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STATEMENT OF THE SECRETARY OF TRANSPORTATION,  
ALAN S. BOYD, ON NOISE ABATEMENT, BEFORE THE TRANS-  
PORTATION AND AERONAUTICS SUBCOMMITTEE OF THE  
HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE

Wednesday, November 15, 1967

Mr. Chairman and Members of the Subcommittee:

I am Alan S. Boyd, Secretary of Transportation. It is a pleasure to appear before your Subcommittee to describe the function of the Department of Transportation in alleviating the problem of aircraft noise.

A description of the aircraft noise abatement function that the Department of Transportation is undertaking begins with some recent and relevant history. Twenty months ago, the President, in his message to Congress proposing the establishment of the Department of Transportation, recognized that "aircraft noise is a growing source of annoyance and concern to the thousands of citizens who live near many of our large airports." The President directed us to "embark now on a concerted effort to alleviate the problems of aircraft noise." In order to alleviate the problems of aircraft noise, the President directed his science advisor, Dr. Hornig, to work with other Federal agencies and departments to frame an action program to attack this problem.

Dr. Hornig undertook this task and during the past months Federal and local Government representatives, as well as representatives from industry, studied the development of noise standards and the

compatible uses of land near airports and recommended legislative and administrative actions needed to move ahead in this area. The Administration sponsored noise abatement bill (H. R. 3400 and S. 707) which I strongly support and which I will comment on in detail later on, represents one of the recommendations which Dr. Hornig's group has made.

As of September 1 the responsibilities previously held by Dr. Hornig and his advisors and colleagues were transferred to the Department of Transportation. In the future we will be the focal point for government-wide activity in the field of aircraft noise abatement. Later in my testimony I will comment on how we have organized the implementation of these new responsibilities within the Department of Transportation.

There are few subjects within the responsibilities of the Department of Transportation of greater importance than noise abatement.

Our effort to find solutions to the problems of noise abatement is part of a total departmental effort to insure that transportation activities do not adversely effect our natural environment.

Sections 2(b)(2) and 4(f) of the Department of Transportation Act cast upon me, as Secretary of Transportation, a major responsibility to insure that we preserve, to the maximum extent possible, the values of our society and the rich natural assets which we enjoy.

We intend to conserve our great natural resources. We intend to not only protect but hopefully enhance our great historical sites. We are determined to do the same for the great sites of natural or man made beauty which abound in this nation. Most of the problems we have faced in reaching those goals in the past have been related to our highway construction effort. But we can be sure they will be found in airport construction and other activities in the future.

There is no question that one of the goals we must have is to maintain an environment in which noise levels do not impair or indeed destroy the normal process of life.

For those who must live surrounded by the din of normal city life, the whine of an increasing number of jet aircraft can make life almost intolerable for many who live below or near the path of flight. I am

not here to tell you that there are easy solutions for the problem. But I am here to tell you that the Department of Transportation is devoting every possible resource to finding solutions.

Let me begin by saying that I do not believe there will ever be such a thing as a quiet airplane. Despite our far longer experience with the problems of truck noise and railroad noise, we have not been able to produce quiet vehicles in those modes of transportation. But I am convinced that we will be able, by technological and regulatory means, to reduce the impact of aircraft noise exposure for the majority of Americans who now, or will potentially be, subject to excessive aircraft noise exposure.

One of the major difficulties in determining what is a tolerable level of noise exposure is the great diversity of human response and reaction to noise. That phenomenon is made even more complex by the various types of construction of buildings in which Americans live or work.

At Kennedy Airport there is a motel, sitting practically on the airport grounds, which is exposed to a noise level that must be one of the highest magnitudes in the country on a sustained basis. Yet conversation and sleep are no problem in that building for most occupants, because of its construction and insulation.

Two miles off the runway at JFK there is a large residential community in which neighbors experience different effects from low flying jet aircraft. While their backyards and patios are quite vulnerable, families living in air conditioned, brick homes with all windows closed experience much less annoyance from jet noise than the family living next door in a frame house with windows open for ventilation and cool air who may find conversation, radio and television listening, and sleep quite difficult for substantial periods of the day and evening.

What do we believe we can do about noise abatement?

We are looking at the total aircraft noise problem from engine start to shut down. We include both subsonic and supersonic aircraft and consider the sonic boom to be another noise generated by aircraft.

Federal and local Government representatives as well as representatives from the aviation and scientific communities have been and will continue to be solicited for their recommendations and support of this program.

We are establishing Study Panels in eight major areas in which investigations will be conducted to identify the noise reduction potential within each of these areas. They are: aircraft noise research, aircraft operations, sonic boom research, airport and land use, natural environment, legal, structures, and human response. NASA, HUD, DOD, DOI, and DOT will provide chairmanships for the Panels and support for studies in these areas.

Although we have made improvements in some of these areas and research has been underway for some time, we must push far more vigorously for action programs to provide more positive results. We have a substantial base today upon which to initiate action and this we are going to do within the limits of the statutory authority we now have. As mentioned earlier, we have requested passage of an aircraft noise abatement bill which will give us the authority to certify aircraft for noise as we now do for safety. This bill will provide the mechanism by which we can assure future aircraft are substantially quieter than our present generation.

But let me make it very clear that the present technology we have to produce a quieter engine, and that which we believe will be available within the short range future, will not solve the complete aircraft noise problem. We believe that the eventual range of noise reduction may be between 10 to 20 Perceived Noise Decibels (PNdB's).

Even a reduction of 10 PNdB provides a far greater relief from noise annoyance than the numbers themselves might indicate. While a reduction, for example, from 110 to 100 is slightly less than 10% by number, the annoyance reduction will be significantly larger.

Several other steps have been taken in the field of aircraft operation and air traffic control. It has been possible to significantly reduce the impact of jet aircraft noise by better take-off and landing patterns and procedures. With respect to these operating procedures for existing aircraft, as Administrator McKee told the Congress when he transmitted the Administration's pending noise legislation, the FAA has used its authority to regulate the flight procedures of aircraft to protect persons and property on the ground from aircraft noise wherever possible. Prior to the formal creation of the Department, the FAA, with assistance from NASA, had also tested and developed climb-out profiles which not only significantly reduced aircraft noise but also were acceptable to industry as consistent with the safe and reasonable operation of the aircraft. This so-called two segment noise abatement climb profile consists of a maximum takeoff climb to a specific altitude followed by a reduction in power and lower rate of

climb to an altitude where the generation of noise is not annoying and thereafter a resumption in the normal climb procedure.

In addition, research is now underway to provide a noise abatement approach profile. This procedure is presently in the experimental stage but we propose to continue until we have achieved success with the approach problem keeping in mind the overriding problem that there is, as yet, a safety hazard in increasing the rate of descent with today's aircraft instrumentation and performance. We are hopeful that this hazard can be overcome.

We also intend to continue our efforts to insure that Federal funds will not be expended for airports which have not provided for adjacent land utilization compatible with future noise exposure. This approach perhaps offers more hope for noise abatement for future airports than any other, but at the moment we still face the major problem of proliferated zoning authority in the areas surrounding the airport.

Let me make it clear that I am not just talking about so-called "clear zone" techniques. There is no type of structure that I know of that cannot be placed near the end of a much used jet runway provided that it is constructed with all of the available techniques to reduce aircraft noise. Buildings can be made virtually soundproof by the use of the right structural materials and proper insulation around windows and doors.

In the field of compatible land use, the Department is developing a computerized method of predicting aircraft noise exposure at airports. The methodology has been applied to three principal airports, JFK, O'Hare and Los Angeles International, and plans are underway to apply it to 29 additional airports. This, in turn, will now enable HUD to inventory the land use at those airports. This noise exposure forecast-land use inventory will then be applied to or be applicable by the balance of the airports. As a result, we shall for the first time have a precise grasp of the actual magnitude of the problem of compatible land use projected through 1975. It will be on the basis of this understanding that any necessary legislation will be drafted and submitted enabling the Federal government to assist, at long last, local communities in making the environment of the airport neighborhood one in which noise from aircraft does not generate noise from an outraged citizenry.

My point is, gentlemen, that this problem is complex, no single solution will fit all conditions as they apply at all airports. Therefore, we are conducting a comprehensive examination of the most critical conditions to ascertain the best plan.

To put what I have said into an organization focus, the Assistant Secretary of Transportation for Research and Technology, Mr. Frank W. Lehan, will be in charge of aircraft noise abatement. He will have reporting directly to him an Office of Noise Abatement. It will be his responsibility to provide the leadership and direction for our noise abatement efforts.

The direction and coordination of all Federal efforts will be through an Inter-Agency Aircraft Noise Abatement Program which is being established by the Department of Transportation which will continue and expand the programs recommended by Dr. Hornig.

Let me conclude with a plea that you give speedy and effective consideration to the bill which is before you. As I have previously stated, it will not solve all the problems that face us in aircraft noise abatement, but it will be an essential instrument in finding solutions. I would urge its immediate approval by this distinguished subcommittee so that it may be acted on by the full committee and the House of Representatives.