108 decibels, depending upon the weight of the aircraft and the number of engines. Measurements are taken at two points on the ground during takeoff and at one point during landing.