

GAO

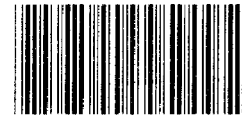
Testimony

For release
on delivery
expected at
3:30 p.m. EDT
Monday,
May 16, 1988

FAA's Implementation of the Expanded
East Coast Plan

Statement of
Mary Hamilton
Regional Manager, New York Regional Office

Before the
New Jersey Noise Control Council



135809

042155/135809

Mr. Chairman and members of the New Jersey Noise Control Council:

My name is Mary R. Hamilton and I am the manager of the New York Regional Office of the U.S. General Accounting Office (GAO). I appreciate this opportunity to discuss our review of the implementation of the Federal Aviation Administration's (FAA) Expanded East Coast Plan (EECP). As you know, the EECP is a comprehensive revision of air traffic control routes and procedures in the eastern United States designed to reduce delays in the New York metropolitan area.

Before I begin I would like to briefly describe GAO's role within the federal government. GAO was created by the Congress in 1921 as an independent, nonpartisan agency to assist the Congress to oversee the executive branch of the federal government. We do this by auditing and evaluating federal programs and reporting our findings to the Congress and federal agency officials. The great majority of our work is done at the request of the Congress.

Our review of FAA's implementation of the first phase of the EECP was done at the request of eight members of New Jersey's congressional delegation. These representatives were concerned that while the plan may have reduced delays at Newark International and other airports, their constituents had been negatively affected by excessive aircraft noise attributed to the plan's first phase. We have briefed the Congressional

representatives and their staffs on the results of our work and have provided them with copies of our draft report. Our draft report has also been provided to FAA, the Department of Transportation, the Port Authority of New York and New Jersey, and the President's Council on Environmental Quality for comment.

In my statement I will address:

- the effects of Phase I of the EECF;
- actions taken in response to residents' complaints; and
- FAA's rationale for not performing an environmental assessment before implementing the EECF.

Overall, we have concluded that, because many important characteristics of the plan were known to FAA before the plan was implemented, FAA should have foreseen the significant effect the plan would have on parts of New Jersey and the resulting controversy. We also believe that, even though the plan is in effect, FAA should prepare an environmental assessment of the effects of the plan and perform similar assessments before making major air route changes elsewhere in the country. This assessment, along with the results of a noise survey being conducted by the Port Authority, should help FAA judge whether the environmental effects of the EECF warrant any adjustments to the plan.

EFFECTS OF THE PLAN

FAA implemented Phase I of the Expanded East Coast Plan in February 1987 by creating additional air routes and revising others. The goals were to accommodate the growing air traffic around the New York metropolitan area's three major airports and to reduce delays. Since implementing the plan, FAA found significant reductions in flight delays (scheduled air carrier flights) at these airports, and attributed those reductions to the plan. A significant side effect of the EECF, however, has been the negative reaction of northern and central New Jersey residents--including some who live 30 to 40 miles from Newark Airport--about increased aircraft noise over their homes caused by the changes.

Delay Reductions Are Not Clearly

Linked To The Plan

After implementing Phase I of the plan, FAA found that delays at the three New York area airports had decreased by an average 34 percent compared with the same February-to-April period during 1986. The reduction was particularly large at Newark International where delays had decreased 64 percent. However, these reductions cannot be ascribed solely to the plan because other significant operating changes occurred during the same time period. For example, People Express discontinued its hubbing operation at

Newark airport in January 1987. According to officials of the Office of the Secretary of the U.S. Department of Transportation, this event probably had a major effect on reducing delays at Newark. Delays were also reduced when the Department of Transportation permitted airlines to cooperate in shifting flight schedules during peak hours to diminish congestion beginning in January 1987. Furthermore, FAA has not linked delay reductions to specific components (route or flight procedures changes) of the plan.

Airspace Changes Over New Jersey

Phase I of the plan created new arrival and departure routes over New Jersey and revised others. The changes included three new departure routes, two new arrival routes, and six realigned ones. This caused either new or additional air traffic over some New Jersey communities; other communities found that aircraft now passed over them at lower altitudes. For example, Long Valley, New Jersey--which is 34 miles west of Newark Airport--now experiences significantly greater traffic, often at lower altitudes than before the EECF. The plan shifted some routes. For example, the southerly route to Kennedy Airport that overflew Marlboro, New Jersey, before the plan, now overflies an area between Marlboro and Freehold, New Jersey.

Some New Jersey residents complained about increased aircraft noise after Phase I of the plan went into effect. Besides complaints from areas close to Newark Airport, such as Cranford, New Jersey, complaints have come from communities such as Long Valley and Califon which are 30 miles and more away from the airport. Residents have complained to FAA, the Port Authority of New York and New Jersey, the New Jersey Department of Environmental Protection, and a variety of elected officials at all levels of government. While all complaints have focused on increased aircraft noise, residents have specifically cited increased numbers of flights, lower altitudes, and late night overflights.

ACTIONS TAKEN IN RESPONSE

TO NOISE COMPLAINTS

In response to complaints about increased noise, FAA, New Jersey's Department of Environmental Protection, and the Port Authority of New York and New Jersey have done or are planning to do noise studies in areas affected by the plan.

FAA uses a measurement known as Ldn (day-night noise level) to determine exposure to aircraft noise. This method averages the noise from events, such as aircraft overflights, over a 24-hour period. In June 1987, FAA analyzed aircraft noise for one day over Long Valley--the source of many noise complaints. FAA's analysis showed that 144 flights passed within 2.5 nautical miles of Long

Valley at between 5,000 and 14,000 feet. Based on the different aircraft types, the noise each aircraft makes, and the actual flight paths, FAA concluded that the community was exposed to an average day-night noise level of 50.5 Ldn. While the study stated that this is substantially below the federal guideline of 65 Ldn used to designate areas as incompatible for residential purposes, the study acknowledged that the Ldn value of 50 does not necessarily mean that area residents are incorrect in asserting that there has been an impact on their quality of life, especially if there were no overflights before.

The State of New Jersey's analysis--which was done in August 1987--involved single aircraft noise measurements, rather than the Ldn measurement mandated in the federal noise studies, at selected sites from 1.5 to 34 miles from Newark airport. Based on the difference between noise levels in a neighborhood without aircraft and levels when aircraft passed over, the analysis concluded that noise near the airport clearly required reduction, and that noise levels at the distant sites are considerably lower than those near the airport, but are still much higher than the neighborhood noise level.

In March 1988, the Port Authority contracted for a noise survey of the areas immediately surrounding Newark airport and in a number of communities farther from the airport which may have been affected by the plan. The contractor selected by the Port

Authority will first measure noise in areas near the airport where noise levels might be incompatible with residential land use using the federal (Ldn) measure. The contractor will then measure average (Ldn) noise levels where the plan has changed routes or where residents blame the plan for irritating aircraft noise. The New Jersey Department of Environmental Protection stated that the Ldn method for measuring noise will not give an adequate picture of the situation. This criticism is based on the fact that the Ldn methodology averages high and low noise levels. The Port Authority responded to the state's criticism by asserting that the Ldn methodology is the federal standard for assessing cumulative aircraft noise impacts. However, the Port Authority has subsequently decided to expand the noise survey to include noise measures that give greater weight to the low-frequency component of aircraft noise events.

We found that the technical aspects of the Port Authority's proposed approach are generally sound. The proposal meets the Port Authority's specifications, conforms to federal guidelines for this kind of work, and the contractor appears to be well-qualified for the task. We are concerned, however, that the contractor's plans to use citizen complaint data could be inadequate. The Port Authority's Request for Proposals clearly calls for factoring complaint data into the survey methodology. The contractor's proposal does not say how this important ingredient will be used in the survey. However, in commenting on

our draft report, the Port Authority said that its consultant will map all sources of complaints in order to help identify areas for enroute aircraft noise measurements.

FAA, in the meantime, is taking other steps to reduce aircraft noise over New Jersey. In early 1988, FAA advised air traffic controllers at Newark that whenever possible--especially at night--they should vary flight paths within the several mile-wide official routes, instead of flying over the same narrow band of geography time after time. The purpose of this is to spread traffic over a wider area, reducing flight frequency and therefore total noise over local communities. FAA stated that although these measures will not completely eliminate the noise problems, they are a positive step toward cooperating with local communities.

FAA JUDGED THAT ENVIRONMENTAL
ASSESSMENT WAS UNNECESSARY

Part of FAA's mission is to minimize the public's exposure to aircraft noise. The agency's approach to aircraft noise abatement includes setting standards for quieter aircraft engines, setting maximum allowable noise levels during takeoffs and landings, and providing financial assistance for abatement programs in communities where noise levels are incompatible with residential

land use. In addition, FAA is required by the National Environmental Policy Act to prepare environmental assessments--concise descriptions of the environmental effects of a proposed action and its alternatives--under certain circumstances. If such an assessment finds significant problems, an environmental impact statement will be prepared. FAA's regulations also make two other procedures clear: (1) they permit FAA to exclude some actions from the assessment process, and (2) they list exceptional circumstances under which these excluded actions should be subject to an environmental assessment.

Based on its regulations, FAA exempted its Expanded East Coast Plan from an environmental assessment. The exemption was based on the fact that the proposed changes would take place 3,000 feet or more above ground level--a condition qualifying for exemption. However, the policy also stipulates that even an exempted noise-related action should be reviewed if it might be controversial, impacts on people, or has other adverse noise implications. FAA Headquarters and Eastern Region officials stated that they did not foresee the controversy or the noise impacts that resulted from implementation of the plan and that if they had, they would have performed an environmental assessment.

The causes of the increased noise--lower flight altitudes, new and realigned routes, and increased flights over previously lightly traversed areas--were known to FAA before the plan was

implemented. Consequently, we believe FAA should have anticipated the negative reaction of New Jersey residents. FAA could have been more sensitive to environmental concerns by conducting an environmental assessment before implementing the plan. The assessment would have provided more information to the public, allowed a range of views to be presented, and surfaced possible alternatives to the plan.

- - - - -

In summary, we found that the Expanded East Coast Plan designated changes to air routes that resulted in more aircraft flying over some areas of New Jersey that previously had very few flights, resulting in more noise and complaints. It also reduced flight delays, although how much is attributable to the plan is debatable since there were other major changes taking place at the same time.

The complaints also raised the question of why the FAA did not do an environmental assessment before implementing the plan. While FAA exempted the EECF from an environmental assessment based on its policy for environmental actions, this policy also contains provisions where an exempted action should be reviewed. We believe FAA should have anticipated the negative reaction to the plan and performed an environmental assessment. We also believe that the noise studies by FAA, the State of New Jersey, and the Port

Authority could form the basis of an environmental assessment which would allow FAA to make a more informed judgment on the overall merits of the plan and adjust it if warranted. In light of the facts we believe that FAA should:

- prepare an environmental assessment of the effects of the plan and
- do similar assessments before making major air route changes in other areas of the country where delays and congestion warrant such changes.

- - - - -

After receiving agency comments and making the appropriate changes, we plan to issue the final report on our review of Phase I of the Expanded East Coast Plan in June. Our report will include the appropriate recommendations. At that time, we will be pleased to make copies available to members of the New Jersey Noise Control Council and other interested parties on request. I will be happy to respond to any questions you may have concerning our review during the question and answer session.