The original documents are located in Box C50, folder "Presidential Handwriting, 10/4/1976 (2)" of the Presidential Handwriting File at the Gerald R. Ford Presidential Library.

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THE WHITE HOUSE

WASHINGTON

October 4, 1976

ADMINISTRATIVELY CONFIDENTIAL

MEMORANDUM FOR:

JIM CANNON

FROM:

JIM CONNOR JEE

SUBJECT:

Aviation Noise Proposal by Secretary Coleman

The President reviewed your memorandum of September 29 on the above subject and made the following notations:

> "Very good <u>except</u> it doesn't include the Coleman plans as an alternative if Congress doesn't act.

It should be spelled out. Talk with Bill Coleman and add to the text so I can have something on my return."

Please follow-up with appropriate action.

cc: Dick Cheney

THE WHITE HOUSE WASHINGTON 10 Jun Cannon) Very grod about it doesn't include the Coleman plan as an atternative Memprins dorant act. Do shall. 20 should be spilled out. Talk with Bill Coleman & add to The teft to 2 can have something on my vitur.

THE WHITE HOUSE

WASHINGTON

September 29, 1976

MEMORANDUM FOR THE PRESIDENT

JIM CANNOR

FROM:

1:

SUBJECT:

Attached at Tab A is my memorandum and draft policy state-

Aviation Weise Proposal by Secretary Coleman

ment on aviation noise which you asked for on September 18.

I regret that this has been delayed beyond the three days we asked for. I sent it to you on Friday, September 24, before your Southern Swing; and I did not realize you had not seen it.

The comments of Jack Marsh, Alan Greenspan and Paul O'Neill are at Tab B.

In addition, I thought it would be helpful if we had some indication of CAB's reaction to possible fare adjustments if airlines should need them to meet FAA standards. At my request Ed Schmults informally asked CAB Chairman Robson for his views. They are at Tab C.

attachments

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THE WHITE HOUSE

INFORMATION REQUESTED

WASHINGTON

September 24, 1976

MEMORANDUM FOR THE PRESIDENT

FROM:

JIM CANNO Aviation Noise Policy

SUBJECT:

When you discussed an Aviation Noise Policy Statement with Cheney, Marsh, Greenspan and me last Saturday, you suggested that your Policy Statement might take the form of a message to Congress, or a major address.

Since any message to Congress could be lost in the closing days of this session, I believe that a speech would provide a better opportunity for you to present your views.

Accordingly, I have drafted for your consideration an Aviation Noise Policy Statement in the form of a speech which might be given to a knowledgeable audience gathered at one of the noisiest airports:

Airport

Serious Noise Affecting

New York - La Guardia	1,000,000	persons
Chicago - O'Hare	771,000	persons
New York - John F. Kennedy	507 , 000	persons
Newark, New Jersey	431,000	persons
Boston - Logan International	431,300	persons
Los Angeles, International	293,600	persons

Since the New York metropolitan area has three of the noisiest airports, I would suggest you speak at one of them, preferably JFK.

The audience could include (by invitation) airport workers, pilots, homeowners in the area, community leaders, environmental leaders, airline executives, civic leaders, a cross-section of the community most directly affected by aircraft noise, and labor and management representatives of the airline and aircraft industries and their suppliers. This draft attempts to get across these points:

- -- your concern for an environmental problem;
- -- your interest in preserving a healthy and competitive airline industry;
- -- your concern for jobs;
- -- your interest in energy conservation;
- -- your desire to avoid unnecessary Federal expenditures;
- -- your personal leadership in addressing a difficult, complex, and interrelated set of problems; and
- -- your decisiveness in proposing a balanced, practical and sound solution.

By the time of your return I will have reviewed this with Marsh, Greenspan and O'Neill.

QUIET SKIES

(Appropriate Salutation)

We have assembled here at _____ Airport today so that I could speak with you about two important and related national problems.

And in the process I am going to discuss a reallife case study of what <u>is</u> wrong with Washington -- and what must be done about it.

The first of these two national problems is aircraft and airport noise -- and I will today announce a plan to reduce the noise pollution around this and other major airports in the Nation.

The second problem is the need to ensure that the 200 million Americans who fly every year have the finest possible airline service. I will today describe the measures necessary to make certain that the American consumer will be served by a healthy and competitive system of commercial airlines. Both of these problems and their resolution affect your lives, your jobs, your environment, your property, your future and your children's future, and the well-being and progress of the Nation.

For some 6 million Americans who live and work around 100 major airports in the U.S., the noise of jet planes is a very real and personal environmental problem. I know, because I used to live near Washington National, and sometimes the noise was so bad you could not read a newspaper, hear the T.V., or finish a conversation with the children.

For these 6 million Americans the problem of noise is getting worse as air travel increases -- and we want air travel to increase.

But we must also end the noise problem.

Since the 1960's, when the airlines introduced new jet airplanes into the fleet, noise has been recognized as a major constraint to commercial aviation. Through research and development, by the government and by private industry, we have learned how to make jet engines quieter, and more efficient in fuel use. The technology is ready.

-2-

We have taken the first steps to reduce the noise around airports. In 1969 the Federal Aviation Administration, one of the two Federal agencies that regulate the commercial airlines -- I know you are aware that Congress feels the airlines are so important that you need <u>two</u> Federal regulatory agencies to tell you what to do -- in 1969 the FAA issued standards that would cut in half the perceived noise of new jet aircraft effective at the start of 1975.

For the last two years, all commercial planes coming off the assembly lines in the United States have met these standards.

But the FAA did not act to correct the biggest part of the airport noise problem -- some 1600 older jet airplanes, or about 77 percent of the U.S. commercial airlines fleet.

These planes are still flying; and if you live near this or any other major airport in the United States, you are still listening to them.

-3-

Why, seven years after the FAA set aircraft noise standards, are these noisy planes still flying?

The answer, very simply, is that FAA knew that some of the airlines could not afford to pay for modifying or replacing their older planes to meet the new noise standards.

Why not? One reason, frankly, is that some of the airlines have not been well-managed.

But another important reason airlines could not afford to pay for noise reduction is that the Civil Aeronautics Board, the other Federal agency that regulates the airlines, could not look ahead and provide the revenues the airlines would need to pay for noise reduction.

The CAB is like that mythical bird which flew backward and knew where it had been, but not where it was going. Under their own regulations for setting airline fares, CAB looks backward at "historic costs," but not ahead to realistic future costs.

-4-

The CAB was created almost 40 years ago to promote and assist a young and hopeful airline industry. There were reasons then to allocate routes, set fares, and limit competition; at the beginning, the public need for good service required extensive government involvement to assure orderly growth of the airlines.

It is different now.

When the CAB began in 1938, domestic airlines carried a total of 1.3 million passengers, for 476 million passenger miles.

This year, U.S. airlines will carry more than 200 million passengers, for 128 billion passengers miles -- a growth of 26,800 percent. Airlines now carry more people between cities than any other form of public transportation.

The airline industry is no longer an infant; it is mature, big and fully capable of prospering in a free, open and competitive market.

It was for this reason that on October 8, 1975, I proposed to the Congress the Aviation Act of 1975, which

-5-

would have reduced economic controls, opened markets, reduced fares and made it possible for all airlines to better serve the American consumer.

My objective was to work with the Congress to ensure that the U.S. will have the most efficient airline system in the world, providing the American public with the best possible service at the lowest possible cost.

That was ll months ago; but neither the House nor the Senate has acted on this important legislation, which is the first comprehensive updating of airline regulation in almost forty years. Nor has Congress proposed any alternative.

However, the blame does not all rest on Congress. Some airline executives, and their Washington lobbyists, have short-sightedly opposed this change. While they say publicly they are for free enterprise and open competition, they have privately lobbied against open competition, against the American consumer, and in fact against greater opportunity for the growth and prosperity of their airlines. Consequently, we have this situation:

Too Much Noise:

The FAA, by not moving on noise standards, has shown a lack of decisiveness that must be changed.

Outdated Regulations:

The CAB, by following policies and procedures that are impractical and out of date, is clearly unable to assist the airlines in providing the best and cheapest service to the public.

Congressional Inaction:

The Congress, by its failure to act on aviation regulatory reform, is continuing a critical economic problem for the airlines and all the people who work for airlines and depend on them.

As President, I cannot tolerate inaction any longer.

We must end the noise pollution around American airports and bring quiet skies back to America again.

We must free aviation from arbitrary and unnecessary restrictions and regulations so that the airlines themselves can pay the cost of noise abatement. To do this, I am taking the following actions:

First, I am today directing the Secretary of Transportation to instruct the Administrator of FAA to extend its noise regulations to all U.S. commercial aircraft, to be phased in over an 8-year period.

Second, I am putting the Congress on notice that I will not accept its inaction. Congress must adopt the airline regulatory reform measure I proposed in 1975. Congress must act on this reform in the interest of the American public.

I want the members to know now that aviation regulatory reform will be on their doorstep when they come back in January.

Third, I propose that the present Federal tax on domestic passenger fares be reduced from 8 percent to 6 percent, and on domestic freight, be reduced from 5 percent to 3 percent. This tax on the consumer is now going to the Airport and Airway Trust Fund to provide Federal assistance to airport construction and improvement. There is now a surplus of \$1.4 billion in this fund. Passengers have a right to this tax reduction. However, if the Congress does not act on regulatory reform for the airlines within 60 days after the new session opens, I shall have no choice but to propose the reimposition of that 2 percent as an environmental surcharge on passenger fares and freight bills. The funds from the surcharge would be directed into a special trust fund, administered by the Secretary of Transportation, to assist the airlines in financing the new and quieter planes that are necessary for the abatement of aircraft noise around our major airports.

I do not want to call for this environmenal surcharge on passengers. Regulatory reform is a far better solution. But if Congress does not act on the aviation regulatory reform I proposed last October, there has to be another alternative.

Even then, an environmental surcharge would be a temporary expedient -- not a permanent solution to the real problem facing the airlines and other over-regulated industries in this country.

Such a surcharge would help end the noise problem. But it will not change the CAB's outdated methods of setting fares and controlling markets. It will not improve an airline's ability to compete and provide better service.

-9-

The lasting solution is to give the free enterprise system its best chance to operate.

The genius of the American economic system throughout our history has been a partnership between government and free enterprise. The right role of the government in the American economic system is to help private enterprise accomplish needed objectives for the American people -and not to hinder private enterprise.

Our national growth in 200 years has been phenomenal, and in no area of our lives has the partnership between government and private enterprise worked better than in transportation.

In the National Transportation Policy Statement of my Administration of September 17, 1976, we said:

"Transportation has substantially shaped the growth and development of the United States. Waterways led our ancestors to new frontiers. Today, our energy-efficient inland waterways and merchant marine seek out new markets. Railroads

fed the hearths of an industrial revolution and now have renewed significance in the era of environmental and energy consciousness. Highways made us the most mobile population on earth, profoundly altered our land use patterns, and established the automobile, truck and bus as an important part of the Nation's mobility and economic activity. Mass transit provided the lifeline to city centers and now offers hope for their revival. Civil aviation extended its reach around the globe and helped design the interdependent world in which we now live. General aviation has greatly increased business and pleasure mobility and opened up formerly unreachable territories. Pipelines are vital to energy independence.

"To sustain and enhance our economic vitality and growth, the productivity of our commerce and the quality of our leisure, we need a healthy and responsive transportation system. National transportation policy must serve these broad goals of our society by helping to guide the development, financing and maintenance of a safe, efficient, accessible and diverse transportation system. Such a system should meet the needs of all Americans -as passengers, consumers, employees, shippers and investors -- in a way that is consistent with other national objectives. The values and priorities of our society are changing as the land on which we live is changing, and transportation must blend with other national goals in seeking heightened quality in the American way of life."

We have set our national goals for what is and what must continue to be the best airline system in the world. By working together we can reach those goals.

Thank you.

B .

Jack Marsh

Concurs with the general approach of requiring Congress to either pass your Aviation Regulatory Reform or impose an environmental surcharge to assist the airlines in meeting FAA standards.

Alan Greenspan

Made three points:

- 1. He feels it is very important that you make a judgement on the politics of the proposal.
- 2. He believes it is bad long-term economic policy to provide part of the capital airlines need to finance equipment, and it would eventually lead to quasi nationalization.
- 3. He believes that aviation noise is not a compelling public issue of the dimension of abortion or jobs. He would like to see this decision delayed until after the election, which would give us time to review the financing alternatives.

Paul O'Neill

Made three points:

- 1. We should not say the FAA is holding up action on the extension of noise abatement regulations. The fact is that FAA has sent several proposals to Secretary Coleman to extend the noise regulations, but the Secretary has returned them for further study.
- 2. While the general public may respond favorably to your insistence that Congress either pass your Aviation Regulatory Reform or face an environmental surcharge, the aviation trade believes this is not a real threat. The airlines which have opposed deregulation would be likely to continue their opposition in order to get federal assistance for aircraft replacement.

3. OMB is strongly opposed to giving up the revenue from the present tax. A 2% reduction would cost them about \$300 million yearly.

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THE WHITE HOUSE

WASHINGTON

1976 SEP 22 AM 10 22

September 22, 1976

MEMORANDUM FOR:

JIM CANNON

ED SCHMULTS

FROM:

SUBJECT:

Telephone Call to the Chairman of the CAB on DOT Noise and Aircraft Financing Proposals

092201

I called Chairman Robson this morning to inquire about CAB procedures if the airlines requested a fare increase to finance, in part, aircraft replacement required by FAA noise standards. At the outset, Robson said that the CAB had never been faced with the problem of authorizing fare increases to meet future costs. He said that such a request by the airlines would present novel. questions to the CAB and would require adjustment to the Board's fare setting formula. If the ticket tax were reduced by 2 percent or so, this would at least give the Board something to work with.

Robson stressed several times that he thought any proposal should be directly linked to regulatory reform. He said that we should not lose the "lever" provided by any financing proposal without obtaining passage of reform legislation.

Robson also observed that if the DOT proposal involved any legislation, the airlines would undoubtedly be fighting in Congress for a mandatory fare increase.

THE WHITE HOUSE

WASHINGTON

September 24, 1976

MEMORANDUM FOR THE PRESIDENT

FROM:

JIM CANNO Aviation Noise Policy

SUBJECT:

When you discussed an Aviation Noise Policy Statement with Cheney, Marsh, Greenspan and me last Saturday, you suggested that your Policy Statement might take the form of a message to Congress, or a major address.

Since any message to Congress could be lost in the closing days of this session, I believe that a speech would provide a better opportunity for you to present your views.

Accordingly, I have drafted for your consideration an Aviation Noise Policy Statement in the form of a speech which might be given to a knowledgeable audience gathered at one of the noisiest airports:

Airport

Serious Noise Affecting

New York - La Guardia1,00Chicago - O'Hare77New York - John F. Kennedy50Newark, New Jersey43Boston - Logan International43Los Angeles, International29

1,000,000 persons 771,000 persons 507,000 persons 431,000 persons 431,300 persons 293,600 persons

INFORMATION

REQUESTED

Since the New York metropolitan area has three of the noisiest airports, I would suggest you speak at one of them, preferably JFK.

The audience could include (by invitation) airport workers, pilots, homeowners in the area, community leaders, environmental leaders, airline executives, civic leaders, a cross-section of the community most directly affected by aircraft noise, and labor and management representatives of the airline and aircraft industries and their suppliers. This draft attempts to get across these points:

- -- your concern for an environmental problem;
- -- your interest in preserving a healthy and competitive airline industry;
- -- your concern for jobs;
- -- your interest in energy conservation;
- -- your desire to avoid unnecessary Federal expenditures;
- -- your personal leadership in addressing a difficult, complex, and interrelated set of problems; and
- -- your decisiveness in proposing a balanced, practical and sound solution.

By the time of your return I will have reviewed this with Marsh, Greenspan and O'Neill.

QUIET SKIES

(Appropriate Salutation)

We have assembled here at _____ Airport today so that I could speak with you about two important and related national problems.

And in the process I am going to discuss a reallife case study of what <u>is</u> wrong with Washington -- and what must be done about it.

The first of these two national problems is aircraft and airport noise -- and I will today announce a plan to reduce the noise pollution around this and other major airports in the Nation.

The second problem is the need to ensure that the 200 million Americans who fly every year have the finest possible airline service. I will today describe the measures necessary to make certain that the American consumer will be served by a healthy and competitive system of commercial airlines. Both of these problems and their resolution affect your lives, your jobs, your environment, your property, your future and your children's future, and the well-being and progress of the Nation.

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For these 6 million Americans the problem of noise is getting worse as air travel increases -- and we want air travel to increase.

But we must also end the noise problem.

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-2-

We have taken the first steps to reduce the noise around airports. In 1969 the Federal Aviation Administration, one of the two Federal agencies that regulate the commercial airlines -- I know you are aware that Congress feels the airlines are so important that you need <u>two</u> Federal regulatory agencies to tell you what to do -- in 1969 the FAA issued standards that would cut in half the perceived noise of new jet aircraft effective at the start of 1975.

For the last two years, all commercial planes coming off the assembly lines in the United States have met these standards.

But the FAA did not act to correct the biggest part of the airport noise problem -- some 1600 older jet airplanes, or about 77 percent of the U.S. commercial airlines fleet.

These planes are still flying; and if you live near this or any other major airport in the United States, you are still listening to them.

-3-

Why, seven years after the FAA set aircraft noise standards, are these noisy planes still flying?

The answer, very simply, is that FAA knew that some of the airlines could not afford to pay for modifying or replacing their older planes to meet the new noise standards.

Why not? One reason, frankly, is that some of the airlines have not been well-managed.

But another important reason airlines could not afford to pay for noise reduction is that the Civil Aeronautics Board, the other Federal agency that regulates the airlines, could not look ahead and provide the revenues the airlines would need to pay for noise reduction.

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-4-

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The airline industry is no longer an infant; it is mature, big and fully capable of prospering in a free, open and competitive market.

It was for this reason that on October 8, 1975, I proposed to the Congress the Aviation Act of 1975, which

-5-

would have reduced economic controls, opened markets, reduced fares and made it possible for all airlines to better serve the American consumer.

My objective was to work with the Congress to ensure that the U.S. will have the most efficient airline system in the world, providing the American public with the best possible service at the lowest possible cost.

That was 11 months ago; but neither the House nor the Senate has acted on this important legislation, which is the first comprehensive updating of airline regulation in almost forty years. Nor has Congress proposed any alternative.

However, the blame does not all rest on Congress. Some airline executives, and their Washington lobbyists, have short-sightedly opposed this change. While they say publicly they are for free enterprise and open competition, they have privately lobbied against open competition, against the American consumer, and in fact against greater opportunity for the growth and prosperity of their airlines. Consequently, we have this situation:

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The CAB, by following policies and procedures that are impractical and out of date, is clearly unable to assist the airlines in providing the best and cheapest service to the public.

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We must end the noise pollution around American airports and bring quiet skies back to America again.

We must free aviation from arbitrary and unnecessary restrictions and regulations so that the airlines themselves can pay the cost of noise abatement. To do this, I am taking the following actions:

First, I am today directing the Secretary of Transportation to instruct the Administrator of FAA to extend its noise regulations to all U.S. commercial aircraft, to be phased in over an 8-year period.

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-8-

However, if the Congress does not act on regulatory reform for the airlines within 60 days after the new session opens, I shall have no choice but to propose the reimposition of that 2 percent as an environmental surcharge on passenger fares and freight bills. The funds from the surcharge would be directed into a special trust fund, administered by the Secretary of Transportation, to assist the airlines in financing the new and quieter planes that are necessary for the abatement of aircraft noise around our major airports.

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-11-

a system should meet the needs of all Americans -as passengers, consumers, employees, shippers and investors -- in a way that is consistent with other national objectives. The values and priorities of our society are changing as the land on which we live is changing, and transportation must blend with other national goals in seeking heightened quality in the American way of life."

We have set our national goals for what is and what must continue to be the best airline system in the world. By working together we can reach those goals.

Thank you.

Jack Marsh

Concurs with the general approach of requiring Congress to either pass your Aviation Regulatory Reform or impose an environmental surcharge to assist the airlines in meeting FAA standards.

Alan Greenspan

Made three points:

- 1. He feels it is very important that you make a judgement on the politics of the proposal.
- 2. He believes it is bad long-term economic policy to provide part of the capital airlines need to finance equipment, and it would eventually lead to quasi nationalization.
- 3. He believes that aviation noise is not a compelling public issue of the dimension of abortion or jobs. He would like to see this decision delayed until after the election, which would give us time to review the financing alternatives.

Paul O'Neill

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- 1. We should not say the FAA is holding up action on the extension of noise abatement regulations. The fact is that FAA has sent several proposals to Secretary Coleman to extend the noise regulations, but the Secretary has returned them for further study.
- 2. While the general public may respond favorably to your insistence that Congress either pass your Aviation Regulatory Reform or face an environmental surcharge, the aviation trade believes this is not a real threat. The airlines which have opposed deregulation would be likely to continue their opposition in order to get federal assistance for aircraft replacement.

3. OMB is strongly opposed to giving up the revenue from the present tax. A 2% reduction would cost them about \$300 million yearly.

THE WHITE HOUSE

WASHINGTON

1976 SEP 22 MI 10 22

September 22, 1976

MEMORANDUM FOR:

FROM:

SUBJECT:

JIM CANNON

ED SCHMULTS

Telephone Call to the Chairman of the CAB on DOT Noise and Aircraft Financing Proposals

072231

I called Chairman Robson this morning to inquire about CAB procedures if the airlines requested a fare increase to finance, in part, aircraft replacement required by FAA noise standards. At the outset, Robson said that the CAB had never been faced with the problem of authorizing fare increases to meet future costs. He said that such a request by the airlines would present novelquestions to the CAB and would require adjustment to the Board's fare setting formula. If the ticket tax were reduced by 2 percent or so, this would at least give the Board something to work with.

Robson stressed several times that he thought any proposal should be directly linked to regulatory reform. He said that we should not lose the "lever" provided by any financing proposal without obtaining passage of reform legislation.

Robson also observed that if the DOT proposal involved any legislation, the airlines would undoubtedly be fighting in Congress for a mandatory fare increase.

August 26

THE WHITE HOUSE WASHINGTON

Dick:

Staffing has not been completed on the attached "Aircraft Noise Policy Matter", but I wanted you to be aware that it was in-house.

Jackton



THE WHITE HOUSE

WASHINGTON

August 25, 1976

MEMORANDUM FOR:

PHIL BUCHEN MAX FRIEDERSDORF ALAN GREENSPAN ROBERT T. HARTMANN JIM LYNN JACK MARSH BRENT SCOWCROFT

BILL SEIDMAN GUY STEVER JIM CANNON JAA

FROM:

SUBJECT:

Presidential decision memorandum on Aviation Noise Policy and Aircraft Replacement

You are no doubt already familiar with this issue. We were asked to reconcile several different memoranda on the subject for Presidential decision.

I would appreciate receiving your comments and recommendations by C.O.B. Friday, August 27th.

lue: COB QugT

AUG 2 5 1976

THE WHITE HOUSE

WASHINGTON

DECISION

August 25, 1976

MEMORANDUM FOR:

THE PRESIDENT

FROM:

JIM CANNON

SUBJECT:

Aviation Noise Policy and Aircraft Replacement

The purpose of this memorandum is to seek your decision on aviation noise policy and, if appropriate, a new federal role in the financing of aircraft replacement and new aircraft development. Secretary Coleman is scheduled to testify on the Administration's position before the House Aviation Subcommittee September 2.

There are essentially two issues which require your consideration:

- I. What position should the Administration take on aviation noise policy in September 2 Congressional testimony?
- II. What should the Federal Government do to help airlines finance the retrofit and replacement of old aircraft and to stimulate the development of a new generation of aircraft by U.S. airplane manufacturers?

BACKGROUND

Six million people are significantly affected by aircraft noise at 100 airports. About 600,000 people near 26 major airports are seriously affected. Public officials, environmental groups, and airport neighbors have long pushed for federal action to reduce aircraft noise.

The main federal action to date has been the issuance of noise standards for all new aircraft. Approximately 1600 airplanes (77% of the current commercial jet fleet) do not meet the standards. The oldest planes in the jet fleet -- about 500 B-707's and DC-8's (25% of the fleet) -- are the

noisiest and least fuel efficient aircraft. Later model aircraft -- about 1,000 B-727's B-737's and DC-9's (50% of the fleet) -- are significantly less noisy but fail to meet the 1969 standards. About half the U.S.-owned B747's (50 planes) also fail to meet the standards.

The FAA has statutory authority and responsibility for setting noise standards for new and existing aircraft. It has so far failed to issue standards in existing airplanes, but is under pressure to do so from the EPA, interest groups, and at least one State (Illinois through litigation). The FAA is prepared to work out a joint plan with Secretary Coleman; but in the absence of a comprehensive policy statement, the FAA is expected to issue regulations under its existing authority.

There are a number of ways to reduce aviation noise:

- Modification (retrofit) of existing aircraft engines with sound absorbing material;
- Replacement of older, noisy aircraft with new, quieter planes;
- Imposition of jet "bans" or night curfews at airports (e.g. Washington National);
- Land acquisition and local zoning measures to create noise buffer zones; and
- Modified operational techniques to minimize noise.

Many of these techniques are already being used in response to strong pressures at local levels. Lawsuits against local airports are increasing both in frequency and in damages sought. Over the last five years airport operators have paid \$25 million on noise judgments and settlements, and have invested hundreds of millions in land acquisitions for noise buffer zones. The noise issue has seriously curtailed airport planning and expansion.

Secretary Coleman's Position (See Tab A)

Apart from the noise issue, there are a number of related problems currently faced by the airlines and aircraft manufacturers. Secretary Coleman proposes to deal with these problems in a comprehensive fashion. He maintains that:

- Airlines have experienced a low return on investment in recent years and are unable to finance new airplanes they will need in the 1980's, with or without a federal noise policy.
- (2) In the absence of new orders, U.S. aircraft manufacturers are unable to commit themselves fully to the development of the next generation of long range aircraft, threatening the traditional American superiority in this field (especially in light of government subsidized competition from Germany and France);
- (3) Unemployment, depressed earnings, and unused capacity continue to plague aircraft manufacturers and related industries.
- (4) Many airplanes in the existing jet air fleet are inefficient users of fuel.
- ISSUE.I. What position should the Administration take on aviation noise policy in September 2 Congressional testimony?

There are three basic alternatives regarding what position the Administration should adopt. The options differ in the emphasis placed on noise reduction methods. The options are:

- Issue a comprehensive policy statement which imposes strict standards on all aircraft (old as well as new).
- (2) Issue a limited policy statement largely dependent on the regulatory authority of the FAA to issue guidelines on operational techniques and noise limits.
- (3) Defer issuance of a policy statement until after September 2 to permit more thorough analysis of the merits of various noise abatement options.

Discussion of Options

Option #1 - Issue a comprehensive noise policy statement

This option embraces the regulatory components of Secretary Coleman's proposed policy, but does not necessarily include his related financing proposal (that proposal is discussed in Issue II below). This policy would require most commercial aircraft operating in the U.S. to meet the 1969 noise standards over the next 4 - 8 years.

The DOT proposal would require that the entire fleet of all domestic air carriers and the domestic portion of U.S. international air carriers' fleets meet the current noise standards, or be retired, according to a prescribed timetable. The intention is to force replacement of the oldest, noisiest jets (B-707's and DC-8's), and the modification of the later model, non-standard planes (B-727's, B-737's, B-747's and DC-9's).

The arguments in favor of this option are:

- It would clarify the federal responsibility for reducing aircraft noise at its source.
- It would guarantee lower aircraft noise levels over 4 - 8 years -- 2 - 3 years sooner than presently scheduled fleet retirements.
- It would partially relieve the pressure on local airport authorities to impose disruptive operating restrictions.
- It would delineate the major responsibilities of carriers, airport operators, and the various levels of government.
- It would remove an existing air of uncertainty which impedes the ability of local authorities to plan for their long-range air service needs.
- It would promote public understanding of the economic costs associated with achievement of the socially desirable goal of aircraft noise abatement.
- It could hasten new orders for aircraft, thus preserving the competitive advantage of U.S. manufacturers, while speeding the pace of technological investments, new aerospace industry jobs, and energy savings.

It should be noted that Option #1 would place increased financial pressures on the airlines, some of which may not be able to manage independently. This issue is discussed below as Issue II. Option #2 - Issue a limited noise policy statement.

This option would limit federal actions to FAA promulgation of regulations for future aircraft types and the establishment of the quietest operating procedures consistent with a high safety standard.

Arguments in favor of this option are:

- It would minimize federal involvement and allow communities to decide on preferred noise abatement measures. (This seems appropriate because:

 about half the six million people seriously affected by airplane noise live near 5 major airports; and (2) the community is best equipped to trade off the degree and cost of service with the amount of noise it wishes to accept. There is evidence that many areas prefer to tolerate noise rather than reduce air activity because of service and employment losses that operating restrictions can bring.)
- It would recognize the fact that the noise problem is taking care of itself. It is expected that many of the noisiest planes will be retired over the next ten years, and major federal intervention may serve only to reduce this timetable by 2-3 years.

Option #3 - Delay issuance of a federal policy statement.

This option would postpone the announcement of the Administration's aviation noise policy until after September 2.

Arguments in favor of this option are:

 It would permit more thorough analysis of the asserted merits of Options 1 and 2, i.e.

-- To what extent does Option #1 achieve the external benefits claimed (e.g. improved U.S. competitive position, job creation, energy savings, etc.)?

-- Does Option #1 create an undesirable precedent for federal action?

-- Does Option #2 encourage local action which disrupts air service and stalls airport and land use planning? -- Does either Option have any significant effect on international air carriers and their governments?

It would permit consideration of alternative policy options not included here, e.g.

-- A hybrid compromise incorporating elements of Option #1 and #2;

-- Differential treatment of certain airports; or

-- Establishment of a noise pollution tax linked to the degree of noise omitted by specific air-craft.

- It would recognize the fact that although there is pressure for federal action, there is no compelling reason for immediate action. Congress is not likely to act this year on any of the nine noise abatement measures currently before it.
- It would permit additional study of the apparent inconsistency between a "quiet" policy on noise and the decision to give the Concorde (SST) a trial period. (Federal law requires noise standards to the extent they are technologically feasible. Current technology does not permit quieter SST operation.)
- It would permit Secretary Coleman to hold public hearings of the type he has used so successfully on the Concorde and air bag issues.

RECOMMENDATIONS

DECISION ON ISSUE I

Option #1 Issue a comprehensive noise policy statement.

Option #2 Issue a limited noise policy statement.

Option #3 Delay issuance of a federal policy statement.

If Option #1 is selected, Issue II below on financing should be studied and decided.

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ISSUE II. What should the Federal Government do to help airlines finance the retrofit and replacement of old aircraft and to stimulate the development of a new generation of aircraft by U.S. airplane manufacturers?

If you decide on Option 1 on the issue discussed above, i.e., to issue a comprehensive noise policy statement with retrofit/replacement deadlines, Secretary Coleman urges that the Administration also propose a \$3.0 to 3.5 billion program funded mainly by an "environmental surcharge" to help finance the required replacement and retrofitting of jets. In addition to assisting the domestic airline industry to modernize its jet fleet, Secretary Coleman argues that this program will stimulate earlier development of a new generation of aircraft by U.S. manufacturers and strengthen the position of U.S. airframe manufacturers in the world aircraft market.

There are three basic options regarding Federal involvement in financing the retrofit/replacement of existing airplanes and the development of new generation aircraft. These opetions are:

 Propose the DOT plan which calls for financing more than \$3 billion of airplane retrofit and replacement over 10 years out of tax money now going into the Airport/Airway Trust Fund.

- (2) Do nothing except continue to push strongly for the Administration's proposed Aviation Act of 1975.
- (3) Do nothing at this time except continue to push strongly for the Aviation Act and initiate a thorough review of the related airplane financing and new plane development situation.

Background

American scheduled airlines had about 2000 jet aircraft in their fleets at the beginning of 1976. Of these, about 300 are wide-bodied jets (B-747's, DC-10's and L-1011s) which will be used into the 1990s. Another about 1,225 B-727's, B-737's and DC-9's in the fleets are, for the most part, relatively new. Only about 300 of these will be replaced by 1985. Finally, about 475 older B-707's and DC-8's will be largely phased out by 1985.

The application of noise standards on older aircraft may effectively require some aircraft, now likely to be replaced by 1985, to be replaced at an earlier date. Thus, the impact of noise standards may be to increase capital outlays during the next several years while reducing outlays somewhat in the mid-1980's, but the magnitudes of these shifts has not been established.

If the airlines were to continue to earn the 5.7% rate of return which they have experienced over the past few years, they will have substantial, if not insurmountable, problems obtaining the capital needed to finance the fleet replacement and expansion. However, if our airlines begin to earn a normal rate of return (10-12% for industry), they will generate \$6-8 billion of earnings. This internallygenerated capital plus the new debt and equity which would be available if the airlines were financially healthy would be sufficient to meet all the capital needs of the airlines over this 1976-1985 period.

Last fall you proposed the Aviation Act of 1975 which is designed to increase competition in the airline industry, decrease CAB involvement in the business decisions of the airlines and improve the financial health of the airlines. If enacted, it is anticipated that the Aviation Act will create an economic environment where the airlines earn a normal rate of return. Extensive hearings on this bill have taken place in both the Senate and House. Positive action on the Aviation Act or a similar bill is anticipated by the end of 1977.

A memorandum at Tab B provides some information on the Aircraft Manufacturing Industry.

Discussion of Options

- Option #1 The DOT proposal would couple the Noise Policy with legislation which would do the following:
 - -- Reduce the Federal air passenger ticket and freight way bill taxes collected for the Airport/ Airway Trust Fund from 8% to 6% and from 5% to 3%, respectively.
 - -- Impose a 2% surcharge for 10 years on all domestic passenger tickets and freight waybills.
 - Deposit surcharge revenues (expected to be \$3 to
 3.5 billion over 10 years) in an Aircraft Replacement Fund, managed by intercarrier agreement.
 - Grant each carrier drawing rights to the Fund in proportion to its total system passenger and cargo revenue. Withdrawals would be permitted only for replacement of aircraft not meeting existing Federal noise standards for new aircraft. There would be no requirement that the money be used to purchase the next generation of jet aircraft.
 - -- Deposit any balances remaining in the Aircraft Replacement Fund after program objectives have been achieved in the existing Airport/Airway Trust Fund, dedicating them to noise control purposes (including land acquisitions and easements).
 - -- Authorize payment of the cost of retrofitting two- and three-engine aircraft (\$250 to 300 million) from the Airport/Airway Trust Fund.

The arguments in favor of this option are:

- It would help finance about one-half the cost of replacing the oldest, noisiest B-707's and DC-8's while the later model B-727's, B-737's and DC-9's would be retrofitted.
- It would not adversely affect the Airport/Airway Trust Fund because the reduced rates are expected to be sufficient to cover all outlays chargeable to the Fund under the Airport Development Aid Program (ADAP) bill through FY 1980. DOT estimates that without a tax reduction, unused Trust Fund

balances will grow rapidly (to \$1.7 billion by 1979) and become a target for other tax reductions or unjustified spending proposals already being advanced by the aviation industry.

- It would provide the air carriers with greater assurance of the financing needed to retrofit/ replace existing aircraft.
 - It would help to reduce a financial burden (created by the imposition of noise standards on existing aircraft) on some air carriers that they cannot meet. Credit markets are now virtually closed to the industry, because the return on investment since 1967 has averaged 5.7%. Even with the loosening of CAB control over air fares, as you proposed last October in the aviation regulatory reform bill, some argue that it is unlikely that the industry can assume the full burden of meeting the noise standards within the proposed time frame.
 - It would recognize the fact that the air carrier industry has several financially weak members (Pan Am, TWA, Eastern) which would find meeting the DOT standards very difficult within their existing resources. Redistribution of surcharge revenues would avoid an unduly severe impact on the four major carriers (Pan Am, TWA, American and United -- but not Eastern) that own 60% of the B-707's and DC-8's. This program would tend to help the "weak" carriers more than the "strong" carriers (such as Delta, Northwest and Continental) which, because of better management or more favorable route structures, have purchased newer, quieter planes and would thus tend to equalize the competitive position of most of the airlines.
 - It could create sizable orders for new aircraft and might stimulate airframe manufacturers into beginning development of new, advanced aircraft types with improved fuel efficiency and quieter engines at a somewhat earlier date. There are now no U.S.-manufactured 140-200 passenger, medium/long range aircraft suitable to replace those reaching the end of their useful lives in the early 1980's. It is desirable to begin to develop within the next year or two a new

generation of U.S. aircraft. However, the aerospace industry does not have the economic incentive to go forward with these programs at this time. (Each new U.S. aircraft has a total R&D cost of as much as \$1 billion). Employment in the aerospace industry would also rise substantially (each new aircraft program would add 10,000 new jobs within two years and 25,000 new jobs within six years) and the competitive advantage of U.S. manufacturers would be enhanced. This would help to maintain the U.S. preeminent position in the international aviation market in the face of stiff new government-subsidized competition from France and Germany. Failure to act may allow government-subsidized European manufacturers to preempt the next generation market, thereby reducing sales and jobs for the U.S. aerospace industry.

- It would finance the cost of reducing noise by taxing the user. Cutting taxes while initiating a surcharge also has the advantage of keeping air fares constant.
 - It would have minimal inflationary impact (DOT estimates) primarily because private sector outlays would be spread over a 10 year period and would be in the airframe industry which has idle manufacturing capacity.

Option #2 - Do nothing except continue to push strongly for the Administration's proposed Aviation Act of 1975.

Arguments in favor of this option are:

- While it has been asserted that our airlines and aircraft manufacturers face a financing problem of major proportions, the objective analysis to support this assertion has not been developed. Without persuasive evidence of a continuing problem it is unwise to take measures to correct the problem.
 - The Administration, including Secretary Coleman, has argued consistently that adoption of the Aviation Act will lead to financially healthy airlines which earn a reasonable rate of return and are capable of financing growth. Any attempt to subsidize aircraft purchases would be totally inconsistent with these arguments.
- The Aviation Act is expected to be enacted in reasonably acceptable form during 1977. This will have a very beneficial impact on the profitability of our airlines and their ability to finance new plane purchases.
- Once enactment of the Aviation Act -- or a revised version -- occurs, a major uncertainty in the airline industry will have been removed and outside investors (financial institutions and private individuals) will be more likely to provide debt and equity capital for the airlines.
- One of the major arguments favoring some kind of financing incentive is the weakening position of our airframe manufacturing industry. However, it is not at all clear that a severe financing problem confronts the airframe manufacturers which are likely to develop a new generation of aircraft. Rather, it is likely that our manufacturers are merely awaiting the airplane orders which should be forthcoming now that U.S. airlines are returning to profitability and using up excess capacity. In addition, new markets and sources of financing may be available through international cooperative joint ventures.

- Since the Administration has consistently argued that the aviation industry should contribute more than it presently pays towards the \$1.7 billion Federal cost of operating the aviation system, any "tax cut" would be contradicting our own policy.
- Any redistribution of revenues penalizes those airlines that do not have large numbers of noisy aircraft. A principal criticism of Option 1 is that it would create a \$3 to 3.5 billion fund, collected from passengers of all carriers, in order to help finance new aircraft for those carriers with disproportionate numbers of old and noisy B-707s and DC-8s.
- It leaves the airline industry with the decision of determining whether it is in their economic best interest to purchase new planes or retrofit their existing ones. No artificial incentives are established as is the case in Option 1.
- Market competition alone should compel the airlines to purchase new planes, even without Government incentives, since new aircraft being built and designed not only meet or exceed current aircraft noise standards, but are also 25% to 40% more fuel-efficient.
- Any other action may be perceived as a Federal bail-out of the airline and aerospace industries.
- Pooling and redistribution of taxes is contrary to antitrust policy.
- Option #3 Do nothing at this time except continue to push strongly for the Aviation Act and initiate a thorough review of the related airplane financing and new plane development situation.

Factors in favor of this option are:

- The arguments for Option 2, above, are also relevant here.
- If a problem exists, this will allow the Administration to examine alternative ways of dealing with it including, for example: the DOT financing proposal (Option 1 above) / or some variation, loan guarantees, tax incentives, aircraft development grants to airframe manufacturers, DOD purchase of noisy planes for the air transport reserve fleet, Government purchase of new generation aircraft and special export incentives for foreign airlines willing to order new generation aircraft from U.S. manufacturers.

- An action which may not be needed and is totally inconsistent with your proposed Aviation Act of 1975 should not be taken until an objective analysis of the need is undertaken.
- To date, sufficient information on the aircraft needs of the airlines, the financing problems of the airlines, the new airframe development plans of the U.S. airframe manufacturers and the competitive situation posed by foreign manufacturers has not been developed by an interagency group charged with carrying out a factual analysis of the issues and developing appropriate alternatives for action.
- The airlines and airframe manufacturers are just coming out of a disastrous recession and thus there is risk of overreacting to a problem which may now be resolved by market forces. Deferring action would give additional time to assess whether the airlines and airframe manufacturers will solve any problems on their own.

Recommendations

DECISION ON ISSUE II

Option #1 Propose the DOT plan for more than \$3 billion of financing

Option #2 Do nothing except push for Aviation Act

Option #3 Do nothing except push for Aviation Act and initiate review

Attachments

Tab	A	DOT Memorandum for the President on "Aviation Program"
Tab	В	Memorandum on "Implications For Aircraft Manu- facturing Industry"
Tab	С	Table on "Carrier Contribution and Entitlement" under DOT Proposal

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THE WHITE HOUSE WASHINGTON

August 19, 1976

Jim Connor -

Jim -

Just received this package from Judy Hope and she is sending the original memo to Cannon in today's courier.

Felt you should have this to review.

It still seems very confusing to me.

I feel that Jim Cannon should make a recommendation in his memorandum and then we could staff it.

If it is not handled that way then I think Domestic Council should staff and send in the complete package.

Please let me know what you think.

Trudy

THE WHITE HOUSE

WASHINGTON

August 18, 1976

MEMORANDUM FOR:

JAMES M. CANNON

FROM:

JUDITH RICHARDS HOPE

SUBJECT:

Bill Coleman's Proposed Aviation Noise Policy Statement

I attach for your consideration and review a draft Presidential Decision Memorandum on the above subject, together with the proposed memorandum circulating it to the senior staff. As you will see, there are three questions presented here:

Whether the Federal Government should establish a comprehensive noise policy?

Whether that policy should be limited to noise alone or should encompass broader goals, such as the revitalization of the aerospace industry and the creation of jobs?

And, if the answer to either of the first two questions is affirmative, should Federal financial assistance be provided, in what amount, and by what methods?

I would emphasize that the entire package does not need to be decided by the September 1st date. Indeed, although the matter has been studied for several years, the correlation and compilation of data in some critical areas is still incomplete. This could be developed over the course of the next three to four weeks, but not in time to meet the September 1 deadline. Depending on the views of the senior staff, I tentatively recommend that Bill Coleman be given the go ahead on establishing a noise policy, but that his testimony be limited to the noise policy, coupled with a statement that various methods of implementing that policy and of financing it are still under consideration.

THE WHITE HOUSE

ACTION

WASHINGTON

August 18, 1976

ADMINISTRATIVELY CONFIDENTIAL

MEMORANDUM FOR:

Phil Buchen Max Friedersdorf Alan Greenspan Robert T. Hartmann Jim Lynn Jack Marsh Brent Scowcroft Bill Seidman Guy Stever

FROM:

Jim Cannon

SUBJECT:

Secretary Coleman's Proposed Aviation Noise Policy Statement

I attach for your consideration a Presidential Decision Memorandum on Bill Coleman's Proposed eight-year, 3.5 billion dollar aviation noise program, financed by airline users themselves, to help replace today's fleet of older, noisier commercial aircraft. The policy has these objectives:

- 1. Reduction of noise levels at and around metropolitan airports.
- 2. Stimulation of the development of a new generation of aircraft.
- 3. Stimulation of approximately 240,000 private sector jobs.
- Conservation of energy through use of newer, more fuelefficient aircraft.
- 5. Maintaining our preeminent position in the international aviation marketplace.

To finance this proposal, Bill Coleman recommends legislation to reduce the Federal airline ticket tax, currently at 8 per cent, to 6 per cent. Simultaneously, a 2 per cent environmental surcharge on tickets would be imposed, the revenues from which would be placed in a special trust fund administered by the airlines and used to finance a portion of the replacement costs of older, noisy aircraft. His proposed legislation would also make \$250-300 million available from the Airport Trust Fund to "retrofit" newer, but noisy, 2 and 3 engine jets.

Because Bill Coleman is scheduled to testify before the House Aviation Subcommittee on the Administration's noise policy on <u>September 1</u>, he seeks White House approval of a noise policy before that time.

Can you review and comment on the proposed policy and the financing options presented so that the President may have the benefit of your views?

I would appreciate receiving your comments by close of business, Tuesday, August 24.

Thanks.

THE WHITE HOUSE

DECISION

WASHINGTON

August 19, 1976

MEMORANDUM FOR THE PRESIDENT

FROM: JIM CANNON

SUBJECT: Secretary Coleman's Memorandum on Aviation Noise Policy and implementing legislation

BACKGROUND

Aircraft noise is a serious problem for 6 million Americans near 6 major airports; it is a significant problem for 60 million, at about 100 airports. Public officials at all levels of government, airport operators, the airline industry, environmentalists, and citizens are demanding that the Federal government mandate quieter jet aircraft. Two methods are technologically feasible: add insulation to all existing, noisy aircraft (retrofit); or require that, by a specified date, the airlines replace their noisy fleet with new, quiet planes (replacement).

Because total retrofit would require a \$1 billion investment in an already old aircraft fleet, Secretary Coleman believes that a \$3.5 billion replacement program for larger aircraft, financed by airline users, coupled with a \$250-300 million retrofit plan for newer, but still noisy, 2 and 3 engine jets, is cost beneficial, and serves other important national goals as well.

SUMMARY OF RECENT DEVELOPMENTS

Since 1969, the FAA has been required by law to issue noise standards for <u>new</u> and <u>existing</u> aircraft. Standards for <u>new</u> aircraft were issued quickly (the Federal Aviation Regulation, part 36, or "FAR 36," standards) but none have been set for the noisy 1600 aircraft comprising 77 percent of the current commercial jet fleet. The State of Illinois has filed suit against the Department of Transportation to force FAA's compliance with the law. EPA, which has the authority to issue noise regulations under the Federal Aviation Act, is proposing mandatory retrofit of all noisy aircraft. Congress has held public hearings and is considering 9 separate legislative proposals, some which would require the retrofit of all airplanes at <u>Federal</u> expense and the creation of regional land use planning commissions.

Lawsuits against local airports are increasing both in frequency and in damages sought: over the last 5 years airport operators have paid \$25 million in noise judgements and settlements, and have invested hundreds of millions in land acquisitions for noise buffer zones. The noise issue has paralyzed airport planning and expansion and effectively eliminated the building of new airports.

Piecemeal "solutions" are being tried: airport operators are restricting air traffic by imposing <u>night time curfews</u> and jet bans which place significant burdens on interstate commerce, particularly on air freight, which often moves at night.

Concomitantly, the troubled airline industry lacks the capital needed to purchase new, quiet equipment. (While the private marketplace could handle replacement of the noisy fleet if all carriers have \$6 billion in earnings in the next 10 years, the best current estimates indicate there will be only \$3 billion.) Lack of orders in turn has prevented the aircraft manufacturers from completing development of new aircraft. (Both Germany and France are heavily subsidizing their aircraft manufacturing industry with the expectation of obtaining a much increased percentage of the world aircraft business.)

SUMMARY OF SECRETARY COLEMAN'S PROPOSAL

Secretary Coleman has prepared and submitted for your review, a comprehensive 10-year, \$3.5 billion program paid for by aircraft users, which will not only attack the noise problem, but will also help to finance the development of a new generation of quieter, more fuel-efficient aircraft, revitalize the airline and aircraft industries, create at least 240,000 jobs, and strengthen our position in the International Aviation marketplace. His proposal is attached at Tab A.

His proposed financing methods would require implementing legislation including: (a) reduction of the airline ticket tax by 2 percent; (b) imposition of a 2 percent per ticket environmental surcharge for ten years: (c) a limited exemption from certain provisions of the anti-trust laws to allow the airlines to pool and administer the environmental fund; (d) use of

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\$250-300 million from the airport trust fund to retrofit existing 2 and 3 engine jets.

SUMMARY OF ISSUES

- . Should the Federal Government mandate a comprehensive aviation noise policy?
- Should that policy be limited to noise alone or should it encompass broader goals?
 - If so, should Federal financial assistance be provided, in what amount, and by what methods?

TIMING

Secretary Coleman has been called to testify <u>September 1, 1976</u> before the House Aviation Subcommittee on the Administration's position on noise. He seeks White House approval on his proposal prior to that time.

ISSUES

 Should the Administration issue an Aviation Noise Policy Shatement, whether limited or Comprehensive, at this time?

This Administration has or will soon announce policies which, when taken together, form a co-ordinated, comprehensive aviation policy. The proposed Aviation Act of 1975 would simplify CAB regulation of the domestic airline industry, foster competion, and encourage lower air fares. Our International Aviation Policy Statement, to be issued in 4-6 weeks, will set goals in the International sphere. The Airport Development and Assistance Act of 1976, signed July 12, not only provides funds for air safety and airport development, but also, for the first time, allows airport trust fund moneys to be used for land acquisition to help solve the airport noise problem.

DOT's budget allocates substantial money for research and development of aviation noise solutions.

Secretary Coleman believes that an Administration noise proposal is a necessary adjunct to our aviation policy.

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OPTIONS

1. Take no action on the aircraft noise issue at this time.

We could defer making a policy statement until after September 1 and cause another paper to be prepared which compares the costs and effectiveness of various noise abatement options.

PROS

- Deferral of decision would maximize local community decision-making on local noise needs and wishes.
- New aircraft being built not only meet current aircraft noise standards, (FAR 36) but are also 5% to 40% more fuel-efficient. Pure market competition may compel the airlines to purchase new planes, even without Government intervention.
 - The airline industry's financial condition is improving; deferring action would give additional time to see if the airlines, on their own, can solve the noise problem.
 - Recent signings of international joint ventures, such at that between McDonald-Douglas and the French, indicate that the aerospace industry's financial condition may also be improving.
 - If the Aviation Act of 1975 becomes law, the competitive financial positions of the airlines should be strengthened particularly in the Act's first "honeymoon" years when pricing flexibility is allowed, but market entry is still restricted.

CONS

The enunciation of an aircraft noise policy is an appropriate function for Presidential leadership. If decision is deferred, Congress, the FAA, the EPA, and/or local airport operators may act in ways contrary to the Administration's overall aviation policy. Indeed "doing nothing" is not permitted under the law, which requires FAA to set standards now. This issue has been studied for years; deferring decision may not result in any additional information or options.

2. Limited Federal Action

We could proceed with the issuance of a noise policy statement limited to the promulgation of more strict noise standards for future aircraft types, the establishment by FAA directive of the quietest operating procedures which are safe, and the requirement that, by a date certain (1984-1986), all jets flying must meet a standard such as FAR 36.

PROS

- Shows Presidential leadership and concern about this serious problem but limits the Federal role;
 - Allows private market forces, such as inter-airline competition to work; private firms will be encouraged to purchase new aircraft not only because they are quieter, but also because they are considerably more fuel efficient.
- Sets a compliance date for existing, noisy aircraft which is compatible with the end of their "useful" lines.

CONS

- Assumes, contrary to present industry predictions, that the industry's financial condition will be sufficiently improved to permit retirement of the old fleet and purchase of a new fleet within 10 years.
- Fragments the rules and regulations governing the nationwide airline system, allowing different planes to land in different manners and at different times depending on the airport.
 - Does not address additional issues of concern to the airline industry.

3. THE DOT AVIATION NOISE POLICY STATEMENT

As discussed, Secretary Coleman proposes a 10-year, \$3.5 billion program funded by an environmental surcharge, designed to address not only noise but also energy conservation, the revitalization of the aerospace industry, jobs, the International market share with its balance of payments implications and the continued development of needed technological skills for national defense. The proposal would retrofit the smaller, newer jets paid for from the Airport Trust Fund.

PROS

- . Would reduce aircraft noise 2-3 years sooner than presently scheduled fleet retirement;
- Stimulates the development of a new generation of aircraft at a time when new foreign products are coming on the market.
- . Stimulates permanent private sector jobs;
- Conserves energy: new technology aircraft are 25 to 40 percent more fuel efficient than existing B-707's and DC-8's.
- . Eases the pressure on local airport authorities to establish curfews and other operating restrictions which, if wide-spread, would be disruptive to air travel.
- . Is strongly supported by the aviation industry.

CONS

- Under the guise of a noise policy, proposes broad relief for the airline and aerospace industries;
- May perpetuate the cyclical "boom or bust" tendency of the airplane manufacturing industry by creating a demand for new equipment not caused by the marketplace;
 - Interferes with local decision-making;

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- Depending upon which financing option is chosen, may cause passengers on efficient carriers (which have new, quiet equipment) to subsidize carriers which have been less efficient.
- Depending on which financing option is chosen, pooling and redistribution of surcharge taxes may require an anti-trust exemption, contrary to our aviation regulatory reform effort which seeks increased competition.

FINANCING OPTIONS UNDER DOT PROPOSAL (Option 3)

Options 1 and 2 do not require consideration of financing options since they involve no federally mandated funding.

Option 3 does.

(a) DOT PROPOSAL

DOT's recommendations include the following financing mechanism;

- . Seek legislation to reduce the Federal air passenger ticket and freight way bill taxes collected for the Airport/Airway Trust Fund from 8% to 6% and from 5% to 3%, respectively.
- . Impose a 2% surcharge for 8-10 years, on all domestic passenger tickets and freight waybills.
- Deposit surcharge revenues in an Aircraft Replacement Fund, managed by intercarrier agreement.
- . Grant each carrier drawing rights to the Fund in proportion to its total system passenger and cargo revenue. Withdrawals would be permitted only for retrofit/replacement of 4-engine aircraft not meeting FAR 36 noise standards, or replacement of non-FAR 36 two and threeengine aircraft.
 - Deposit any balances remaining in the Fund after program objectives have been achieved in the existing Airport/ Airway Trust Fund, dedicating them to noise control purposes (including land acquisitions and easements).

Seek legislation to authorize payment of the cost of retrofitting two and three-engine aircraft (\$250 million) from the Airport/Airway Trust Fund.

Effect:

The \$3-3.5 billion flowing into the Aircraft Replacement Fund could finance approximately one-half of the \$6.4 billion cost of replacing the some 200 to 275 B-707's and DC-8's that would otherwise be in airline service at the end of 1984, the date by which the noise standards must be met. (This would be about 10% of the industry-wide capital requirements for this period).

The user taxes flowing into the Airport/Airway Trust Fund under the reduced rates would cover all outlays chargeable to the Fund under the Airport Development Aid Program (ADAP) bill through FY 1980. Without a tax reduction, unused Trust Fund balances will grow rapidly (to \$1.7 billion by 1979) and become a target for tax reductions, already being advanced by the aviation industry.

PROS

- Provides major financial assistance to the airlineaircraft industry but, unlike loan guarantees, minimizes Federal involvement.
- Sparks development of a new generation of airplanes, but does not encourage excess capacity because the surcharge provides only part of the revenues needed for replacement.
- Interference with market choices is minimal; the carriers have flexibility to decide how to use the revenues from the surcharge.
- Redistribution of surcharge revenues avoids an unduly severe impact on the four carriers that own 60% of the B-707's/DC-8's.
- . Does not increase the cost of air travel.
- . Is funded by aviation users, not the general taxpayer.

CONS

 Pooling and redistribution of some revenues is contrary to antitrust policy; an antitrust exemption, if needed, is contrary to the tenets of our aviation regulatory reform effort which fosters competition.

- Controversy over revenue pooling, whether in the Congress or before the Civil Aeornautics Board, may delay announcement of new aircraft programs.
- Redistribution of revenues penalizes those airlines that, because of better management or more favorable route structures, have been able to purchase newer, quieter planes. (Note: only Delta has opposed the proposal on this basis.)
 - May be perceived as favoritism to the airlines as opposed to other transportation modes;
- Revenue pooling is contrary to present antitrust policies;

(b) Modified Financing Proposal

This proposal has the same basic provisions as financing option (a) except that, instead of establishing a pool or trust fund, each carrier would impose the surcharge and manage its own aircraft replacement account, comparable to the aircraft security surcharge (\$.37 per ticket) established when airline highjacking's were prevalent. Excess funds would be remitted to the airport trust fund; and receipts and disbursements would be reported regularly to the CAB and DOT.

PROS

- . All of the pros of financing option (a) above.
- . Does not require special exemption from the anti-trust laws.
- . Does not conflict with our aviation regulatory reform proposals.

CONS

- . Would be taxable income for each carrier, thus providing a smaller overall fund for replacement.
- . Provides a windfall for carriers which have modern quiet fleets, (Delta and Continental, for example) while providing

less assistance for other carriers which have the older noisier fleets (United and American) and little for our international carriers (Pan Am and TWA.)

RECOMMENDATIONS

Departments and Agencies

Option 1 (defer decision and request further studies) is recommended by CEQ and Justice.

Option 2 (limited Federal involvement) is recommended by CEA, COWPS, and OMB.

Option 3, (Secretary Coleman's full replacement and retrofit proposal) is recommended by DOT, NASA, State, HEW, and Commerce.

Financing Options

Option 3(a), (the DOT financing proposal) is recommended by DOT and Commerce.

Option 3(b), (reduction of tax, coupled with surcharge but no pooling arrangement), is recommended by

White House Advisors

(Note: Among other considerations, the impact of these proposals on International Aviation and the concerns of the financial institutions which have a \$4 billion investment in aircraft leased by them to the airlines, should be considered here.)

DECISIONS

Option 1, (defer decision and request further studies) Approve Disapprove Option 2 (limited Federal involvement) Approve Disapprove Option 3, (Secretary Coleman's full replacement and retrofit proposal) Approve Disapprove If Option 3 is approved, then: Financing option Option 3(a), (the DOT financing proposal) Approve Disapprove Option 3(b), (reduction of tax, coupled with surcharge but no pooling arrangement)

Approve _____ Disapprove

WASHINGTON, D.C. 20590

WASHINGTON



MEMORANDUM FOR THE PRESIDENT The White House

Subject: Aviation Program

The Administration has a unique opportunity to propose an innovative aviation program managed by the private sector to reduce airport noise, stimulate private financing of new aircraft, increase employment in the depressed aeronautical manufacturing industry, advance aircraft technology, and preserve the American share of the world aircraft market which is now being challenged by the Europeans.

The Department of Transportation submitted to the Office of Management and Budget on June 1 a proposed Aviation Noise Policy Statement. This Noise Policy placed the primary responsibility on the airport proprietors and state and local governments to take action to reduce airport noise by locating airports outside populated areas, to assure compatible land use and zoning, and to acquire land around airports. The policy further clarifies the responsibility of the federal government to reduce aircraft noise at its source both by promulgating noise standards for new airplanes and by bringing the 75% of the existing fleet that does not now comply with federal noise standards into compliance within eight years. This policy statement is currently in the process of interagency review. I urge that the statement be approved, with certain refinements.

Bringing the current aircraft fleet into compliance with federal noise standards will require special financing arrangements. The Department of Transportation recommends that airlines be permitted to collect a 2% surcharge on airline tickets for ten years and use these funds primarily as down payments for the replacement of the oldest, noisiest four engine jets in the commercial fleet. 1/ The carriers, not the

1/ A 2.0 surcharge for a ten year period would raise about \$3 billion which is almost one-half of the cost of replacing those old noisy four engine airplanes that would remain in the fleet at the end of 1984, the date when full compliance with federal noise standards would be required. If after further analysis within the Administration, we

federal government, would operate the fund and they would have maximum flexibility in determining how to use the funds. At the same time the surcharge is imposed, the ticket tax collected for the Airport Trust Fund would be reduced by 2%. The Trust has accumulated a surplus that now exceeds \$1 billion. If the ticket tax continues to be levied at its present rate, the surplus will exceed \$2 billion by 1980 assuming full funding of all current authorizations. Although we would prefer to broaden the uses of the Trust Fund to include maintenance of the air traffic system, Congress has permitted this only to a limited extent. Eventually, the surplus will either become a target for unjustified spending proposals or the tax will be reduced. Of course. the moment the tax is reduced, the airlines probably would apply to the CAB to increase their fares to a like amount, but it is doubtful that the CAB would permit the increase, and if it does, there would be no direction as to how said increase is spent. I believe that this proposal is sound public policy because it prevents an increase in the cost of air travel while dedicating resources to the attainment of important objectives. It is also my judgment that Congress will reduce the ticket tax by 2% to 3%.

We recommend further that the Administration seek legislation to authorize the expenditure of an additional \$350 million from the existing Trust Fund surplus that would be used to quiet down some of the newer two and three engine airplanes. The Congress will then have the opportunity to consider whether the retrofit of the newer airplanes with sound absorbent material provides sufficient noise reduction to be worth the cost. 2/

I would like to highlight for you some of the advantages of this program:

Minimum Federal Involvement: Use of a surcharge collected and managed by the carriers with CAB approval avoids direct and continuing federal involvement in private sector capital investment decisions.

(footnote continued)

reach agreement that this objective may be achieved with less financing then we could reduce the number of years or the surcharge percentage. Several options along these lines are described in the attachments.

2/ Alternatively, we could include the cost of retrofitting these two and three engine planes in the CAB-approved fund that would be used for aircraft replacement and avoid the need to seek specific legislation to authorize the expenditure of trust funds. The financial burden will be placed on airline users rather than on the general public.

- . A surcharge avoids use of general federal revenues.
- . The airlines collect the surcharge, determine the distribution formula, and decide whether they prefer to replace or retrofit airplanes.

<u>New Technology:</u> Stimulating private financing for aircraft replacement will provide the estimated \$1 billion needed for Boeing to develop the 7X7 and \$500-\$800 million for McDonnell-Douglas to build to DCX200. A new generation of U.S. manufactured airplanes is presently stalled at the design stage because U.S. air carriers have not been able to finance new airplanes.

Employment: Aircraft replacement will generate jobs in the aerospace and related industries.

- An accelerated replacement program by the airlines that generates about \$12 billion dollars in aircraft sales, including sales abroad, would create over 240,000 jobs in the aerospace and related industries.
- Aircraft orders could reverse the heavy unemployment of the scientists and engineers in the commercial jet manufacturing industry.
- . Immediate aircraft replacement would prevent a major shift of jobs to European countries whose manufacturers have captured a larger share of the aircraft market.

Exports: Accelerated production of these airplanes will help American manufacturers remain competitive in the world market.

 Aerospace products have been, in recent years, an important export of the United States, equaling 7% of the total in 1974. Twenty-seven percent of 1974 U.S. aerospace sales in 1974 were exported.

• European governments are now subsidizing their aerospace industries. (France's 5 year plan for 1971-75 contained a \$220 million annual subsidy for its aerospace industry).

- 3 -

European aerospace manufacturers are beginning to produce aircraft, for example, the A-300-B, that will take sales away from U.S. manufacturers if U.S. companies do not produce new aircraft soon.

Energy: Production of a new generation of planes will promote, energy conservation by improving fuel efficiency about 30% over the older four engine planes.

Better Air Service: New generation airplanes are more cost efficient to the airlines.

- . New technology airplanes will be more efficient to the carriers than the older aircraft in terms of seats, range and operational characteristics (easier maintenance, increased reliability of systems).
- . Improved air service would be achieved without a significant increase in cost to users since DOT, as part of its proposal, requests a 2% reduction in the ticket tax collected for the Airport Trust Fund.

Noise Reduction: Affirmative federal action to reduce aircraft noise by the early retirement of the noisiest, oldest four engine jets (about 500 B-707s, DC-8s) and the retrofit of some of the newer two and three engine jets (B-727, B-737, DC-9) is necessary.

- New aircraft containing new noise control technology would reduce by more than two-thirds the land area and number of people presently impacted by noise problems for six million Americans, helping to forestall increasing damage suits against airports.
- Proliferation of curfews and other airport use restrictions that increasingly threaten to interfere with interstate commerce and disrupt the air traffic system will be deterred.

Air Quality: New airplanes will comply with engine pollution standards to be in effect in 1979.

I believe this proposal offers you an opportunity to address affirmatively a number of serious environmental, energy, transportation, export promotion and employment problems with minimal federal involvement and maximum private sector flexibility. If you approve the concept generally, I hope to work closely with my colleagues in the Cabinet to refine and improve the proposal to enable you to announce it as soon as possible.

William T. Coleman, Jr.

Enclosures:

Preferred financing proposal

Alternative financing proposals

Backup paper on financing aircraft noise reduction

AVIATION NOISE FINANCING

DOT recommends a financing plan with the following key elements:

1. <u>CAB would be asked to approve</u>, and the Executive Branch would support (perhaps with an expression of Congressional desire), an across the board surcharge for 10 years of 2% on domestic passenger tickets and freight waybills. The airlines would be required to deposit the revenues from the surcharge in an Aircraft Replacement Fund.

Effect:

About \$3 billion (in inflated dollars) would flow into the Aircraft Replacement Fund over 10 years. This amount would finance approximately one-half of the cost (roughly \$6.4 billion) of some 200 to 275 of the B-707s and DC-8s that would otherwise be in airline service at the end of 1984, when the noise standard applies to those aircraft.*

2. The Aircraft Replacement Fund would be managed by intercarrier agreement under which each carrier would have entitlements to the Fund in proportion to its total system passenger and cargo revenue.

Effect:

Administration of the Fund by the airlines would minimize federal involvement.

3. The federal air passenger ticket and freight waybill taxes would be reduced from 8% to 6%, and from 5% to 3%, respectively.

The amount of \$3 billion to be collected through the surcharge has been chosen because it is the sum that commercial banks have indicated to the airline industry would be required to induce their participation in financing an early aircraft replacement program. DOT is, however, conducting an analysis to ascertain whether some lesser amount might induce the participation of the financial community. Upon completion of that analysis the recommendation as to the duration of the 2% surcharge will be adjusted to that the collection will yield the amount deemed necessary.

Effect:

The lower user taxes flowing into the Airport and Airway Trust Fund would cover all outlays chargeable to the Fund under the ADAP bill. (An amendment would be needed to permit the use of ? uncommitted balances (\$1.4 billion) to finance the full annual authorizations included in the ADAP Act.)

- 2 -

Once the pending ADAP bill is enacted without a tax reduction, unused Trust Fund balances would grow rapidly (to \$1.7 billion by 1979) and become a target for tax reductions or unjustified spending proposals.

From a national interest point of view, the use of these excess revenues to help meet environmental and broad economic objectives is a sound and defensible policy alternative.

4. Any balances remaining in the Fund after program objectives have been achieved would be deposited in the Airport and Airway Trust Fund and dedicated to noise control purposes (including land acquisitions and easements).

5. The cost of retrofitting two and three engine airplanes will be paid from the Airport and Airway Trust Fund.

Effect:

About \$350 million (inflated dollars) will be taken from the Trust Fund for retrofit.

Attachments:

- 1. Effect of Aircraft Replacement Fund on carriers' finances.
- 2. Estimated Aircraft Replacement Fund revenues, 1977-1986.
- 3. (A&B) -- Impact on airport/airway fund of lower tax rates.

						STITLE LING	TINARLES -	•	
6 4		CAI	RRIER CON	TRIBUTION	AND ENTITL	EMENT		•	
•	Contai			ollars in m	iiiinons)			••	•
<u>Carrier</u> Trunk	Passenger & 10 Years,	bution (2% Waybill Surc 1977-1986)		Number Non-Comply 707's & DC	ina	. <u>To</u> Enti	tlement]	Entitlement less Contribution	5
American Braniff Continental Delta Eastern National Northwest Pan American Trans World United Western <u>Total Trunk</u> <u>Local Service</u> <u>Allegneny</u> Frontier North Central Ozařk Piedmont Air West Southern Texas Internation <u>Total Local</u>	\$ na1	424.8 119.8 132.5 384.0 357.1 83.2 162.3 28.7 319.4 598.3 126.2 736.2 103.5 41.2 39.6 31.5 35.9 44.0 26.3 15.8 37.8		91 11 5 34 - 10 79 90 100 23 443		\$ • \$ •\$	377 124 112 299 342 75 171 353 379 469 109 2810 80 37 34 28 28 36 25 17 287	$\begin{array}{c} \$ (47.8) \\ 4.2 \\ (20.5) \\ 85.0 \\ 15.1 \\ (8.2) \\ 8.7 \\ 324.3 \\ 59.6 \\ (129.3) \\ (17.2) \\ \$ \\ 73.8 \\ \\ \$ (23.5) \\ (17.2) \\ \$ \\ 73.8 \\ \\ \$ (23.5) \\ (129.3) \\ (17.2) \\ \$ \\ 73.8 \\ \\ \$ \\ (129.3) \\ (17.2) \\ \$ \\ (129.3) \\ (129.$	

Total entitlement is determined by distributing the funds collected among carriers, on the basis of the propertion that each carrier's system revenues bear to the total of all revenues collected by the carriers.

-									,	Page 2
<u>'Carrier</u>	<u>'Pass</u> 10	<u>Contribut</u> enger & Way Years, 197	bill Sur	charge-	Number Non-Comp 707's &	lying	<u>٤</u>	<u>Total</u> ntitlement	Entitlement less	<u>.</u> .
o ng Tiger ard Ift Total Cargo	•	31.1 17.4 <u>4.5</u> \$53.0		•	16 11 5 <u>32</u>	•		8 46 24 78	(23.1) 28.6 19.5 25.0	-
r Temental Carri astate Carrie iian a Total Other		48.2 125.5 14.8 11.5 \$200.0	· ·	•	31 - - 	• . 1	2	92 42 11 <u>7</u> 152	43.8 (83.5) (3.8) (4.5) (48.0)	· · · · · · · · · · · · · · · · · · ·
<u>TOTAL</u> <u>Carriers</u> 2/	•	\$3327.0	•	••••	495 <u>17</u>	· ·		3327.0	∖ - 0 -	
TOTAL	•	· .	•	•	523	•		•	•	•

cludes commercial operators and flying clubs. Revenue contribution and entitlements for these carriers e not provided due to lack of revenue data.

Attachment 2

REVENUE COLLECTIONS - AIRCRAFT REPLACEMENT FUND

	1977	. 1978	1979	<u>1980</u>	1981	1982	1983	1984	1985	1986	Year Total
PLACEMENT FUND		•	•			•		•••••••••••••••••••••••••••••••••••••••			•
lurcharge	224	244 •	258	. 271	284	303	322 ·	341	360	377	2484
Surcharge	22	26	28	32	36	38	. <u>38</u>	40	40	. 42	342
	246	270	206	303	320	341	360	381	400	419	<u>3327</u>

CASE A. EXISTING TAX STRUCTURE, LATEST CONFEREE COMPROMISE ON ADAP & MAINTENANCE. 5/27/75

••		(In \$	Millions)	•	•	•	
~*	1976	<u>то</u>	1977	1978	1979	1980	1981
inning Uncommitted Balance	889	1269	1378	1520	1693	1892	2105
Trust Fund Revenues	· <u>969</u>	254	1046	<u>1128</u> ·	1205	1268	1338
Subtotal	.1858	1523	2424	2648	2898	3160	3443
: ADAP Maintenance F&E RE&D Wubtotal	412 250 68 1128	103 62 <u>18</u> 1340	525 250 250	555 275 250 <u>85</u> 1433	590 300 250 <u>90</u> 1668	625 325 250 <u>95</u> 1865	•
Estimated Interest *	141	38_	198		224	240	
ng Uncommitted Balance	1269	1378 _	1520.	1693	1892	2105	•

nterest for FY 1976 and the transition quarter is as shown in the FY 1977 Budget; interest thereafter s calculated at 8% of average cash balance.

nning Cash Balance	.2013	2393	2502	2644	2817	3016	3229
lus Revenues Less Expenses	239	71	<u>- 56</u>	<u>-37</u>	<u>- 25</u>	<u>- 27</u>	
Ending Cash Balance	2252	2464	2446	2607	2792	2989	
age Cash Balance nterest nce Carried Forward	$\frac{141}{2393}$.	<u>38</u> 2502	(2474) <u>198</u> 2644	(2625) 210 2817	(2804) 224 3016	(3002) 240 3229	

CASE. B. 6% PASSENGER TICKET TAX, 3% WAYBILL TAX, LATEST CONFEREE COMPROMISE ON ADAP & MAINTENANCE

5/27/76

(In \$ Millions)

. .

				•			
~``	1976	TQ	. 1977	1978	1979	1980	1981
ginning Uncommitted Balance	889.	.1269	1378	1276	1165	1038	. 884
us Trust Fund Revenues	. 969	254	871	874	932	981	1035
Subtotal	1858	1523	2189	2150	2097	2019	1919 -
ss: ADAP Haintenance F&E RE&D	412 250 <u>68</u>	103 62 18	525 250 250 77	555 275 250 85	590 300 250 90	625 325 250 95	• • •
Subtotal	1128	1340 .	1087	985	- 867	724	
<u>us</u> Estimated Interest *	141	. 38	189	<u>180</u> ·	171	160	
ing Uncommitted Balance	1269	1378	1276	1165	1038	884	
	•					:	

Interest for FY 1976 and the transition quarter is as shown in the FY 1977 Budget; interest thereafter is calculated at 8% of average cash balance.

inning Cash Balance Plus Revenuas Less Expenses Ending Cash Balance rage Cash Balance	2013 239 2252	2393 	2502 -291 2211	2400 -291 2109	2289 -298 1991	2162 -314 1848	2008
Interest ance Carried Forward	<u>141</u> 2393	<u>38</u> 2502	(2351) 189 2400	(2254) <u>180</u> 2289	(2140) <u>171</u> 2162	(2005) 160 2008	•

ALTERNATIVE OPTIONS FOR

AVIATION NOISE FINANCING

The following options might be considered as alternatives to DOT proposal to facilitate replacement and retrofit of aircraft that do not comply with the FAA noise standards:

Option #1

1. <u>CAB would be encouraged through an expression of legislative</u> intent to permit an environmental surcharge of 2% on domestic passenger tickets and freight waybills for 5 years. Revenues from the surcharge would be placed in an escrow fund to be used primarily for replacement of 4 engine aircraft.

Effect:

About \$1.4 billion would be provided for the replacement fund over 5 years.

2. The replacement fund would be managed by the airlines under an inter-carrier agreement.

Effect:

Administration of the replacement fund by the carriers would keep federal involvement to a minimum.

3. The replacement fund would be disbursed as follows:

- - 50% would be distributed in cash to the participating airlines in proportion to the surcharges each contributes to the fund;

- - 50% would be used as a loan guarantee fund with the

-

entitlement of each participating carrier computed on the basis of its total system revenues. Loan guarantees would be authorized up to three times the amount of each airline's entitlement. Effect:

About \$1.4 billion in cash would be available to carriers.

Use of a loan guarantee fund enables carriers to obtain financing for new airplanes.

4. Any unused balance in the loan guarantee fund after all loans have been paid off will be placed in the Airport and Airways Trust Fund.

5. The tax on passenger tickets and freight waybills collected for the Airport and Airways Trust Fund would be reduced by 2% for 5 years. Effect:

A reduction in the ticket tax to balance the surcharge prevents the cost of air transportation from increasing.

6. <u>Appropriations would be authorized from the Airport and Airways</u> <u>Trust Fund to pay the cost of retrofitting those non-FAR 36 aircraft</u> which the airlines elect to retain in domestic service, rather than replace or retire them.

Effect:

The cost of retrofitting 2/3 engine airplanes is estimated to be about \$350 million (in inflated dollars). If the airlines choose to retrofit the approximately 75 four-engine aircraft which may be economic to retrofit

then the cost would increase by \$225 million.

Option #2

The CAB would be encouraged to approve a 2% surcharge for
 7 years on carriers' domestic passenger tickets and freight waybills.
 Revenues from the surcharge would go into a replacement fund. '.

Effect:

About \$2 billion in revenues, 30% of the approximately \$6.4 billion needed to replace 4 engine airplanes would flow into the replacement fund.

2. <u>The replacement fund</u>, managed by the airlines under an inter-carrier agreement, would be distributed according to the amount each carrier contributes.

Effect:

Administration of the fund by carriers minimizes federal involvement. Funds could be used for purchase of any type of new aircraft. There would not be any cross subsidy or pooling of funds.

3. International carriers and the portion of a domestic carrier's airplanes used in international service (determined by the proportion its international revenues bear to total revenues) are exempt from the domestic standard and do not participate in the domestic Aircraft Replacement Fund.

Effect:

About one-third of TWA's and almost all of Pan Am's fleet would be exempted. The exempt portion of an American carrier's fleet would come within the international fund (6 below).

4. Any balance in the replacement fund at the end of the 7 year period would be placed in the Airport and Airways Trust Fund.

5. The tax on passenger tickets and freight waybills collected for the Airport and Airways Trust would be reduced by 2% for 7 years.

Effect:

A reduction in the ticket tax that corresponds to the surcharge will not increase the cost of air transportation.

6. <u>A surcharge on all international tickets and waybills would be</u> collected to facilitate replacement of 4 engine airplanes in international service for both domestic and foreign carriers. A distribution formula would be worked out through ICAO.

Effect:

Separation of domestic and international operations prevents uneven treatment of either domestic or foreign carriers.

 Appropriations would be authorized from the uncommitted balance (\$1.4 billion) in Airport and Airways Trust Fund to pay for retrofit of 2/3 engine airplanes. Option #3

1. Require the carriers to submit a plan within 6 months after a noise rule takes effect stating the number of airplanes they intend to retrofit and the number they intend to replace.

5 -

Effect:

The FAA, airframe manufacturers, and airlines will know the estimated demand for retrofit kits and new airplanes and can estimate the costs.

2. <u>An escrow fund would be created and would receive moneys from</u> two sources:

- - the \$1.4 billion surplus in the Airport and Airways Trust Fund:

- a 1% surcharge approved by the CAB to be levied on domestic
passenger tickets and freight waybills.

Effect:

About \$2 billion would be placed in the fund in 5 years. Of this amount, \$1.4 billion would be available immediately to be used for replacement.

The carriers would decide how they would meet the noise requirements.

3. Disburse the funds as follows:

- - Estimate the retrofit costs and set the amount necessary to meet them aside;

- - Allocate the funds remaining after retrofit equally among the airplanes to be replaced.

Effect:

The total cost of retrofit (\$350 million in current dollars) would be . covered.

About \$1.6 billion, approximately 25% of the amount needed to replace 4-engine airplanes (roughly \$6.4 billion), would be available for that purpose.

BACKUP PAPER ON FINANCING AIRCRAFT NOISE REDUCTION

I. INTRODUCTION

- There are four parts to the aircraft noise problem:
 - -- One, an unacceptably high level of noise at major U.S. airports, and the resultant pressure for a responsible Federal Government noise-reduction program.
 - -- Two, the inability of much of the airline industry to obtain conventional financing to undertake a noise reduction program.
 - -- Three, the present unavailability of new-generation aircraft as suitable replacements under the program.
 - -- Four, declining employment in the U.S. aerospace industry, and threatening encroachment of government subsidized foreign competition on the U.S. share of the world aerospace market.

II. DEFINITION OF THE PROBLEM

- A. The National Airport Noise Problem
- Aircraft noise has become a serious problem at seven key U.S. airports and a considerable irritation and annoyance at about one hundred more, derogating the quality of life for 6 to 7 million citizens. Pressure from airport operators and consumer groups compel action by the Federal Government in order to avoid:
 - -- Curfews at major airports, which would interfere with air commerce and disrupt our national air system by delaying mail and cargo, and requiring expensive and difficult repositioning and rescheduling of aircraft.
 - -- Billions of dollars in potential law suits and/or land acquisitions.
 - -- Federal preemption of local restrictions and the resultant Federal liability for claims against local airport operators.
 - To correct the noise problem, DOT proposes issuance of a regulation requiring operators of the aircraft not meeting FAR 36 standards to comply with these standards within a 6- to 8-year period, depending on aircraft type, by retiring and replacing them except in the case of newer aircraft for which retrofit makes sense.

There are 2,148 jet aircraft in the U.S. commercial fleet today. Of these, 77 percent, or 1,654 planes, exceed FAR 36 standards. These consist of approximately 500 1960-vintage four-engine aircraft, 1,100 more recent two- and three-engine aircraft, and 50 early 747's. Relatively few of the noisy aircraft are found in the fleets of the all-cargo and supplemental carriers. The majority are owned by the trunk carriers; four trunks--American, Pan Am, TWA, and United--account for nearly two-thirds.

If all 1,654 noisy aircraft were retrofitted, the cost in today's dollars would range from approximately \$870 million to \$1.6 billion:

- -- \$255 million for the 1,100 two- and three-engine aircraft (at an average cost of over \$200,000 per aircraft).
- -- From \$600 million to \$1.3 billion for the approximately 500 four-engines (not including the 747's). The cost of these kits--which have not yet been developed--is estimated to range from \$1.2 million to \$4.5 million, depending on certain assumptions, the most important of which is the number of aircraft to be retrofitted. A reasonable estimate, assuming all four-engines were retrofitted, would be from \$1.2 million to \$2.5 million per aircraft. The higher unit cost, as compared to the two- and three-engine retrofit, is a function of the greater difficulty of retrofitting these planes, the larger number of engines, and the smaller numbers of planes involved.

-- The 50 747's would cost approximately \$13 million to retrofit.

- Retrofit is conceded to increase operating costs for most narrowbodied four-engine aircraft, and it is expected the airlines will choose to replace rather than retrofit these aircraft. The kits are expensive and would add nothing to the useful life of the planes. The airlines have indicated it would be economically preferable to replace almost all with a quieter, more efficient aircraft, if one were available, contingent upon obtaining the necessary financing.
- Not all the four-engine aircraft in the fleet today will be in the fleet at the end of 1984. But not all will have been retired either. Between now and then, it is expected that the airlines will purchase on the order of 700 additional aircraft* to meet
- * Projecting the composition of individual carrier fleets and the total U.S. fleet 8 years into the future is a difficult, complicated exercise, requiring considerable amounts of judgment as to carrier decisions, as well as quantitative data. The figures included in this paper are preliminary and may be revised; however, the relationships and the ranges are firmly established and can be used with reasonable confidence.

anticipated traffic growth and to replace worn out, uneconomic aircraft (additional requirements resulting from Federal noise reduction policies not included). Several points central to the program should be noted here:

- -- The airlines are not expected to need a significant number of new aircraft before 1980 or 1981. Existing aircraft, combined with orders currently on the books and supplemented only slightly by additional purchases, should handle projected traffic increases until then. In addition, because of their poor financial condition, some carriers will find it difficult to obtain financing for new equipment. For this and other reasons, the carriers can be expected to postpone replacement orders until they become absolutely necessary.
- -- On the other hand, to meet the 1984 noise regulation with a new technology aircraft, the airlines would have to place firm orders for such aircraft in the next 12 to 18 months. Thus, there is a gap of from 2 to 3 years between the investment decision the airlines would make in the normal course of events--absent a noise regulation--and the accelerated decision they must make to comply with the noise reduction program.
- -- Many of the noisy four-engine aircraft currently in the fleet will be retired under the airlines' anticipated schedule. But more than half--between 275 and 350--are expected to be still in the fleet by the end of 1984 (as cargo and charter aircraft, if not in passenger scheduled service). Most of these planes are, or soon will be, fully depreciated. However, the expense of retrofitting them, with kits ranging from \$1.2 million to \$4.5 million, would make continued operation in most cases uneconomic.
- The cost of a realistic and economic program to meet the noise reduction requirement by 1984 has been estimated as follows:
 - -- \$400 to \$450 million (in 1976 dollars) for retrofit of approximately 950 two- and three-engine aircraft, 50 747's, and approximately 75 four-engines that may be economical to retrofit.
 - -- From \$4.0 to \$5.5 billion (in 1976 dollars) for accelerated replacement of the other 200 to 275 noisy four-engines expected to be in the fleet after 1984.
 - -- If the airlines choose to retrofit none of the narrowbodied four-engine aircraft then the cost of replacement

increases to a range of from \$5.5 billion to \$7 billion (in 1976 dollars).

- B. The Financial Situation of the Trunk Airline Industry* (Detail in Appendix A).
 - Although the national interest quite clearly compels a noise reduction program, the financial condition of the trunk airline industry, and in particular of certain companies within the industry, calls into serious doubt the industry's ability to finance such a program through conventional means.
 - In the normal course of events, the airline industry will have to raise on the order of \$25 billion to \$30 billion (in inflated dollars) between now and 1985 in order to purchase an estimated 700 new aircraft that will be made necessary by traffic growth and obsolescence of existing aircraft, to repay debt, and for other miscellaneous capital expenditures.
 - As is well known, the air carriers have had almost 10 years of very lean earnings (since 1967 an average pre-tax profit margin of 2.5 percent and ROI of 5.7 percent). There seems little doubt that for the last year or so (principally as a result of the 1974-75 economic recession combined with rapidly escalating costs) the industry's collective ability to finance any major capital acquisitions has been at an extreme low point, both in terms of its own history and as compared to other industries.
 - Fortunately, the resurging economy is bringing the industry out of its doldrums, and positive earnings are in sight for the next several years. The size of the existing fleet, with the addition of current orders, is sufficient to make the need for new aircraft investments relatively low through the period from 1976 to 1979. By the time substantial new aircraft capacity is needed, it seems likely that the industry will have redeveloped adequate financial strength to fund it. (This assumes no extraordinary financing needs and the help of regulatory reform.)
 - However, the realistic noise reduction program would add \$5.6 to \$7.7 billion (in inflated dollars) to the industry's capital requirement, which clearly constitutes an extraordinary financing
- * The focus of attention in this paper is on the financial condition of the trunk air carrier industry because the majority of the noisy aircraft, and virtually all of the noisy four-engine aircraft which should be replaced, are concentrated therein. Any financing options considered by either the industry or the government must of course take into account the fact that there are noisy aircraft owned by companies outside the trunk airline industry.

need.* Capital needs would increase by 19 to 31 percent, from which the airlines would derive no direct traffic or revenue increases, and only slight capacity increases. An incremental requirement of this magnitude is beyond the near-term ability of the industry to finance in any normal fashion, since both the debt and equity markets have been foreclosed effectively for several years.**

Yet, to obtain delivery of new generation aircraft in time to comply with the regulation by 1984, the airline industry would have to accelerate its replacement schedule and make firm purchase commitments within the next 12 to 18 months. The industry very simply is not in adequate financial condition to make such commitments. It will begin to do so eventually, but too late to obtain the economically and environmentally efficient aircraft desired for the noise reduction program, to generate the jobs needed now in the aerospace industry, and to counter the competitive threat of new-technology foreign aircraft.***

Compounding the problem greatly is the financial condition of certain individual carriers within the industry. The use of aggregate data to analyze the ability of an industry to meet a specific financial need is often misleading. Individual companies, possessing a specialized knowledge of their own situation, can find ways around financial barriers that seem insurmountable to the industry analyst. In this case, however, the reverse is true. Several of the financially weakest carriers in the industry are also the owners of large numbers of

* Assumes the combination of replacement and retrofit discussed earlier, with a 5 percent annual inflation rate and using 1982 prices. Excludes those four-engine aircraft possessed by other than the trunk airlines.

**In hearings on the Aviation Act, the heads of several banks and insurance companies, the industry's traditional institutional lenders, testified that they did not anticipate making further loans to any carriers, and advised that capital formation was, and would continue to be, a critical problem for the industry.

***An additional consideration is the potential impact of some approaches that have been proposed for dealing with the industry's re-equipment problem. Frank Borman, the CEO of Eastern Airlines, has recommended, for example, that the industry conduct a design competition, select a single new aircraft, and then agree to purchase that aircraft only. The consequences of such an approach for the competitive structure of the aerospace industry are serious. noisy aircraft, and will face some of the largest requirements for funds with which to replace those aircraft.

TNA, for example, has had an extremely difficult time remaining solvent over the past year and a half. In fact, having asked for and been refused Federal subsidy, it has avoided bankruptcy only through extraordinary efforts on the part of management and acquiescence on the part of its lenders. TWA's problems will not vanish overnight. Even though it will approach breakeven in 1976, and should see a return to profitability in 1977, the company is a few years away from being an effective competitor for funds inthe capital marketplace.* Yet by 1985, TWA probably will require from \$2 to \$3 billion in capital (in inflated dollars) merely to stay competitive and remain in business. The added cost of achieving noise reduction goals (that is, of replacing before 1985 those aircraft that would otherwise remain in its fleet) could increase TWA's capital needs by as much as \$1.5 to 2.0 billion (in inflated dollars) between now and then. Present projections say it is highly unlikely that TWA could finance independently such a tremendously increased capital requirement.

Two of the other carriers strongly impacted by the noise regulation, Pan Am and American, also have had financial difficulties recently and would face similar problems in financing the purchase of replacement aircraft. Pan Am's capital requirements in the 1976 to 1984 period could increase on the order of \$1 billion (from around \$2 billion to as much as \$3 billion), as would American's (from around \$3 billion to around \$4 billion).

C. The Need for a New-Generation Aircraft (Detail in Appendix B).

No major new aircraft has been developed in the United States for almost 10 years. In that time important design and technological advances have been made -- many specifically to meet the new economic, operating, and environmental constraints dictated by rising labor costs, energy shortages, and changing market demands.

* TWA's recent announcement that it plans to sell 2 million shares of common stock should not be construed as a sign of ability to compete in the capital marketplace. The company quite clearly has been forced into the sale by financial exigencies and as a result will suffer a serious dilution to its equity base. The shares will sell at a current market price of around \$13 as compared to a book value of \$21. Something like 15 percent of the company will thus be sold for approximately \$25 million, or the price of one 747. Although the technology exists, the present inability of the U.S. airline industry to finance a new generation of aircraft prevents the manufacturers from moving beyond the design stage. It is clearly in the national interest, however, and in the interest of the air traveler and the airline industry, to take advantage of of such gains:

- -- Greater noise reduction: A new technology aircraft would sound about three times quieter than a nonretrofitted 707, and twice as quiet as a retrofitted 707.
- -- Greater fuel efficiency: In the period from 1981 (when the first new-technology aircraft would be introduced under the accelerated-replacement program) until 1986 (when all newtechnology replacement aircraft would be delivered) the total savings in jet fuel is estimated to amount to about 2.5 billion gallons.
 - -- <u>Productivity</u>: Measured against existing aircraft, a newtechnology aircraft would offer greater payload for its size and weight, would be more reliable and more easily maintained, and would cost less to operate and less to acquire per unit of productivity.
- D. The Declining Prospects of the U.S. Aerospace Industry (Detail in Appendix B).

The United States achieved its prominence in the world aerospace market because of its technical superiority; most important civil aviation advances historically have been-made in U.S. products. But lack of orders for a new plane has virtually stalled technical development since the widebody jet: were introduced. Newer foreign aircraft such as the A-300-B show the potential for meeting certain market demands which current U.S. products cannot (i.e. efficient operation over short-medium range routes). This, combined with declines in U.S. Government outlays for aircraft and engines, has already had serious consequences for U.S. airframe and engine manufacturers, a major source of employment and export sales. Since 1968:

- -- Real industry sales have declined 37 percent.
- -- Employment has declined 37 percent.
- -- Aerospace exports as a percent of GNP have declined 42 percent.

Each \$30 million lost in sales translates into a loss of 1,000 full time jobs and \$15.5 million in payroll.

While the U.S. industry shrinks in real terms, foreign aerospace manufacturers -- spurred by Government subsidy -- are growing larger, more capable technologically, and more agressive. It is conceded that the U.S. cannot continue to hold its present 80 percent market share (of world civil aircraft in operation). The question of how large a share European and other foreign manufacturers take will depend in part on how long U.S. production of a new aircraft is delayed. A 2- to 3-year acceleration of the present timetable could be very important in that it would allow U.S. manufacturers to produce a new generation of planes when U.S. airlines will need them and when new foreign products will be on the market.

APPENDIX A

FINANCIAL CONDITION OF THE TRUNK AIRLINE INDUSTRY

The ability of the airline industry to finance equipment replacement depends, as it would in any other industry, on its ability to generate funds internally (through depreciation and earnings) and/or externally (from the equity market and/or debt market).
 Table 1, following, projects sources and uses for the 1977-1984 period, using the specified economic and traffic assumptions.

1. Internal Sources

- As the table shows, depreciation will yield a total of \$10.0 billion through 1984. Aircraft sales will yield only about \$400 million, leaving the airlines \$18.7 billion short of their total needs of \$29.1 billion. This amount must be met through earnings, new loans, leases, or new equity financing. The cost of a realistic noise reduction program would increase the total need for funds by the end of 1984 by around 23 percent, to \$36 billion and would increase the deficit by around 36 percent, to \$25 billion.*
- Industry earnings are projected to range from \$.3 to \$.5 billion in 1976-1977 to \$.6 to \$.7 billion toward the end of the period,** and could total about \$5 billion, which would leave a financing need of \$13.7 billion, or about \$21 billion when noise reduction costs are taken into account. This "gap" must be met through external sources -- the equity market and/or the debt market.

2. External Sources

Because of the airlines' poor earnings record for the past 10 years (see Table 2) both the equity and debt markets have been effectively foreclosed to them for some time. Airline stocks have not been a recommended buy for much of this period, and are not being recommended as an investment for the future, except for possible short-term

Assumes the cost of the replacement/retrofit program is in the middle of the \$5.6 to \$7.7 billion range.

** To earn \$.5 billion, the industry would have to achieve about 9 percent to 10 percent ROI at current investment levels. Since 1967, ROI for the domestic trunks plus Pan American has ranged from a high of 8.5 percent to a low of 2.1 percent, averaging only 5.7 percent. gains in the next six months.* At present, airline stocks stand at approximately 60 percent of their 1967 value (versus 120 percent for the Dow-Jones Average).

- The major source of airline debt financing through the 1960's-traditionally the large insurance companies--has been closed for six years. Under New York law, New York insurance companies are forbidden to make further loans. In a statement submitted to the House Public Works and Transportation Committee George Cenkins, Chairman of Metropolitan Life Insurance, said: "... we feel confident that Metropolitan will lose no money on its current airline investments as they run off, but under present conditions, no new money will be loaned." Before lenders will commit new debt capital, Jenkins added, "(they) will require a sound equity base and good profits ..."
- The DOT is confident that the proposed Aviation Act of 1976 will return the Aviation industry to long-term profitability and eliminate the capital expenditure problem of the future. However, no remedy is seen for the problem of funding the capital decisions that must be made now in order to achieve a quieter and more fuel efficient fleet by the end of 1984. Airline earnings are the key to both internal and external funds generation, but as the foregoing data makes clear even a high level of earnings will not insure that the industry will be able to finance the \$5.6 to \$7.7 billion needed for the noise reduction program through normal means.

3. Problem Carriers

The financing problems anticipated for the industry will be concentrated heavily in major carriers, which have the most fourengine aircraft in their fleet and consequently the greatest retrofit burden, particularly American, TWA, and Pan Am. As shown in Table 3, these three carriers have together accounted for a large portion of the industry's losses over the last five years and, with the possible exception of American, have relatively undesirable debt burdens. Further, as shown in Table 4, American and TWA, (presuming that they could obtain the debt financing they would need,) under the burden of the noise reduction program would have debt/equity ratios of o 4 and 5.7 respectively, while Pan Am's would be near 2. These carriers are likely to have great difficulty in raising the capital that would be required by the noise regulation.

* A potential exception to this statement is the pending TWA issue of 2 million shares of stock. As explained in the text, the need for such an issue is created by TWA's poor financial situation and at the expected price of the sale will seriously dilute the company's equity base.

PROJECTED USES AND SOURCES OF FUNDS U.S. TRUNK AIR CARRIERS 1977, 1980 LAD 1984

(Current Dollars in Billions)

Uses of Funds	<u>1977</u>	1980	1984	.,1977-1984
Property & Equipment Debt Repayment Dividends & Other	\$1.2B .5 .3	\$1.6B .5 .6	\$5.7B .4 .1	\$24.4B 3.6 <u>1.1</u>
Tctal Uses	• \$2.0B	\$2.7B	\$6.2B	\$29.1B
Sources of Funds			•	•
Depreciation Sales of Aircraft	1.1	1.1 	· 1.6	10.0
Total Sources	1.2	., 1.1	1.7	10.4
Uses Less Internal Sour	rces \$.8B	\$1.6B	\$4.5B	\$18.7 B

NOTE: The following growth rates are assumed in the projections:

Real GNP	3.7%
Inflation	5.1%
RPM's	
Domestic	6.5%
International	- 5.3%
System	6.2%
	•

TABLE 2

SELECTED FINANCIAL DATA FOR TRUNK CARRIER INDUSTRY (System Operations, Including Pan Am) 1967-1975

(Dollars	in	mil	71	ions)	
----------	----	-----	----	-------	--

•••		Operating Revenue	Pre-Tax Profit	Pre-Tax Profit Margin	Return on 1/ Investment 1/
1967	•	\$6,17.7	\$638	10.4%	8.5%
1958		6,902	• 411	5.6	6.1
1969		7,765	247 .	3.2	4.6
1970		8,131	(154)	(1.9)	1.8
1971		8,811	` 55	0.6	3.7
1972	· · · · · · · · · · · · · · · · · · ·	9,783	266	- 2.8	5.0
-1972 -1973	•	10,905	. 287	2.6	5.6
1974	• .	12,865	447	3.5	5.8
1975		13,374	. (121)	· · · · <u>(-)</u>	2.8
, 1975	9 Yr. Total	\$84,653	\$2;075	2.5%	NA .

1/ Return element includes net income and interest on long term debt.

Source: CAB Form 41/TPI-32 Reports

.	COTED EINANCIAL DATA F	TABLE 3 OR TRUNK CARRIERS (Inc	luding Pan Am) 1971 TO 1	975
Carriers with Large Numbers of 4-Engine Aircraft	Operating Revenues (\$ Millions)	Net Income (Loss) (\$ Millions)	Profit (Loss) Margin (Percent)	Debt as a Proportic of Total Capitalizat (Percent)
Trans World	\$ 7,679.9	\$ (24.5)	(0.3)%	.73.0%
American .	7,583.5	(39.5)	(0.5)	45.4
United	9,681.2	155.6	- 1.6	. 48.2
Pan American	7,169.1	(233.9)	(3.3)	75.9
Others	•			•
* Eastern	6,629.2	(65.1)	(1.0)	68.2
Delta	5,502.5	258.8	4.9	44.8
Braniff	2,281.3	93.1	4.1	57.7
Western	2,113.4	74.5	3.5	43.8
Northwest	2,984.8	. 203.5	6.8	28.3
Continental	2,081.4	21.3	. 1.0 ,	• 71.7
National	1,821.1	. 82.3	4.5	46.7 .

Trunk Air Carriers - System Operations, December 31, 1975

TABLE 4

PROJECTIONS OF DEBT EQUITY RATIOS, SELECTED TRUNK CARRIERS, 1976, 1989, AND 1984 (Dollars in Billions)

AIRLINE	ANTICIPATED CAPITAL EXPENSITURES (1977-1984)	LONG TERM DEBT/ EQUITY 1976 1980 1984	ADDITIONAL REPLACEMENT CAPITAL REQUIRED BY 19842/	DEBT/EQUITY RATIO INCLUDING REPLACEMENT FINANCIN (1984)
American	\$3-3.5	.78 .47 2.3	\$1.2	4.4
Pan Am	1.8	3.0 1.7 .74	ุ 1.อ	2.17.
TWA	\$23	3.0 2.2 2.8	1.5-2.0	5.77
United	4.2	1.1 .56 .34	2.0	1.52
Industry	\$27.1	1.3 .74 .98	5.6-7.7	1.78
•		•••		

SOURCE: Alliance One Institutional Services and TPI-32

1/ Assumes borrowings for capital needs without respect to carriers ability to obtain financing.

2/ Based on number of four-engine aircraft remaining in fleet after 1984, with replacements (including spares) valued at a 1982 cost of \$27 million each.

APPENDIX B

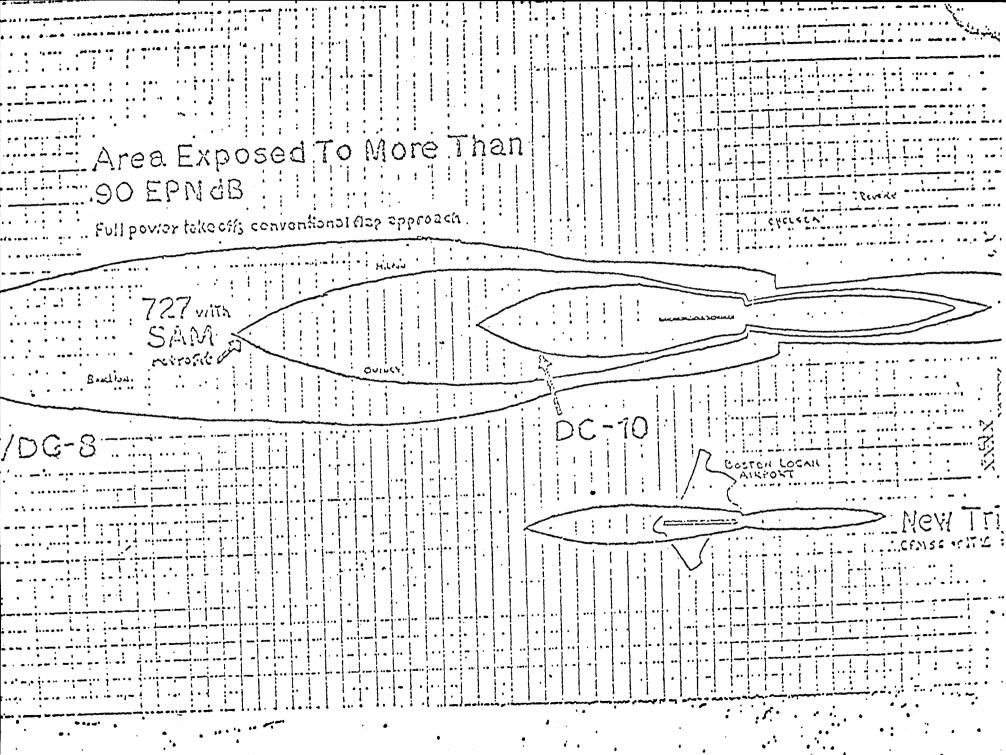
ADVANTAGES OF ACCELERATED DEVELOPMENT OF NEW TECHNOLOGY AIRCRAFT

1. Greater Noise Reduction

- A new-technology replacement aircraft would be far quieter than the quietest existing aircraft. The gain achievable is illustrated in Figure 1, which outlines the area exposed, on a single event, to a noise level equal to or greater than 90 EPNdB--roughly equivalent to the sound of a busy downtown street.
 - -- The 90 EPNdB contour of the 707/DC-8 aircraft (technology of the 1950's) extends more than 20 miles beyond the brake release point of takeoff and roughly nine miles prior to the touchdown point on landing.
 - --- The DC-10, employing the late 1960's technology CF-6 engine, is able to confine the 90 EPNdB contour to a much smaller area, equivalent to the over-water area south of Logan International. It is significantly quieter than a SAM retrofitted 727, which meets FAR 36 standards.
 - -- Further important noise reduction advances are reflected in the noise contour of a new Tri-jet which has double layer acoustical linings, and the 1970's technology CFM-56 or JT10D engines with new design fan and turbine stages. Those engines are expected to be available for use in new aircraft.

2. Productivity, Operating and Safety Gains

- Technological advances possible today will result in a new aircraft with greater payload for its size and weight--an aircraft that is more reliable, more easily maintained, costs less to operate, and costs less to acquire per unit of productivity. These benefits accrue to the public, the air traveler, and the airlines.
- Greater efficiencies are achieved through such technological advances as:
 - -- Supercritical aerodynamics concepts in wing airfoil and body design, which can yield a lighter and more efficient aircraft.
 - -- Lighter, more aerodynamic propulsion system and more efficient engines and nacelles.
 - --- Digital electronics for avionics systems and in-flight control to avoid engine abuse, improve navigation and approach precision, provide increased reliability, maintainability, safety and fuel efficiencies.



- New structural concepts, new materials, and computer-aided designs which will result in a lighter aircraft made up of fewer, less complex parts.
- The new aircraft will be safer for the air traveler, through improvements in inflight control, and new interior materials of much improved flammability/smoke/toxicity characteristics.
- The new aircraft will comply with the more rigorous engine pollutant standards set for 1979.
- The new aircraft, by virtue of improvements in systems and avionics, will be certified with a two-man flight deck crew--an important contribution to control of airline costs and hence ticket prices.
- In terms of seats, range and operational characteristics, the new aircraft will be more closely attuned to marketing requirements of the late 1970's and mid 1980's. On many routes today the aircraft used are smaller than optimal, making additional flights necessary; on other routes aircraft of longer range than necessary are used, which incurs both weight and efficiency penalties. A market-matched aircraft would convert into increased airline efficiencies.
- The new aircraft will use computer-aided flight profile management, which increases aircraft, airport and airways system productivity.
- The new aircraft will accept the standardized interline cargo container (LD-3). This would allow much improved efficiency in the high growth air cargo industry, by avoiding much of the labor and handling costs, while interfacing efficiently.with all-cargo and interline air cargo services.

3. Energy Savings

- Replacement of 707/DC-8 aircraft with new, high-technology aircraft would result in reduced energy consumption per seat mile flown. <u>1</u>/ The estimated magnitudes of the savings from various noise reduction programs are shown below:
 - -- A program resulting in the retrofit of about 100 of the 707/DC-8 aircraft and replacement of the rest with new, high-technology aircraft would provide an energy saving of about 2.5 billion gallons of jet fuel--an energy cost saving of about \$900 million over the period of the program (1981-1986) at today's price.
- 1/ This is based on comparison of the fleet mix that was estimated to result from implementation of the proposed programs with the fleet mix estimated to result in the event that no program were undertaken. The new, hightechnology aircraft is estimated to be 30% more fuel efficient than a 707/DC-8 on a seat mile per gallon basis.

- aircraft with new, high-technology aircraft would provide an energy saving of about 2.8 billion gallons--a cost saving of over \$1 billion over the program period.
- -- A program resulting in the retrofit of all 707/DC-8 aircraft would impose an additional energy requirement of about 220 million gallons over the program period.
- It should also be noted that retrofit of the 727/737/DC+9 aircraft would not cause a measurable change in the energy requirement of the commercial aircraft fleet.
- The annual energy saving of the program would in 1986 amount to about 8% of the total jet fuel consumption of the commercial aircraft fleet.

4. Positive Impact on the U.S. Aerospace Industry

- The 2- to 3-year gap between expected development and accelerated development of a new-generation aircraft is significant for the national interest in general, but could be crucial for the U.S. aerospace industry. Lacking a market for a new plane -- and thus the opportunity to put their drawing-board technology to work -- the U.S. manufacturers already have lost some of the technological advantage they have always enjoyed over foreign competition.
- A potentially more critical loss is U.S. share of the world aerospace market. If delivery of a new aircraft is delayed to 1985, as appears likely absent the spur of a realistic noise reduction program, foreign competition -- with newer products to offer -may secure their, hold on a major share of the world market, and the U.S. industry may decline to a level from which it cannot easily recover.*
- The economic impact on the aerospace industry and on the U.S. economy in general would be enormous. With sales of \$28 billion, and employment of around 950 thousand, the industry has been a major factor in the U.S. economy for nearly the last quarter century. Since 1968, however -- as a result of the problems of its client industry, the U.S. airlines, and a reduction in military purchases -- aerospace has experienced a very sharp decline:
 - -- Direct employment has declined 37 percent.
 - -- Industry payroll as a percent of all manufacturing payroll has declined 30 percent.

* The domestic market is also at issue. In the absence of a new U.S. 180-to-200 passenger aircraft, U.S. airlines are looking at such foreign aircraft as the French-made A-300-B, which already developed is substantially cheaper -- though less efficient -- than a new generation U.S. aircraft would be.

As a percent of GMP, aerospace industry sales have declined 42 percent.

-- Real aerospace industry sales have declined 37 percent.

- As the real domestic and military markets have declined, U.S. manufacturers have grown heavily dependent on foreign markets for sales of civil aircraft. Since 1968 civil aircraft exports as a percentage of total civil aircraft sales have almost doubled. U.S. airframe and engine manufacturers have turned more and more to consortiums with European firms, both to share developmental costs and to ensure continued access to European markets. However, the consequent sharing of production will further erode U.S. aerospace employment.*
- Anxious to reduce U.S. dominance of the lucrative aerospace market, foreign governments have become increasingly protective of their own aerospace industries and markets, and increasingly aggressive about penetrating other markets, forming alliances where necessary to do so (the French and German combined forces to produce the successful A-300-B). Thus, while the U.S. aerospace industry has been declining in real terms, European and other foreign governments have been subsidizing expansion of their own aerospace industries, and threaten to encroach on both the U.S. sales to foreign competition would result in a loss of 47,000 jobs and \$729 million in payroll.
- Assuming that past relationships hold true, the proposed program would accelerate by 2 to 3 years the rehiring of about 25,000 aerospace workers at a payroll of about \$400 million a year.

* An important consideration here is the effect erosion would have on the structure of the U.S. aerospace industry. The competition between the three major manufacturers has helped to establish and maintain U.S. technological superiority. If a sizable share of the world market is lost to foreign competition, one and possibly two manufacturers could suffer seriously.

THE WHITE HOUSE

WASHINGTON

August 14, 1976

MEMORANDUM TO:

FROM:

SUBJECT:

JIM CONNOR JIM CANNO Proposid ation Noise Policy Āν Statement

We cannot do the thorough job that needs to be done to consolidate and staff the Aviation Noise Policy Statement and have it ready for the 2 p.m. Courier on Tuesday, August 17.

We will have it ready for the Thursday Courier.



THE WHITE HOUSE

August 13, 1976

ADMINISTRATIVELY CONFIDENTIAL

MEMORANDUM FOR:

JIM CANNON

FROM:

SUBJECT:

JIM CONNOR JEL

Proposed Aviation Noise Policy Statement

As you are aware Secretary Coleman wishes to issue an aviation noise policy statement by September 1, when he is scheduled to testify before the House Aviation Subcommittee on the Administrtion's noise policy.

The first decision memorandum on this subject was prepared by OMB on July 19. Comments received in staffing indicated that a revision of the memorandum was necessary prior to submitting to the President. (See TAB A)

The second decision memorandum written on this subject was prepared by OMB on August 12. (See TAB $^{\rm B}$)

Some staff members feel options offered in this memorandum are too limited. For this reason, Bill Gorog prepared an additional decision memorandum (See TAB C)

A consolidated package must be prepared for the President on this important issue and you are requested to coordinate this effort.

A courier will be leaving here for Kansas City on Tuesday, August 17 - approximately 2 P.M. - and this decision memorandum should be on it.

cc: Jim Lynn (Don Ogilvie) Bill Gorog



EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

August 12, 1976

ACTION

MEMORANDUM FOR:

THE PRESIDENT

FROM:

DONALD G. OGILVIE

SUBJECT:

Proposed Aviation Noise Policy Statement

Secretary Coleman wishes to issue an aviation noise policy statement by September 1, when he is scheduled to testify before the House Aviation Subcommittee on the Administration's noise policy. He promises to announce a major new program to curb aircraft noise and stimulate new plane production. The following discussion presents options concerning what the policy statement should say. Financing choices associated with one of the options are covered in TAB A.

Background

- -- About six million people are significantly affected by airport noise, 600 thousand seriously so.
- -- Environmental groups and airport neighbors have long pushed for federal aircraft noise reduction action. Congressional attention to the problem is increasing, although no legislative action will be taken this year.
- -- The main federal action to date has been issuance of noise standards for <u>new</u> aircraft in 1969. However, given the longevity of jet aircraft, over 75% of the current air carrier fleet does not meet the standards. The oldest 25% of the jet fleet (B-707s, DC-8s) are also the noisiest. Later model aircraft (B-727, DC-9), which comprise 50% of the fleet, are less noisy but do not meet the 1969 standards.
- There are many ways to reduce aviation noise which are practiced to different degrees at present. Chief among them are: 1) imposition of a jet ban or night curfew (e.g., such as at Washington National);
 2) operational techniques such as runway use adjustments and scheduling to avoid the use of the noisiest types of planes at

close-in airports; 3) land purchase, soundproofing buildings and local zoning measures; 4) retrofit of existing aircraft engines with sound absorbing material or replacement of the engines with quieter ones; and 5) retirement of the older, non-standard-meeting aircraft and replacement with new, quieter airplanes.

Options

There are three major courses of action regarding what basic policy statement should be issued. The options differ in the emphasis they place on the noise reduction methods stated above. The options are:

- Issue the statement and include in it a 4-10 year, \$3.5 billion program funded mainly by an environmental surcharge. This would help replace the noisiest types of aircraft with new technology and retrofit some of the later model planes which do not meet the 1969 standards.
- 2) Defer making a policy statement until after September 1, to permit a paper to be presented to you which compares the costs and effectiveness of various noise abatement options.
- 3) Issue a policy statement which limits the federal regulatory role to assistance on operational techniques and future aircraft noise reduction.

Discussion of Options

Option #1--This option would require most commercial aircraft operating in the U.S. to meet the 1969 noise standards over 4-10 years. It is intended that the oldest, noisiest jets (B-707s, DC-8s) would be replaced with a new, higher technology aircraft while the later model, non-standard planes (e.g., B-727s, DC-9s) would be retrofitted with sound absorbing material. A fuller discussion of this option can be found in TAB B, prepared by DOT.

Key arguments in favor of this option are:

- -- It would lower aircraft noise levels over 4-10 years and take action on the long standing noise problem.
- -- It could ease the pressure on local airport authorities to establish curfews and other operating restrictions which, if widespread, would be disruptive to air travel.
- -- It could create sizable orders for new aircraft and stimulate airframe manufacturers into launching new, advanced aircraft types with improved fuel efficiency as well as quieter engines. Employment in the aerospace industry would also rise substantially and the competitive advantage of U.S. manufacturers would be enhanced.

-- Local authorities could undertake land purchases, zoning regulations and other noise abatement steps with a definitive, long-term federal noise control policy with which to plan.

Option #2--This option would delay issuing a policy statement until after September 1, to permit a decision paper to be prepared which presented you with the full range of noise reduction options available. The paper would discuss the relative costs and benefits of options such as: 1) retrofit of all non-standard aircraft so as to achieve compliance; 2) retrofit of the noisiest set of aircraft only; 3) use of operating techniques and limited curfews at the most serious noise problem airports; and 4) establishment of a noise pollution tax which escalates with the degree of noise an aircraft emits.

Factors in favor of this option are:

- -- Option #1 has no quantification of the benefits expected to be achieved and no comparison of the replacement/retrofit option with other measures which could be taken.
- -- Some of the other approaches to noise reductions may be more cost effective than Option #1. For example, if all non-standard aircraft were retrofitted it would cost only 1/4 to 1/3 of Option #1 and yet also provide significant noise relief. Further, Option #1 would devote 90% of the noise reduction funds to planes which account for only 10% of the operations at noise-problem airports.
- -- Options such as initiation of a noise pollution tax on non-standard aircraft and imposition of partial curfews appear to offer substantial noise reductions and have the advantage of being able to be tailored to local needs and wishes. A community could trade off, for example, a diminution of night service with a quieter environment.
- -- The replacement/retrofit proposal may have substantive flaws which should be further explored. For instance, the airline interest group which conceived of the replacement/retrofit idea contends that retrofitting the non-standard but less noisy aircraft (e.g., B-727s, DC-9s) would have no appreciable noise benefit, but would cost \$200-300 million. It is also not certain that Option #1 will result in a new generation of aircraft, given that the airlines could choose to purchase existing aircraft types, or to re-engine or retrofit a large number of the planes that DOT presumes would be replaced.

<u>Option #3</u>--This option would limit federal actions to promulgations of regulations for future aircraft types (to make them quieter than the 1969 standard levels) and establishment of the quietest operating procedures consistent with a high safety standard.

Factors in favor of this option are:

- -- It would keep federal involvement at a minimum level, allowing each community to determine the degree to which it wishes to impose operating restrictions (e.g., curfews) and other noise abatement measures. This seems appropriate because: 1) over half of the six million people appreciably affected by aircraft noise are located around five airports; 2) a community could trade off the degree and cost of service with the amount of noise it wished to accept. There is evidence that many areas prefer to tolerate noise rather than reduce air activity because of service and employment losses that operating restrictions can bring.
- -- It is not clear that action to control noise at the source greatly changes people's perceptions of being annoyed. There does not appear to be a clear correlation, for example, between the introduction of the new, quieter aircraft and the level of complaints made at a given airport. This may be due to the gradual nature of changes in the noise emissions made.
- -- The noise problem is not growing, with 1975 being probably better than 1974 in terms of total noise generated. Since it is estimated that 1/3 to 1/2 of the noisiest aircraft will be retired over the next 10 years, the noise from the increase in total operations will be offset by a reduction in the number of most offensive planes.
- -- The proposal appears to be inconsistent with Secretary Coleman's decision to let the Concorde, which is twice as noisy on takeoff as any other commercial jet, into the U.S. However, DOT contends that there is no inconsistency since the Concorde is a very limited demonstration which has a more symbolic than real noise impact.

Recommendations

Agency comments were only received on Option #1. As mentioned earlier, the statement did not provide detailed discussions of the various options other than replacement/retrofit, so no comments on these are available. The agency comments which were received indicate:

- -- In favor of Option #1 (replacement/retrofit)--DOT, NASA, State, and HEW.
- -- In favor of Option #2 (further analysis)--CEQ and Justice.
- -- In favor of Option #3 (limited federal involvement)--CEA, COWPS, and OMB.

While no official position was expressed by EPA, it is known that they favor strict noise standards and heavy federal involvement in airport noise actions.

Views of the White House staff are as follows:

- . Mr. Seidman supports the Secretary's proposal (Option #1) but believes that any announcement should await specific implementation strategy. Mr. Gorog also supports the Secretary's proposal, but believes that options other than the three presented here should be considered. He has prepared an independent decision memorandum for your consideration. Mr. Scowcroft is concerned that the Secretary's proposal is silent on the international implications.
- . Messrs. Schmults, Hartmann, Marsh, and Gergen recommend that the issuance of DOT's proposal be deferred (Option #2) because other options need to be developed and presented for your consideration. Mrs. Hope also agrees that more options should be considered but believes that public announcement of a White House request for more analysis should be made because the Secretary's proposal has appeared in the press.
- . Mr. Friedersdorf supports the issuance of an aviation noise policy statement that involves a limited federal role (Option #3).

Decision

Option #1, issue the replacement/retrofit noise policy statement _______. (See TAB A on financing if this is chosen).

Option #2, defer decision to develop and present other options _____.

Option #3, approve a statement that involves a limited federal role .

Attachment

The following discusses various financing options available for the replacement/retrofit proposal. There are three basic alternatives available.

Options

Option A--DOT would propose that the CAB approve 2% environmental surcharges on tickets and freight rates that would generate about \$3 billion over 10 years. At the same time the surcharge is imposed, ticket and freight taxes collected for the airport/airway trust fund would be reduced by 2%. Revenues from the environmental surcharge would go into a special escrow fund managed by the air carriers. The fund would be used primarily as downpayments for the replacement of the oldest, noisiest jets, but the carriers would have flexibility in deciding how to use these funds to achieve noise reduction objectives.

DOT would further recommend legislation to authorize spending \$350 million of the existing airport/airway trust fund surplus to retrofit some of the newer airplanes which do not meet present noise standards. (Alternatively, DOT would propose that the cost of retrofitting these two and three engine planes be paid from the CAB approved fund mentioned above, thus avoiding the need to seek legislation authorizing use of the trust fund for this purpose.)

<u>Option B</u>--Reduce the ticket tax as in Option A above, but keep the federal involvement minimal by letting the airlines recover through fare increases the funds needed to meet the federal standards.

<u>Option C</u>--Do not reduce taxes, but simply require the airlines to meet the federal standards by a given year (e.g., 1987),

Discussion of Options

Option A, which would establish a special escrow account for the airlines to draw upon for noise abatement purposes, has these advantages:

- -- The air carrier industry has several weak elements (Pan Am, TWA, Eastern) which would find meeting the DOT standards very difficult within their existing resources.
- -- A special escrow account will assure airframe manufacturers of substantial resources available to purchase new aircraft, enabling them to undertake the large capital start-up costs required for a new generation to be launched.
- -- DOT believes reduction of the ticket tax is warranted because there is a large (\$1.4 billion) surplus in the

aviation trust fund which is expected to grow even larger with time. The Congress could well reduce the tax and eliminate this surplus.

- -- By using the ticket tax and the aviation trust fund, aviation users would finance the cost of quieting the noise which their travel creates. Reducing taxes while initiating a surcharge also has the advantage of keeping air fares constant.
- -- Would provide more assurance of compliance with noise standards in 6-10 years than other options.
- -- DOT has concluded this option would have minimal inflationary impact primarily because private sector outlays would be spread over a 10 year period and would be in the airframe industry which has idle manufacturing capacity.

<u>Option B</u>, which would reduce the ticket tax by 1/4 but leave the airlines to find sufficient funds to meet the federal standards has these merits:

- -- Leaves the airline industry with the decision of determining whether it is in their economic best interest to purchase new planes or retrofit their existing ones. No artificial incentives are established as in Option A.
- -- May avoid a financial stability problem which purchase of hundreds of new aircraft during a short time (as envisioned in Option A) may produce. Since the airlines have been traditionally overcapitalized, with many having poor debt/equity ratios, taking on additional debt through the purchase of many new aircraft may actually worsen their financial picture. It may also perpetuate the cyclical "boom or bust" tendency of the airframe manufacturing industry by creating a demand for new equipment which was not made by the marketplace,
- -- Pooling and redistribution of taxes is contrary to antitrust policy.
- -- Avoids building up entitlements for particular air carriers such as in Option A above, thus treating all existing and potential new carriers equally. (It can be argued that Option A is contrary to our aviation regulatory reform proposal since it cross-subsidizes carriers with noisy planes and builds up a fund for all existing carriers).

Option C, which would provide no financing, has these considerations:

-- Avoids establishing special financing means to pay for federal environmental standards which would be a very bad precedent to set for other air, noise or water standards,

- -- Since the Administration has consistently argued that the aviation industry should contribute more than it presently pays towards the \$1.7 billion federal cost of operating the aviation system, a tax cut would be contradicting our own policy.
- -- Not advocating a tax cut places the debate on the reasonableness of a tax cut on its merits, not on what program such a cut might finance.
- -- Proposing a tax cut such as in Options A and B above would create a \$225-300 million increase annually in the 1977-86 deficit.

Recommendations

Option A, reducing taxes and establishing an escrow account is recommended by DOT and Mr. Seidman.

Option B, reducing taxes with no special fund, did not receive a specific endorsement.

Option C, making no financing proposal, is recommended by CEA, COWPS, Justice, Treasury and OMB.

Decision

Option A, reduce taxes and establish an escrow account _____.

Option B, reduce taxes only

Option C, make no financing provision



THE SECRETARY OF TRANSPORTATION WASHINGTON, D.C. 20590

RECEP. AND SECURITY UNIT THE WHITE HOUSE

WASHINGTON

MEMORANDUM FOR THE PRESIDENT The White House

Subject: Aviation Program

The Administration has a unique opportunity to propose an innovative aviation program managed by the private sector to reduce airport noise, stimulate private financing of new aircraft, increase employment in the depressed aeronautical manufacturing industry, advance aircraft technology, and preserve the American share of the world aircraft market which is now being challenged by the Europeans.

The Department of Transportation submitted to the Office of Management and Budget on June 1 a proposed Aviation Noise Policy Statement. This Noise Policy placed the primary responsibility on the airport proprietors and state and local governments to take action to reduce airport noise by locating airports outside populated areas, to assure compatible land use and zoning, and to acquire land around airports. The policy further clarifies the responsibility of the federal government to reduce aircraft noise at its source both by promulgating noise standards for new airplanes and by bringing the 75% of the existing fleet that does not now comply with federal noise standards into compliance within eight years. This policy statement is currently in the process of interagency review. I urge that the statement be approved, with certain refinements.

Bringing the current aircraft fleet into compliance with federal noise standards will require special financing arrangements. The Department of Transportation recommends that airlines be permitted to collect a 2% surcharge on airline tickets for ten years and use these funds primarily as down payments for the replacement of the oldest, noisiest four engine jets in the commercial fleet. 1/ The carriers, not the

1/ A 2% surcharge for a ten year period would raise about \$3 billion which is almost one-half of the cost of replacing those old noisy four
 engine airplanes that would remain in the fleet at the end of 1984, the date when full compliance with federal noise standards would be required. If after further analysis within the Administration, we

federal government, would operate the fund and they would have maximum flexibility in determining how to use the funds. At the same time the surcharge is imposed, the ticket tax collected for the Airport Trust Fund would be reduced by 2%. The Trust has accumulated a surplus that now exceeds \$1 billion. If the ticket tax continues to be levied at its present rate, the surplus will exceed \$2 billion by 1980 assuming full funding of all current authorizations. Although we would. prefer to broaden the uses of the Trust Fund to include maintenance of the air traffic system, Congress has permitted this only to a limited extent. Eventually, the surplus will either become a target for unjustified spending proposals or the tax will be reduced. Of course, the moment the tax is reduced, the airlines probably would apply to the CAB to increase their fares to a like amount, but it is doubtful that the CAB would permit the increase, and if it does, there would be no direction as to how said increase is spent. I believe that this proposal is sound public policy because it prevents an increase in the cost of air travel while dedicating resources to the attainment of important objectives. It is also my judgment that Congress will reduce the ticket tax by 2% to 3%.

We recommend further that the Administration seek legislation to authorize the expenditure of an additional \$350 million from the existing Trust Fund surplus that would be used to quiet down some of the newer two and three engine airplanes. The Congress will then have the opportunity to consider whether the retrofit of the newer airplanes with sound absorbent material provides sufficient noise reduction to be worth the cost. 2/

I would like to highlight for you some of the advantages of this program:

Minimum Federal Involvement: Use of a surcharge collected and managed by the carriers with CAB approval avoids direct and continuing federal involvement in private sector capital investment decisions.

(footnote continued)

reach agreement that this objective may be achieved with less financing then we could reduce the number of years or the surcharge percentage.
Several options along these lines are described in the attachments.
2/ Alternatively, we could include the cost of retrofitting these two

and three engine planes in the CAB-approved fund that would be used for aircraft replacement and avoid the need to seek specific legislation to authorize the expenditure of trust funds. The financial burden will be placed on airline users rather than on the general public.

A surcharge avoids use of general federal revenues.

. The airlines collect the surcharge, determine the distribution formula, and decide whether they prefer to replace or retrofit airplanes.

New Technology: Stimulating private financing for aircraft replacement will provide the estimated \$1 billion needed for Boeing to develop the 7X7 and \$500-\$800 million for McDonnell-Douglas to build to DCX200. A new generation of U.S. manufactured airplanes is presently stalled at the design stage because U.S. air carriers have not been able to finance new airplanes.

Employment: Aircraft replacement will generate jobs in the aerospace and related industries.

- An accelerated replacement program by the airlines that generates about \$12 billion dollars in aircraft sales, including sales abroad, would create over 240,000 jobs in the aerospace and related industries.
- Aircraft orders could reverse the heavy unemployment of the scientists and engineers in the commercial jet manufacturing industry.
- Immediate aircraft replacement would prevent a major shift of jobs to European countries whose manufacturers have captured a larger share of the aircraft market.

Exports: Accelerated production of these airplanes will help American manufacturers remain competitive in the world market.

 Aerospace products have been, in recent years, an important export of the United States, equaling 7% of the total in 1974. Twenty-seven percent of 1974 U.S. aerospace sales in 1974 were exported.

European governments are now subsidizing their aerospace industrics. (France's 5 year plan for 1971-75 contained a \$220 million annual subsidy for its aerospace industry). . European aerospace manufacturers are beginning to produce aircraft, for example, the A-300-B, that will take sales away from U.S. manufacturers if U.S. companies do not produce new aircraft soon.

Energy: Production of a new generation of planes will promote, energy conservation by improving fuel efficiency about 30% over the older four engine planes.

Better Air Service: New generation airplanes are more cost efficient to the airlines.

- . New technology airplanes will be more efficient to the carriers than the older aircraft in terms of seats, range and operational characteristics (easier maintenance, increased reliability of systems).
- Improved air service would be achieved without a significant increase in cost to users since DOT, as part of its proposal, requests a 2% reduction in the ticket tax collected for the Airport Trust Fund.

Noise Reduction: Affirmative federal action to reduce aircraft noise by the early retirement of the noisiest, oldest four engine jets (about 500 B-707s, DC-8s) and the retrofit of some of the newer two and three engine jets (B-727, B-737, DC-9) is necessary.

- New aircraft containing new noise control technology would reduce by more than two-thirds the land area and number of people presently impacted by noise problems for six million Americans, helping to forestall increasing damage suits against airports.
- Proliferation of curfews and other airport use restrictions that increasingly threaten to interfere with interstate commerce and disrupt the air traffic system will be deterred.

Air Quality: New airplanes will comply with engine pollution standards to be in effect in 1979.

I believe this proposal offers you an opportunity to address affirmatively a number of serious environmental, energy, transportation, export promotion and employment problems with minimal federal involvement and maximum private sector flexibility. If you approve the concept generally, I hope to work closely with my colleagues in the Cabinet to refine and improve the proposal to enable you to announce it as soon as possible.

William T. Coleman, Jr.

Enclosures:

Preferred financing proposal

Alternative financing proposals

Backup paper on financing aircraft noise reduction

DEPARTMENT OF TRANSPORTATION

AVIATION NOISE FINANCING

DOT recommends a financing plan with the following key elements:

1. <u>CAB would be asked to approve</u>, and the Executive Branch would support (perhaps with an expression of Congressional desire), an across the board surcharge for 10 years of 2% on domestic passenger tickets and freight waybills. The airlines would be required to deposit the revenues from the surcharge in an Aircraft Replacement Fund.

Effect:

About \$3 billion (in inflated dollars) would flow into the Aircraft Replacement Fund over 10 years. This amount would finance approximately one-half of the cost (roughly \$6.4 billion) of some 200 to 275 of the B-707s and DC-8s that would otherwise be in airline service at the end of 1984, when the noise standard applies to those aircraft.*

2. The Aircraft Replacement Fund would be managed by intercarrier agreement under which each carrier would have entitlements to the Fund in proportion to its total system passenger and cargo revenue.

Effect:

Administration of the Fund by the airlines would minimize federal involvement.

3. The federal air passenger ticket and freight waybill taxes would be reduced from 8% to 6%, and from 5% to 3%, respectively.

The amount of \$3 billion to be collected through the surcharge has been chosen because it is the sum that commercial banks have indicated to the airline industry would be required to induce their participation in financing an early aircraft replacement program. DOT is, however, conducting an analysis to ascertain whether some lesser amount might induce the participation of the financial community. Upon completion of that analysis the recommendation as to the duration of the 2% surcharge will be adjusted so that the collection will yield the amount deemed

Effect:

The lower user taxes flowing into the Airport and Airway Trust Fund would cover all outlays chargeable to the Fund under the ADAP bill. (An amendment would be needed to permit the use of ? uncommitted balances (\$1.4 billion) to finance the full annual authorizations included in the ADAP Act.)

Once the pending ADAP bill is enacted without a tax reduction, unused Trust Fund balances would grow rapidly (to \$1.7 billion by 1979) and become a target for tax reductions or unjustified spending proposals.

From a national interest point of view, the use of these excess revenues to help meet environmental and broad economic objectives is a sound and defensible policy alternative.

4. Any balances remaining in the Fund after program objectives have been achieved would be deposited in the Airport and Airway Trust Fund and dedicated to noise control purposes (including land acquisitions and easements).

5. The cost of retrofitting two and three engine airplanes will be paid from the Airport and Airway Trust Fund.

Effect:

About \$350 million (inflated dollars) will be taken from the Trust Fund for retrofit.

Attachments:

- 1. Effect of Aircraft Replacement Fund on carriers' finances.
- 2. Estimated Aircraft Replacement Fund revenues, 1977-1986.
- 3. (A&B) -- Impact on airport/airway fund of lower tax rates.

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• · · · · · · · · · · · · · · · · · · ·	CARRI	(Dollars in r	AND ENTYTICHEN		
<u>Carrier</u> <u>Pass</u> <u>Trunk</u>	Contribution (2% senger & Waybill Surcha Years, 1977-1986)		of ing	Total titlementl/	ntitlement less Contribution
American Braniff Continental Delta Eastern National Northwest Pan American Trans World United Western Total Trunk Local Service	\$ 424.8 119.8 132.5 384.0 357.1 83.2 162.3 28.7 319.4 598.3 <u>126.2</u> \$ 2736.2	91 11 5 34 - 10 79 90 100 23 443		377 124 112 299 342 75 171 353 379 469 109 2810	\$ (47.8) 4.2 (20.5) (85.0) (15.1) (8.2) 8.7 324.3 59.6 (129.3) (17.2)
Allegneny Frontier North Central Ozařk Piedmont Air West Southern Texas International <u>Total Local Serv</u>	\$ 103.5 41.2 39.6 31.5 35.9 44.0 26.3 <u>15.8</u> ice \$ 337.8		\$.• \$	80 37 34 28 28 36 25 17 287	$\begin{array}{c} $73.8\\ (23.5)\\ (4.2)\\ (5.6)\\ (3.5)\\ (7.9)\\ (6.0)\\ (1.3)\\ 1.2\\ (50.8) \end{array}$

1/ Total entitlement is determined by distributing the funds collected among carriers, on the basis of the proportion that each carrier's system revenues bear to the total of all revenues collected by the carriers.

		Contribut	on (2%		Number	of			14
Carrier	. <u>Pass</u> 10	enger & Wayl	ill Surcha	rge-	Non-Comp 707's &	lying	Total • Entitlemen	t <u>Entitlement le</u>	
Cargo Flying Tiger Seab ard Airlift <u>Total Cargo</u>	•	-`31.1 17.4 <u>4.5</u> \$53.0		•	16 11 <u>5</u> <u>32</u>		8 46 <u>24</u> 78	(23.1) 28.6 <u>19.5</u> 25.0	•
<u>Other</u> Supplemental Carr Intrastate Carrie Hawaiian Aloha <u>Total Other</u>	riers ers	48.2 125.5 14.8 <u>11.5</u> \$200,0	•	•	31 - - - - - - -	4	92 42 11 7 152	43.8 (83.5) (3.8) (4.5) (48.0)	· • ·
<u>TOTAL</u> Other Carriers ²	•	\$3327.0		•	495 <u>17</u>	•	3327.0	\ - 0 -	
<u>TOTAL</u>		на страна 1947 — Страна 1947	· · ·		523	•	•		

Includes commercial operators and flying clubs. are not provided due to lack of revenue data.

. Revenue contribution and entitlements for these carriers

Attachment 2

REVENUE COLLECTIONS - AIRCRAFT REPLACEMENT FUND

11

			•	•		N.		• .			Ten
•	1977	. 1978	1979	1980	1981	1982	1983	1984	1985	1986	Year Total '
FT REPLACEMENT FUND		•	•	•	1			••••			
ket Surcharge	224	244 ·	258	271	284	303	322 ·	341	360	377	2484
ybill Surcharge		26	28	32	36	38	· <u>38</u>	40	40	42	342
Total	246	270	206	303	320	<u>341</u>	360	381	400	419	<u>3327</u>
· · · · · · · · · · · · · · · · · · ·	•	- i 🔨			•	•		· ·	•		

CASE A. EXISTING TAX STRUCTURE, LATEST CONFEREE COMPROMISE ON ADAP & MAINTENANCE

5/27/76

(In \$ Millions)

	•						
~`.	1976	TQ	1977	1978	1979	1980	1981
Beginning Uncommitted Balance	889	1269	1378	1520	1693		
lus Trust Fund Revenues	969	_254	1045	1128	1205	1892 <u>1268</u>	2105
Subtotal	.1858	1523	2424	2648	2898	3160	<u>1338</u> 3443
ess: ADAP Maintenance F&E RE&D Subtotal	412 250 <u>68</u> 1128	103 62 <u>18</u> 1340	525 250 250 . <u>77</u> 1 <u>322</u>	555 275 250 <u>85</u> 1483	590 300 250 <u>90</u> 1668	625 325 250 <u>95</u> 1865	•
lus Estimated Interest *	141	38_	_198			_240	
nding Uncommitted Balance	1269	1378	1520.	1693	1892	2105	
	,			•	•		•
•			•	•	•	•	•
Interest for FY 1976 and the is calculated at 8% of avera	transitio	n quarter	is as shown	in the FY 1	977 Budge	t; interest	thereafter
	ye cash da	:	•		· /	•	
				•			

eginning Cash Balance Plus Revenues Less Expenses Ending Cash Balance Verage Cash Balance Interest lance Carried Forward	2013 239 2252	2393 71 2464	2502 - 56 2446	2644 - 37 2607	2817 <u>- 25</u> 2792	3016 <u>- 27</u> 2989	3229
	$\frac{141}{2393}$.	<u>38</u> 2502	(2474) <u>198</u> 2644	(2625) 210 2817	(2804) 224 3016	(3002) 240 3229	

6% PASSENGER TICKET TAX, 3% WAYBILL TAX, LATEST CONFEREE COMPROMISE ON ADAP & MAINTENANCE CASE. B.

(In \$ Millions)

•		•				•	
~ .	1976	<u>TQ</u>	. 1977	1978	1979	1980	<u>1981</u>
Beginning Uncommitted Balance	889.	.1269	1378	1276	1165	1038	884
lus Trust Fund Revenues	. 969.	254	871	_874	932	981	1035
Subtotal	1858	1523	2]89	2150	2097	2019	<u>1835</u> 1919
ess: ADAP Maintenance F&E RE&D	412 250 <u>68</u>	103 62 18	525 250 250 77	555 275 250 <u>85</u>	590 300 250 90	625 325 250 95	•
Subtotal	1128	1340	1087	985	867	724	
lus Estimated Interest *	141	<u>. 38</u>	189	<u>180</u>	171	160	
nding Uncommitted Balance	1269	1378	1276	1165	1038	884	-
	*			•		•	

Interest for FY 1976 and the transition quarter is as shown in the FY 1977 Budget; interest thereafter is calculated at 8% of average cash balance.

ginning Cash Balance Plus Revenues Less Expenses Ending Cash Balance erage Cash Balance Interest lance Carried Forward	2013 239 2252	2393 	2502 -291 2211	· 2400 <u>~291</u> 2109	<u>-298</u> 1991	2162 -314 1848	2008
	<u>141</u> 2393	<u>38</u> 2502	(2351) 189 2400	(2254) <u>180</u> 2289	(2140) <u>171</u> 2162	(2005) 160 2008	•

5/27/76

ALTERNATIVE OPTIONS FOR

AVIATION NOISE FINANCING

The following options might be considered as alternatives to DOT proposal to facilitate replacement and retrofit of aircraft that do not comply with the FAA noise standards:

Option #1

1. <u>CAB would be encouraged through an expression of legislative</u> intent to permit an environmental surcharge of 2% on domestic passenger tickets and freight waybills for 5 years. Revenues from the surcharge would be placed in an escrow fund to be used primarily for replacement of 4 engine aircraft.

Effect:

About \$1.4 billion would be provided for the replacement fund over 5 years.

2. The replacement fund would be managed by the airlines under an inter-carrier agreement.

Effect:

Administration of the replacement fund by the carriers would keep federal involvement to a minimum.

- 3. The replacement fund would be disbursed as follows:
 - 50% would be distributed in cash to the participating airlines
 in proportion to the surcharges each contributes to the fund;

- - 50% would be used as a loan guarantee fund with the

entitlement of each participating carrier computed on the basis of its total system revenues. Loan guarantees would be authorized up to three times the amount of each airline's entitlement.

About \$1.4 billion in cash would be available to carriers.

Use of a loan guarantee fund enables carriers to obtain financing for new airplanes.

4. Any unused balance in the loan guarantee fund after all loans have been paid off will be placed in the Airport and Airways Trust Fund.

5. The tax on passenger tickets and freight waybills collected for the Airport and Airways Trust Fund would be reduced by 2% for 5 years. Effect:

A reduction in the ticket tax to balance the surcharge prevents the cost of air transportation from increasing.

6. <u>Appropriations would be authorized from the Airport and Airways</u> <u>Trust Fund to pay the cost of retrofitting those non-FAR 36 aircraft</u> <u>which the airlines elect to retain in domestic service, rather than replace</u> <u>or retire them.</u>

Effect:

The cost of retrofitting 2/3 engine airplanes is estimated to be about \$350 million (in inflated dollars). If the airlines choose to retrofit the approximately 75 four-engine aircraft which may be economic to retrofit

then the cost would increase by \$225 million.

Option #2

The CAB would be encouraged to approve a 2% surcharge for
 7 years on carriers' domestic passenger tickets and freight waybills.
 Revenues from the surcharge would go into a replacement fund. '.

Effect:

About \$2 billion in revenues, 30% of the approximately \$6.4 billion needed to replace 4 engine airplanes would flow into the replacement fund.

2. The replacement fund, managed by the airlines under an inter-carrier agreement, would be distributed according to the amount each carrier contributes.

Effect:

Administration of the fund by carriers minimizes federal involvement. Funds could be used for purchase of any type of new aircraft. There would not be any cross subsidy or pooling of funds.

3. International carriers and the portion of a domestic carrier's airplanes used in international service (determined by the proportion its international revenues bear to total revenues) are exempt from the domestic standard and do not participate in the domestic Aircraft Replacement Fund.

Effect:

About one-third of TWA's and almost all of Pan Am's fleet would be exempted. The exempt portion of an American carrier's fleet would come within the international fund (6 below).

4 -

4. Any balance in the replacement fund at the end of the 7 year period would be placed in the Airport and Airways Trust Fund.

5. The tax on passenger tickets and freight waybills collected for the Airport and Airways Trust would be reduced by 2% for 7 years.

Effect:

A reduction in the ticket tax that corresponds to the surcharge will not increase the cost of air transportation.

6. A surcharge on all international tickets and waybills would be collected to facilitate replacement of 4 engine airplanes in international service for both domestic and foreign carriers. A distribution formula would be worked out through ICAO.

Effect:

Separation of domestic and international operations prevents uneven treatment of either domestic or foreign carriers.

Appropriations would be authorized from the uncommitted balance
 (\$1.4 billion) in Airport and Airways Trust Fund to pay for retrofit of
 2/3 engine airplanes.

Option #3

1. Require the carriers to submit a plan within 6 months after a noise rule takes effect stating the number of airplanes they intend to retrofit and the number they intend to replace.

Effect:

The FAA, airframe manufacturers, and airlines will know the estimated demand for retrofit kits and new airplanes and can estimate the costs.

2. <u>An escrow fund would be created and would receive moneys from</u> two sources:

- - the \$1.4 billion surplus in the Airport and Airways Trust

Fund;

- - <u>a 1% surcharge approved by the CAB to be levied on domestic</u> passenger tickets and freight waybills.

Effect:

About \$2 billion would be placed in the fund in 5 years. Of this amount, \$1.4 billion would be available immediately to be used for replacement.

The carriers would decide how they would meet the noise requirements.

3. Disburse the funds as follows:

- - Estimate the retrofit costs and set the amount necessary to meet them aside;

- - Allocate the funds remaining after retrofit equally among the airplanes to be replaced.

Effect:

The total cost of retrofit (\$350 million in current dollars) would be covered.

About \$1.6 billion, approximately 25% of the amount needed to replace 4-engine airplanes (roughly \$6.4 billion), would be available for that purpose.

BACKUP PAPER ON FINANCING AIRCRAFT NOISE REDUCTION

I. INTRODUCTION

- There are four parts to the aircraft noise problem:
 - -- One, an unacceptably high level of noise at major U.S. airports, and the resultant pressure for a responsible Federal Government noise-reduction program.
 - -- Two, the inability of much of the airline industry to obtain conventional financing to undertake a noise reduction program.
 - -- Three, the present unavailability of new-generation aircraft as suitable replacements under the program.
 - Four, declining employment in the U.S. aerospace industry, and threatening encroachment of government subsidized foreign competition on the U.S. share of the world aerospace market.

II. DEFINITION OF THE PROBLEM

- A. The National Airport Noise Problem
 - Aircraft noise has become a serious problem at seven key U.S. airports and a considerable irritation and annoyance at about one hundred more, derogating the quality of life for 6 to 7 million citizens. Pressure from airport operators and consumer groups compel action by the Federal Government in order to avoid:
 - -- Curfews at major airports, which would interfere with air commerce and disrupt our national air system by delaying mail and cargo, and requiring expensive and difficult repositioning and rescheduling of aircraft.
 - -- Billions of dollars in potential law suits and/or land acquisitions.
 - Federal preemption of local restrictions and the resultant Federal liability for claims against local airport operators.

To correct the noise problem, DOT proposes issuance of a regulation requiring operators of the aircraft not meeting FAR 36 standards to comply with these standards within a 6- to 8-year period, depending on aircraft type, by retiring and replacing them except in the case of newer aircraft for which retrofit makes sense. There are 2,148 jet aircraft in the U.S. commercial fleet today. Of these, 77 percent, or 1,654 planes, exceed FAR 36 standards. These consist of approximately 500 1960-vintage four-engine aircraft, 1,100 more recent two- and three-engine aircraft, and 50 early 747's. Relatively few of the noisy aircraft are found in the fleets of the all-cargo and supplemental carriers. The majority are owned by the trunk carriers; four trunks--American, Pan Am, TWA, and United--account for nearly two-thirds.

If all 1,654 noisy aircraft were retrofitted, the cost in today's dollars would range from approximately \$870 million to \$1.6 billion:

- -- \$255 million for the 1,100 two- and three-engine aircraft (at an average cost of over \$200,000 per aircraft).
- From \$600 million to \$1.3 billion for the approximately 500 four-engines (not including the 747's). The cost of these kits--which have not yet been developed--is estimated to range from \$1.2 million to \$4.5 million, depending on certain assumptions, the most important of which is the number of aircraft to be retrofitted. A reasonable estimate, assuming all four-engines were retrofitted, would be from \$1.2 million to \$2.5 million per aircraft. The higher unit cost, as compared to the two- and three-engine retrofit, is a function of the greater difficulty of retrofitting these planes, the larger number of engines, and the smaller numbers of planes involved.

-- The 50 747's would cost approximately \$13 million to retrofit.

- Retrofit is conceded to increase operating costs for most narrowbodied four-engine aircraft, and it is expected the airlines will choose to replace rather than retrofit these aircraft. The kits are expensive and would add nothing to the useful life of the planes. The airlines have indicated it would be economically preferable to replace almost all with a quieter, more efficient aircraft, if one were available, contingent upon obtaining the necessary financing.
- Not all the four-engine aircraft in the fleet today will be in the fleet at the end of 1984. But not all will have been retired either. Between now and then, it is expected that the airlines will purchase on the order of 700 additional aircraft* to meet
- * Projecting the composition of individual carrier fleets and the total U.S. fleet 8 years into the future is a difficult, complicated exercise, requiring considerable amounts of judgment as to carrier decisions, as well as quantitative data. The figures included in this paper are preliminary and may be revised; however, the relationships and the ranges are firmly established and can be used with reasonable confidence.

anticipated traffic growth and to replace worn out, uneconomic aircraft (additional requirements resulting from Federal noise reduction policies not included). Several points central to the program should be noted here:

- -- The airlines are not expected to need a significant number of new aircraft before 1980 or 1981. Existing aircraft, combined with orders currently on the books and supplemented only slightly by additional purchases, should handle projected traffic increases until then. In addition, because of their poor financial condition, some carriers will find it difficult to obtain financing for new equipment. For this and other reasons, the carriers can be expected to postpone replacement orders until they become absolutely necessary.
- On the other hand, to meet the 1984 noise regulation with a new technology aircraft, the airlines would have to place firm orders for such aircraft in the next 12 to 18 months. Thus, there is a gap of from 2 to 3 years between the investment decision the airlines would make in the normal course of events--absent a noise regulation--and the accelerated decision they must make to comply with the noise reduction program.
- -- Many of the noisy four-engine aircraft currently in the fleet will be retired under the airlines' anticipated schedule. But more than half--between 275 and 350--are expected to be still in the fleet by the end of 1984 (as cargo and charter aircraft, if not in passenger scheduled service). Most of these planes are, or soon will be, fully depreciated. However, the expense of retrofitting them, with kits ranging from \$1.2 million to \$4.5 million, would make continued operation in most cases uneconomic.
- The cost of a realistic and economic program to meet the noise reduction requirement by 1984 has been estimated as follows:
 - -- \$400 to \$450 million (in 1976 dollars) for retrofit of approximately 950 two- and three-engine aircraft, 50 747's, and approximately 75 four-engines that may be economical to retrofit.
 - -- From \$4.0 to \$5.5 billion (in 1976 dollars) for accelerated replacement of the other 200 to 275 noisy four-engines expected to be in the fleet after 1984.

If the airlines choose to retrofit none of the narrowbodied four-engine aircraft then the cost of replacement increases to a range of from \$5.5 billion to \$7 billion (in 1976 dollars).

B. <u>The Financial Situation of the Trunk Airline Industry</u>* (Detail in Appendix A).

Although the national interest quite clearly compels a noise reduction program, the financial condition of the trunk airline industry, and in particular of certain companies within the industry, calls into serious doubt the industry's ability to finance such a program through conventional means.

- In the normal course of events, the airline industry will have to raise on the order of \$25 billion to \$30 billion (in inflated dollars) between now and 1985 in order to purchase an estimated 700 new aircraft that will be made necessary by traffic growth and obsolescence of existing aircraft, to repay debt, and for other miscellaneous capital expenditures.
 - As is well known, the air carriers have had almost 10 years of very lean earnings (since 1967 an average pre-tax profit margin of 2.5 percent and ROI of 5.7 percent). There seems little doubt that for the last year or so (principally as a result of the 1974-75 economic recession combined with rapidly escalating costs) the industry's collective ability to finance any major capital acquisitions has been at an extreme low point, both in terms of its own history and as compared to other industries.
 - Fortunately, the resurging economy is bringing the industry out of its doldrums and positive earnings are in sight for the next several years. The size of the existing fleet, with the addition of current orders, is sufficient to make the need for new aircraft investments relatively low through the period from 1976 to 1979. By the time substantial new aircraft capacity is needed, it seems likely that the industry will have redeveloped adequate financial strength to fund it. (This assumes no extraordinary financing needs and the help of regulatory reform.)
- However, the realistic noise reduction program would add \$5.6 to \$7.7 billion (in inflated dollars) to the industry's capital requirement, which clearly constitutes an extraordinary financing
- * The focus of attention in this paper is on the financial condition of the trunk air carrier industry because the majority of the noisy aircraft, and virtually all of the noisy four-engine aircraft which should be replaced, are concentrated therein. Any financing options considered by either the industry or the government must of course take into account the fact that there are noisy aircraft owned by companies outside the trunk airline industry.

need.* Capital needs would increase by 19 to 31 percent, from which the airlines would derive no direct traffic or revenue increases, and only slight capacity increases. An incremental requirement of this magnitude is beyond the near-term ability of the industry to finance in any normal fashion, since both the debt and equity markets have been foreclosed effectively for several years.**

Yet, to obtain delivery of new generation aircraft in time to comply with the regulation by 1984, the airline industry would have to accelerate its replacement schedule and make firm purchase commitments within the next 12 to 18 months. The industry very simply is not in adequate financial condition to make such commitments. It will begin to do so eventually, but too late to obtain the economically and environmentally efficient aircraft desired for the noise reduction program, to generate the jobs needed now in the aerospace industry, and to counter the competitive threat of new-technology foreign aircraft.***

Compounding the problem greatly is the financial condition of certain individual carriers within the industry. The use of aggregate data to analyze the ability of an industry to meet a specific financial need is often misleading. Individual companies, possessing a specialized knowledge of their own situation, can find ways around financial barriers that seem insurmountable to the industry analyst. In this case, however, the reverse is true. Several of the financially weakest carriers in the industry are also the owners of large numbers of

* Assumes the combination of replacement and retrofit discussed earlier, with a 5 percent annual inflation rate and using 1982 prices. Excludes those four-engine aircraft possessed by other than the trunk airlines.

**In hearings on the Aviation Act, the heads of several banks and insurance companies, the industry's traditional institutional lenders, testified that they did not anticipate making further loans to any carriers, and advised that capital formation was, and would continue to be, a critical problem for the industry.

***An additional consideration is the potential impact of some approaches that have been proposed for dealing with the industry's re-equipment problem. Frank Borman, the CEO of Eastern Airlines, has recommended, for example, that the industry conduct a design competition, select a single new aircraft, and then agree to purchase that aircraft only. The consequences of such an approach for the competitive structure of the aerospace industry are serious. noisy aircraft, and will face some of the largest requirements for funds with which to replace those aircraft.

TWA, for example, has had an extremely difficult time remaining solvent over the past year and a half. In fact, having asked for and been refused Federal subsidy, it has avoided bankruptcy only through extraordinary efforts on the part of management and acquiescence on the part of its lenders. TWA's problems will not vanish overnight. Even though it will approach breakeven in 1976. and should see a return to profitability in 1977, the company is a few years away from being an effective competitor for funds inthe capital marketplace.* Yet by 1985, TWA probably will require from \$2 to \$3 billion in capital (in inflated dollars) merely to stay competitive and remain in business. The added cost of achieving noise reduction goals (that is, of replacing before 1985 those aircraft that would otherwise remain in its fleet) could increase TWA's capital needs by as much as \$1.5 to 2.0 billion (in inflated dollars) between now and then. Present projections say it is highly unlikely that TWA could finance independently such a tremendously increased capital requirement.

Two of the other carriers strongly impacted by the noise regulation, Pan Am and American, also have had financial difficulties recently and would face similar problems in financing the purchase of replacement aircraft. Pan Am's capital requirements in the 1976 to 1984 period could increase on the order of \$1 billion (from around \$2 billion to as much as \$3 billion), as would American's (from around \$3 billion to around \$4 billion).

C. The Need for a New-Generation Aircraft (Detail in Appendix B).

No major new aircraft has been developed in the United States for almost 10 years. In that time important design and technological advances have been made -- many specifically to meet the new economic, operating, and environmental constraints dictated by rising labor costs, energy shortages, and changing market demands.

* TWA's recent announcement that it plans to sell 2 million shares of common stock should not be construed as a sign of ability to compete in the capital marketplace. The company quite clearly has been forced into the sale by financial exigencies and as a result will suffer a serious dilution to its equity base. The shares will sell at a current market price of around \$13 as compared to a book value of \$21. Something like 15 percent of the company will thus be sold for approximately \$25 million, or the price of one 747.

- Although the technology exists, the present inability of the U.S. airline industry to finance a new generation of aircraft prevents the manufacturers from moving beyond the design stage. It is clearly in the national interest, however, and in the interest of the air traveler and the airline industry, to take advantage of of such gains:
 - -- Greater noise reduction: A new technology aircraft would sound about three times quieter than a nonretrofitted 707, and twice as quiet as a retrofitted 707.
 - -- Greater fuel efficiency: In the period from 1981 (when the first new-technology aircraft would be introduced under the accelerated-replacement program) until 1986 (when all newtechnology replacement aircraft would be delivered) the total savings in jet fuel is estimated to amount to about 2.5 billion gallons.
 - -- <u>Productivity</u>: Measured against existing aircraft, a newtechnology aircraft would offer greater payload for its size and weight, would be more reliable and more easily maintained, and would cost less to operate and less to acquire per unit of productivity.
- D. The Declining Prospects of the U.S. Aerospace Industry (Detail in Appendix B).
 - The United States achieved its prominence in the world aerospace market because of its technical superiority; most important civil aviation advances historically have been-made in U.S. products. But lack of orders for a new plane has virtually stalled technical development since the widebody jets were introduced. Newer foreign aircraft such as the A-300-B show the potential for meeting certain market demands which current U.S. products cannot (i.e. efficient operation over short-medium range routes). This, combined with declines in U.S. Government outlays for aircraft and engines, has already had serious consequences for U.S. airframe and engine manufacturers, a major source of employment and export sales. Since 1968:
 - -- Real industry sales have declined 37 percent.
 - -- Employment has declined 37 percent.
 - -- Aerospace exports as a percent of GNP have declined 42 percent.
 - Each \$30 million lost in sales translates into a loss of 1,000 full time jobs and \$15.5 million in payroll.

While the U.S. industry shrinks in real terms, foreign aerospace manufacturers -- spurred by Government subsidy -- are growing larger, more capable technologically, and more agressive. It is conceded that the U.S. cannot continue to hold its present 80 percent market share (of world civil aircraft in operation). The question of how large a share European and other foreign manufacturers take will depend in part on how long U.S. production of a new aircraft is delayed. A 2- to 3-year acceleration of the present timetable could be very important in that it would allow U.S. manufacturers to produce a new generation of planes when U.S. airlines will need them and when new foreign products will be on the market.

APPENDIX A

FINANCIAL CONDITION OF THE TRUNK AIRLINE INDUSTRY

The ability of the airline industry to finance equipment replacement depends, as it would in any other industry, on its ability to generate funds internally (through depreciation and earnings) and/or externally (from the equity market and/or debt market). Table 1, following, projects sources and uses for the 1977-1984 period, using the specified economic and traffic assumptions.

1. Internal Sources

As the table shows, depreciation will yield a total of \$10.0 billion through 1984. Aircraft sales will yield only about \$400 million, leaving the airlines \$18.7 billion short of their total needs of \$29.1 billion. This amount must be met through earnings, new loans, leases, or new equity financing. The cost of a realistic noise reduction program would increase the total need for funds by the end of 1984 by around 23 percent, to \$36 billion and would increase the deficit by around 36 percent, to \$25 billion.*

Industry earnings are projected to range from \$.3 to \$.5 billion in 1976-1977 to \$.6 to \$.7 billion toward the end of the period,** and could total about \$5 billion, which would leave a financing need of \$13.7 billion, or about \$21 billion when noise reduction costs are taken into account. This "gap" must be met through external sources -- the equity market and/or the debt market.

2. External Sources

 Because of the airlines' poor earnings record for the past 10 years (see Table 2) both the equity and debt markets have been effectively foreclosed to them for some time. Airline stocks have not been a recommended buy for much of this period, and are not being recommended as an investment for the future, except for possible short-term

* Assumes the cost of the replacement/retrofit program is in the middle of the \$5.6 to \$7.7 billion range.

** To earn \$.5 billion, the industry would have to achieve about 9 percent to 10 percent ROI at current investment levels. Since 1967, ROI for the domestic trunks plus Pan American has ranged from a high of 8.5 percent to a low of 2.1 percent, averaging only 5.7 percent. gains in the next six months.* At present, airline stocks stand at approximately 60 percent of their 1967 value (versus 120 percent for the Dow-Jones Average).

- The major source of airline debt financing through the 1960's-traditionally the large insurance companies--has been closed for six years. Under New York law, New York insurance companies are forbidden to make further loans. In a statement submitted to the House Public Works and Transportation Committee George Jenkins, Chairman of Metropolitan Life Insurance, said: ". . . we feel confident that Metropolitan will lose no money on its current airline investments as they run off, but under present conditions, no new money will be loaned." Before lenders will commit new debt capital, Jenkins added, "(they) will require a sound equity base and good profits . . ."
- The DOT is confident that the proposed Aviation Act of 1976 will return the Aviation industry to long-term profitability and eliminate the capital expenditure problem of the future. However, no remedy is seen for the problem of funding the capital decisions that must be made now in order to achieve a quieter and more fuel efficient fleet by the end of 1984. Airline earnings are the key to both internal and external funds generation, but as the foregoing data makes clear even a high level of earnings will not insure that the industry will be able to finance the \$5.6 to \$7.7 billion needed for the noise reduction program through normal means.

3. Problem Carriers

- The financing problems anticipated for the industry will be concentrated heavily in major carriers, which have the most fourengine aircraft in their fleet and consequently the greatest retrofit burden, particularly American, TWA, and Pan Am. As shown in Table 3, these three carriers have together accounted for a large portion of the industry's losses over the last five years and, with the possible exception of American, have relatively undesirable debt burdens. Further, as shown in Table 4, American and TWA, (presuming that they could obtain the debt financing they would need,) under the burden of the noise reduction program would have debt/equity ratios of over 4 and 5.7 respectively, while Pan Am's would be near 2. These carriers are likely to have great difficulty in raising the capital that would be required by the noise regulation.
- * A potential exception to this statement is the pending TWA issue of 2 million shares of stock. As explained in the text, the need for such an issue is created by TWA's poor financial situation and at the expected price of the sale will seriously dilute the company's equity base.

PROJECTED USES AND SOURCES OF FUNDS U.S. TRUNK AIR CARRIERS 1977, 1980 AND 1984

(Current Dollars in Billions)

Uses of Funds	1977	1980	1984	., <u>1977-1984</u>
Property & Equipment Debt Repayment Dividends & Other	\$1.2B .5 .3	\$1.6B .5 .6	\$5.7B .4 	\$24.4B 3.6 1.1
Total Uses	\$2.0B	\$2.7B	\$6.2B	\$29.1B
Sources of Funds		. :	•	•
Depreciation Sales of Aircraft	1.1	1.1 0	· 1.6 · <u>.1</u>	10.0
Total Sources	1.2	· 1.1	1.7	10.4
Uses Less Internal Source	s \$. 8B	\$1.6B	\$4.5B	\$18.7B

NOTE: The following growth rates are assumed in the projections:

•	
Real GNP	3.7%
Inflation	5.1%
RPM's	
Domestic	6.5%
. International	5.3%
System	6.2%

SELECTED FINANCIAL DATA FOR TRUNK CARRIER INDUSTRY (System Operations, Including Pan Am) 1967-1975

(Dollars in millions)

• .		Operating Revenue	Pre-Tax Profit	Pre-Tax Profit Margin	Return on <u>Investment</u> 1/
1967	•	\$6,11.7	\$638	10.4%	8.5%
1968		6,902	411	5.6	6.1
1969	<u> </u>	7,765		3.2	4.6
1970	·	8,131	(154)	(1.9)	1.8
1971	· · · ·	8,811	. 55	0.6	3.7
1972	• •	9,783	266	2.8	6.0
1973ع	•	10,905	. 287	2.6	5.6
1974	· .	12,865	447	3.5	5.8
1975		13,374	(121)	· . <u>(-)</u>	2.8
	9 Yr. Tota	1 \$ 84,653	\$2;075	2.5%	NA

1/ Return element includes net income and interest on long term debt.

Source: CAB Form 41/TPI-32 Reports

Carriers with Large Numbers of 4-Engine Aircraft	Operating Revenues (\$ Millions)	Net Income (Loss) (\$ Millions)	Profit (Loss) Margin (Percent)	Debt as a Proportion of Total Capitalizati (Percent)
Trans World	\$ 7,679.9	\$ (24.5)	(0.3)%	73.0%
American	7,583.5	(39.5)	; (0.5)	45.4
United	9,681.2	155.6	- 1.6	48.2
Pan American	7,169.1	(233.9)	(3.3)	75.9
<u>Others</u>			• •	•
Eastern	6,629.2	(65.1)	(1.0)	68.2
Delta	5,502.5	258.8	4.9	44.8
Braniff	2,281.3	93.1	4.1	57.7
Western	2,113.4	74.5	3.5	43.8
Northwest	2,984.8	. 203.5	6.8	28.3
Continental	2,081.4	21.3	1.0	• 71.7
National	1,821.1	82.3	4.5	46.7 .

1/ Trunk Air Carriers - System Operations, December 31, 1975

•

• PROJECTIONS OF DEBT EQUITY RATIOS, SELECTED TRUNK CARRIERS, 1976, 1989, AND 1984 (Dollars in Billions)

AIRLINE	ANTICIPATED CAPITAL EXPENSITURES (1977-1984)	LONG TERM DEBT/ EQUITY1/ 1976 1980 1984	ADDITIONAL REPLACEMENT CAPITAL REQUIRED BY 19842/	DEBT/EQUITY RATIO INCLUDING REPLACEMENT FINANCING (1984)	
American	\$3-3.5	.78 .47 2.3	\$1.2	4.4	
Pan Am	1.8	3.0 1.7 .74	1.0	2.17.	
TWA	\$23	3.0 2.2 2.8	1.5-2.0	5.77	
United	4.2	1.1 .56 .34	2.0	1.52	
Industry	\$27.1	1.3 .74 .98	5.6-7.7	1.78	

SOURCE: Alliance One Institutional Services and TPI-32

1/ Assumes borrowings for capital needs without respect to carriers ability to obtain financing.

2/ Based on number of four-engine aircraft remaining in fleet after 1984, with replacements (including spares) valued at a 1982 cost of \$27 million each.

APPENDIX B

ADVANTAGES OF ACCELERATED DEVELOPMENT OF NEW TECHNOLOGY AIRCRAFT

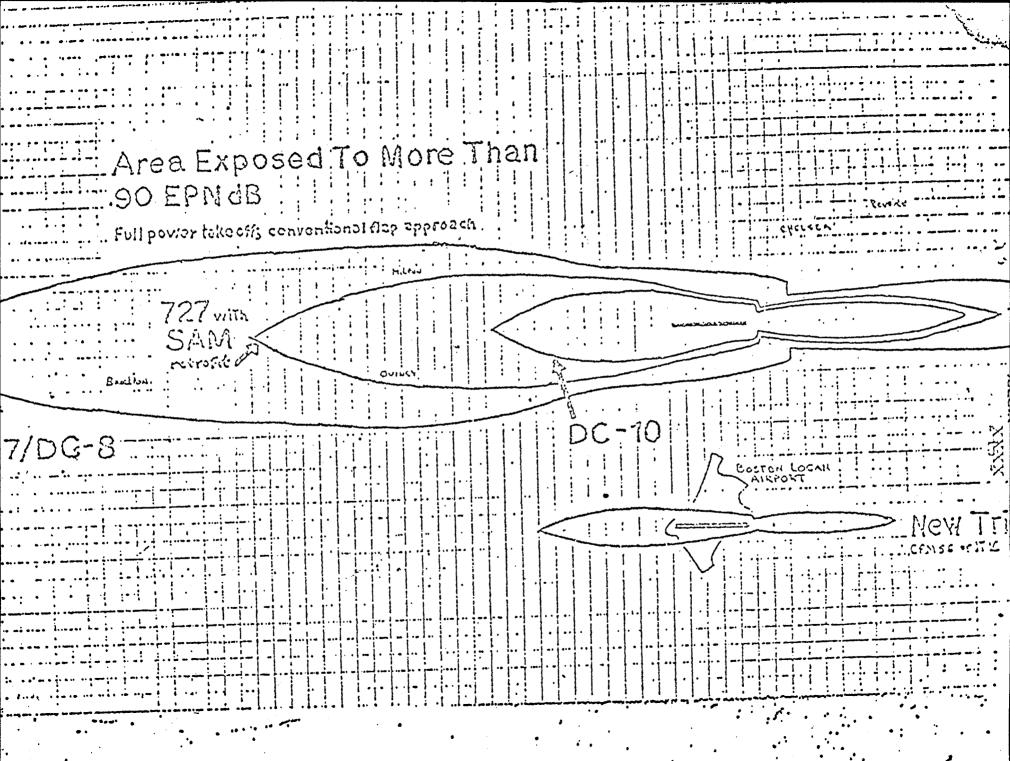
1. Greater Noise Reduction

- A new-technology replacement aircraft would be far quieter than the quietest existing aircraft. The gain achievable is illustrated in Figure 1, which outlines the area exposed, on a single event, to a noise level equal to or greater than 90 EPNdB--roughly equivalent to the sound of a busy downtown street.
 - -- The 90 EPNdB contour of the 707/DC-8 aircraft (technology of the 1950's) extends more than 20 miles beyond the brake release point of takeoff and roughly nine miles prior to the touchdown point on landing.
 - --- The DC-10, employing the late 1960's technology CF-6 engine, is able to confine the 90 EPNdB contour to a much smaller area, equivalent to the over-water area south of Logan International. It is significantly quieter than a SAM retrofitted 727, which meets FAR 36 standards.
 - -- Further important noise reduction advances are reflected in the noise contour of a new Tri-jet which has double layer acoustical linings, and the 1970's technology CFM-56 or JTIOD engines with new design fan and turbine stages. Those engines are expected to be available for use in new aircraft.

2. Productivity, Operating and Safety Gains

- Technological advances possible today will result in a new aircraft with greater payload for its size and weight--an aircraft that is more reliable, more easily maintained, costs less to operate, and costs less to acquire per unit of productivity. These benefits accrue to the public, the air traveler, and the airlines.
- Greater efficiencies are achieved through such technological advances as:
 - -- Supercritical aerodynamics concepts in wing airfoil and body design, which can yield a lighter and more efficient aircraft.
 - -- Lighter, more aerodynamic propulsion system and more efficient engines and nacelles.

-- Digital electronics for avionics systems and in-flight control to avoid engine abuse, improve navigation and approach precision, provide increased reliability, maintainability, safety and fuel efficiencies.



- New structural concepts, new materials, and computer-aided designs which will result in a lighter aircraft made up of fewer, less complex parts.
- The new aircraft will be safer for the air traveler, through improvements in inflight control, and new interior materials of much improved flammability/smoke/toxicity characteristics.
- The new aircraft will comply with the more rigorous engine pollutant standards set for 1979.
- The new aircraft, by virtue of improvements in systems and avionics, will be certified with a two-man flight deck crew--an important contribution to control of airline costs and hence ticket prices.
- In terms of seats, range and operational characteristics, the new aircraft will be more closely attuned to marketing requirements of the late 1970's and mid 1980's. On many routes today the aircraft used are smaller than optimal, making additional flights necessary; on other routes aircraft of longer range than necessary are used, which incurs both weight and efficiency penalties. A market-matched aircraft would convert into increased airline efficiencies.
- The new aircraft will use computer-aided flight profile management, which increases aircraft, airport and airways system productivity.
- The new aircraft will accept the standardized interline cargo container (LD-3). This would allow much improved efficiency in the high growth air cargo industry, by avoiding much of the labor and handling costs, while interfacing efficiently.with all-cargo and interline air cargo services.

3. Energy Savings

- Replacement of 707/DC-8 aircraft with new, high-technology aircraft would result in reduced energy consumption per seat mile flown. <u>1</u>/ The estimated magnitudes of the savings from various noise reduction programs are shown below:
 - -- A program resulting in the retrofit of about 100 of the 707/DC-8 aircraft and replacement of the rest with new, high-technology aircraft would provide an energy saving of about 2.5 billion gallons of jet fuel--an energy cost saving of about \$900 million over the period of the program (1981-1986) at today's price.

If This is based on comparison of the fleet mix that was estimated to result from implementation of the proposed programs with the fleet mix estimated to result in the event that no program were undertaken. The new, hightechnology aircraft is estimated to be 30% more fuel efficient than a 707/DC-8 on a seat mile per gallon basis.

- A program resulting in the replacement of all 707/DC-8 aircraft with new, high-technology aircraft would provide an energy saving of about 2.8 billion gallons--a cost saving of over \$1 billion over the program period.
- -- A program resulting in the retrofit of all 707/DC-8 aircraft would impose an additional energy requirement of about 220 million gallons over the program period.
- -- It should also be noted that retrofit of the 727/737/DC-9 aircraft would not cause a measurable change in the energy requirement of the commercial aircraft fleet.
- -- The annual energy saving of the program would in 1986 amount to about 8% of the total jet fuel consumption of the commercial aircraft fleet.

4. Positive Impact on the U.S. Aerospace Industry

- The 2- to 3-year gap between expected development and accelerated development of a new-generation aircraft is significant for the national interest in general, but could be crucial for the U.S. aerospace industry. Lacking a market for a new plane -- and thus the opportunity to put their drawi.g-board technology to work -- the U.S. manufacturers already have lost some of the technological advantage they have always enjoyed over foreign competition.
- A potentially more critical loss is U.S. share of the world aerospace market. If delivery of a new aircraft is delayed to 1985, as appears likely absent the spur of a realistic noise reduction program, foreign competition -- with newer products to offer -may secure their, hold on a major share of the world market, and the U.S. industry may decline to a level from which it cannot easily recover.*
- The economic impact on the aerospace industry and on the U.S. economy in general would be enormous. With sales of \$28 billion, and employment of around 950 thousand, the industry has been a major factor in the U.S. economy for nearly the last quarter century. Since 1968, however -- as a result of the problems of its client industry, the U.S. airlines, and a reduction in military purchases -- aerospace has experienced a very sharp decline:

-- Direct employment has declined 37 percent.

-- Industry payroll as a percent of all manufacturing payroll has declined 30 percent.

* The domestic market is also at issue. In the absence of a new U.S. 180-to-200 passenger aircraft, U.S. airlines are looking at such forcign aircraft as the French-made A-300-B, which already developed is substantially cheaper -- though less efficient -- than a new generation U.S. aircraft would be.

 As a percent of GHP, aerospace industry sales have declined 42 percent.

-- Real aerospace industry sales have declined 37 percent.

As the real domestic and military markets have declined, U.S. manufacturers have grown heavily dependent on foreign markets for sales of civil aircraft. Since 1968 civil aircraft exports as a percentage of total civil aircraft sales have almost doubled. U.S. airframe and engine manufacturers have turned more and more to consortiums with European firms, both to share developmental costs and to ensure continued access to European markets. However, the consequent sharing of production will further erode U.S. aerospace employment.*

Anxious to reduce U.S. dominance of the lucrative aerospace market, foreign governments have become increasingly protective of their own aerospace industries and markets, and increasingly aggressive about penetrating other markets, forming alliances where necessary to do so (the French and German combined forces to produce the successful A-300-B). Thus, while the U.S. aerospace industry has been declining in real terms, European and other foreign governments have been subsidizing expansion of their own aerospace industries, and threaten to encroach on both the U.S. aelos to foreign competition would result in a loss of 47,000 jobs and \$729 million in payroll.

Assuming that past relationships hold true, the proposed program would accelerate by 2 to 3 years the rehiring of about 25,000 aerospace workers at a payroll of about \$400 million a year.

* An important consideration here is the effect erosion would have on the structure of the U.S. aerospace industry. The competition between the three major manufacturers has helped to establish and maintain U.S. technological superiority. If a sizable share of the world market is lost to foreign competition, one and possibly two manufacturers could suffer seriously.

4



EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

August 12, 1976

ACTION

MEMORANDUM FOR:

THE PRESIDENT

FROM:

DONALD G. OGILVIE

SUBJECT:

Proposed Aviation Noise Policy Statement

Secretary Coleman wishes to issue an aviation noise policy statement by September 1, when he is scheduled to testify before the House Aviation Subcommittee on the Administration's noise policy. He promises to announce a major new program to curb aircraft noise and stimulate new plane production. The following discussion presents options concerning what the policy statement should say. Financing choices associated with one of the options are covered in TAB A.

Background

- -- About six million people are significantly affected by airport noise, 600 thousand seriously so.
- -- Environmental groups and airport neighbors have long pushed for federal aircraft noise reduction action. Congressional attention to the problem is increasing, although no legislative action will be taken this year.
- -- The main federal action to date has been issuance of noise standards for <u>new</u> aircraft in 1969. However, given the longevity of jet aircraft, over 75% of the current air carrier fleet does not meet the standards. The oldest 25% of the jet fleet (B-707s, DC-8s) are also the noisiest. Later model aircraft (B-727, DC-9), which comprise 50% of the fleet, are less noisy but do not meet the 1969 standards.
- There are many ways to reduce aviation noise which are practiced to different degrees at present. Chief among them are: 1) imposition of a jet ban or night curfew (e.g., such as at Washington National);
 2) operational techniques such as runway use adjustments and scheduling to avoid the use of the noisiest types of planes at

close-in airports; 3) land purchase, soundproofing buildings and local zoning measures; 4) retrofit of existing aircraft engines with sound absorbing material or replacement of the engines with quieter ones; and 5) retirement of the older, non-standard-meeting aircraft and replacement with new, quieter airplanes.

Options

There are three major courses of action regarding what basic policy statement should be issued. The options differ in the emphasis they place on the noise reduction methods stated above. The options are:

- Issue the statement and include in it a 4-10 year, \$3.5 billion program funded mainly by an environmental surcharge. This would help replace the noisiest types of aircraft with new technology and retrofit some of the later model planes which do not meet the 1969 standards.
- 2) Defer making a policy statement until after September 1, to permit a paper to be presented to you which compares the costs and effectiveness of various noise abatement options.
- 3) Issue a policy statement which limits the federal regulatory role to assistance on operational techniques and future aircraft noise reduction.

Discussion of Options

<u>Option #1</u>--This option would require most commercial aircraft operating in the U.S. to meet the 1969 noise standards over 4-10 years. It is intended that the oldest, noisiest jets (B-707s, DC-8s) would be replaced with a new, higher technology aircraft while the later model, non-standard planes (e.g., B-727s, DC-9s) would be retrofitted with sound absorbing material. A fuller discussion of this option can be found in TAB B, prepared by DOT.

Key arguments in favor of this option are:

- -- It would lower aircraft noise levels over 4-10 years and take action on the long standing noise problem.
- -- It could ease the pressure on local airport authorities to establish curfews and other operating restrictions which, if widespread, would be disruptive to air travel.
- -- It could create sizable orders for new aircraft and stimulate airframe manufacturers into launching new, advanced aircraft types with improved fuel efficiency as well as quieter engines. Employment in the aerospace industry would also rise substantially and the competitive advantage of U.S. manufacturers would be enhanced.

-- Local authorities could undertake land purchases, zoning regulations and other noise abatement steps with a definitive, long-term federal noise control policy with which to plan.

<u>Option #2</u>--This option would delay issuing a policy statement until after September 1, to permit a decision paper to be prepared which presented you with the full range of noise reduction options available. The paper would discuss the relative costs and benefits of options such as: 1) retrofit of all non-standard aircraft so as to achieve compliance; 2) retrofit of the noisiest set of aircraft only; 3) use of operating techniques and limited curfews at the most serious noise problem airports; and 4) establishment of a noise pollution tax which escalates with the degree of noise an aircraft emits.

Factors in favor of this option are:

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- -- Option #1 has no quantification of the benefits expected to be achieved and no comparison of the replacement/retrofit option with other measures which could be taken.
- -- Some of the other approaches to noise reductions may be more cost effective than Option #1. For example, if all non-standard aircraft were retrofitted it would cost only 1/4 to 1/3 of Option #1 and yet also provide significant noise relief. Further, Option #1 would devote 90% of the noise reduction funds to planes which account for only 10% of the operations at noise-problem airports.
- -- Options such as initiation of a noise pollution tax on non-standard aircraft and imposition of partial curfews appear to offer substantial noise reductions and have the advantage of being able to be tailored to local needs and wishes. A community could trade off, for example, a diminution of night service with a quieter environment.
- -- The replacement/retrofit proposal may have substantive flaws which should be further explored. For instance, the airline interest group which conceived of the replacement/retrofit idea contends that retrofitting the non-standard but less noisy aircraft (e.g., B-727s, DC-9s) would have no appreciable noise benefit, but would cost \$200-300 million. It is also not certain that Option #1 will result in a new generation of aircraft, given that the airlines could choose to purchase existing aircraft types, or to re-engine or retrofit a large number of the planes that DOT presumes would be replaced.

<u>Option #3</u>--This option would limit federal actions to promulgations of regulations for future aircraft types (to make them quieter than the 1969 standard levels) and establishment of the quietest operating procedures consistent with a high safety standard.

Factors in favor of this option are:

- -- It would keep federal involvement at a minimum level, allowing each community to determine the degree to which it wishes to impose operating restrictions (e.g., curfews) and other noise abatement measures. This seems appropriate because: 1) over half of the six million people appreciably affected by aircraft noise are located around five airports; 2) a community could trade off the degree and cost of service with the amount of noise it wished to accept. There is evidence that many areas prefer to tolerate noise rather than reduce air activity because of service and employment losses that operating restrictions can bring.
- -- It is not clear that action to control noise at the source greatly changes people's perceptions of being annoyed. There does not appear to be a clear correlation, for example, between the introduction of the new, quieter aircraft and the level of complaints made at a given airport. This may be due to the gradual nature of changes in the noise emissions made.
- -- The noise problem is not growing, with 1975 being probably better than 1974 in terms of total noise generated. Since it is estimated that 1/3 to 1/2 of the noisiest aircraft will be retired over the next 10 years, the noise from the increase in total operations will be offset by a reduction in the number of most offensive planes.
- -- The proposal appears to be inconsistent with Secretary Coleman's decision to let the Concorde, which is twice as noisy on takeoff as any other commercial jet, into the U.S. However, DOT contends that there is no inconsistency since the Concorde is a very limited demonstration which has a more symbolic than real noise impact.

Recommendations

Agency comments were only received on Option #1. As mentioned earlier, the statement did not provide detailed discussions of the various options other than replacement/retrofit, so no comments on these are available. The agency comments which were received indicate:

- -- In favor of Option #1 (replacement/retrofit)--DOT, NASA, State, and HEW.
- -- In favor of Option #2 (further analysis)--CEQ and Justice.
- -- In favor of Option #3 (limited federal involvement)--CEA, COWPS, and OMB.

While no official position was expressed by EPA, it is known that they favor strict noise standards and heavy federal involvement in airport noise actions.

Views of the White House staff are as follows:

- . Mr. Seidman supports the Secretary's proposal (Option #1) but believes that any announcement should await specific implementation strategy. Mr. Gorog also supports the Secretary's proposal, but believes that options other than the three presented here should be considered. He has prepared an independent decision memorandum for your consideration. Mr. Scowcroft is concerned that the Secretary's proposal is silent on the international implications.
- . Messrs. Schmults, Hartmann, Marsh, and Gergen recommend that the issuance of DOT's proposal be deferred (Option #2) because other options need to be developed and presented for your consideration. Mrs. Hope also agrees that more options should be considered but believes that public announcement of a White House request for more analysis should be made because the Secretary's proposal has appeared in the press.
- . Mr. Friedersdorf supports the issuance of an aviation noise policy statement that involves a limited federal role (Option #3).

Decision

.

Option #1, issue the replacement/retrofit noise policy statement _____. (See TAB A on financing if this is chosen).

Option #2, defer decision to develop and present other options _____.

Option #3, approve a statement that involves a limited federal role .

Attachment

CIEP's additional

Menco conienq from blene Peper Piffer X7024 stabf to gron plane Tues

Jim -

Am trying to find out from Gorog's office what his means --- Strange way to do it.

Also I do not think General Scowcroft is recommending Option 1.



EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

August 12, 1976

MEMORANDUM FOR:

JIM CONNOR

FROM:

DON OGILVIE

SUBJECT:

Proposed Aviation Noise Policy Statement

Attached is a condensed version of the aviation noise policy memo that was circulated among the White House staff last month. For your convenience, I have also enclosed the earlier draft of that memo (dated July 19) together with copies of the comments we received from the White House staff.

Attachment

THE WHITE HOUSE

WASHINGTON

August 13, 1976

MEMORANDUM FOR THE PRESIDENT

FROM: William F. Gorog

SUBJECT: DOT Proposed Policy Statement on Aircraft Noise and Replacement

Secretary Coleman proposes to announce an aviation noise policy and a private sector aircraft replacement program. Because of the breadth of the issues and because legislation will be required, he seeks your approval prior to making his statement public.

Secretary Coleman feels strongly that a decision should be made as soon as possible. He has been called to testify September 1 before the House Aviation Subcommittee on the Administration's aviation noise policy.

Two decisions are required:

- whether to issue a policy statement establishing noise standards, as proposed by the Department of Transportation (DOT), or a more limited statement
- . if noise standards are to be set, what financial alternative should be a part of DOT's statement.

At Tab A is discussion of the noise problem, the air carriers' need for replacement aircraft, and the desirability of stimulating a new generation U.S. aircraft.

Reasons for a Policy Statement

Aircraft noise is a serious problem for 600,000 Americans, at 26 major airports; it is a significant problem for 6 million, at about 100 airports. DOT's proposed statement will clarify the Federal responsibility for reducing aircraft noise at its source through the promulgation of noise standards for new and existing aircraft. It delineates the major responsibilities of carriers, airport operators, and State and local Governments. By leaving responsibility for noise abatement requirements other than source noise regulation with State and local authorities, the proposal leaves liability with them. Such clarification of Federal action and responsibilities will permit airport operators and air carriers to make future plans with greater certainty.

Further, it will promote public understanding of the economic costs associated with achievement of the socially desirable goal of aircraft noise abatement. To some extent it may relieve pressure on local authorities to impose unrealistic, disruptive measures.

Secretary Coleman feels (see Tab B) that the program would also:

- Assure air carriers a means to replace certain aging aircraft: the airline industry, which has had a very low return on investment for a decade, lacks adequate financial community support to purchase needed new aircraft.
- . Stimulate the development of a new generation of aircraft: there are now no U.S. manufactured long range aircraft suitable to replace those that will reach the end of their useful lives in the early 1980's.
- Stimulate private sector jobs in the aerospace
 and related industries: each new aircraft program
 would add 10,000 new jobs within two years, 25,000
 new jobs within six years.
- Conserve energy: new technology aircraft would be 25-40% more fuel efficient than existing B-707s/DC-8s.
- Reduce noise significantly below present standards: new aircraft would be 60% guieter than B-707s/DC-8s, and being 40% larger, would serve more people with fewer flights, thereby reducing landing/take-off noise events and airport congestion.
- . Maintain the U.S. pre-eminent position in the international aviation market in the face of stiff new government-subsidized competition from France and Germany: sales of U.S. aircraft abroad are our second largest dollar export.

 Encourage State and local governments to require that land use around airports be compatible with airport noise.

DOT recommends that domestic air carriers and the domestic portion of U.S. international air carriers' fleets be required to meet Federal Aviation Regulations, Part 36, (FAR 36) noise levels or to be retired according to the following schedule:

- . B-747's within six years
- 4-engine narrow-body jets as soon as possible, but within six to eight years
- 2- and 3-engine narrow-body jets 1/3 within three years, 2/3 within six years, with 1/3 permitted to continue in use after six years at airports other than the major ones with substantial noise problems.

Reasons for a Limited Policy Statement

An alternative to the comprehensive statement proposed by Secretary Coleman would be to proceed with the issuance of a noise policy statement, but limit Federal actions to promulgation of more strict noise standards for future aircraft types and establishment of the quietest operating procedures that are safe.

This alternative would allow each community to determine the degree to which it wishes to abatement measures. This seems appropriate to some agencies because: 1) over half of the six million people appreciably affected by aircraft noise are located around five airports, 2) a community could trade off the degree and cost of service with the amount of noise it wished to accept. There is evidence that many areas prefer to tolerate noise rather than reduce air activity because of service and employment losses that operating restrictions can bring.

It is not clear that action to control noise at the source greatly changes people's perceptions of the annoyance that jet planes cause.

Financing Alternatives

The imposition of noise standards on existing aircraft will place a financial burden on some air carriers that they cannot meet. Credit markets are virtually closed to the industry, because the return on investment since 1967 has averaged 5.7%. Even with some loosening of CAB control over air fares as you proposed last October in the aviation regulatory reform bill, it is unlikely that the industry can assume the full burden of meeting the FAR 36 noise standards within the proposed time frame.

At the same time it is desirable to begin a new generation of U.S. aircraft. The aerospace industry, given the financially weak position of U.S. air carriers, does not have the economic incentive to go forward with these programs at this time. Each new U.S. aircraft has an R&D cost on the order of \$1 billion. Thus the noise policy statement, potentially a significant stimulus toward the needed new generation of aircraft, must consider alternative means to generate the capital required to retrofit and/or replace aircraft.

Option 1. - DOT recommends issuing the noise policy statement with the following financial plan:

- Impose a 2% surcharge for 10 years, on all domestic passenger tickets and freight waybills.
- Deposit surcharge revenues in an Aircraft Replacement Fund, managed by intercarrier agreement.
- Grant each carrier drawing rights to the Fund in proportion to its total system passenger and cargo revenue. Withdrawals would be permitted only for retrofit/replacement of 4-engine aircraft not meeting FAR 36 noise standards, or replacement of non-FAR 36 2- and 3- engine aircraft.
- Deposit any balances remaining in Fund after program objectives have been achieved in the existing Airport/ Airway Trust Fund, dedicating them to noise control purposes (including land acquisitions and easements).
- Seek legislation to authorize payment of the cost of retrofitting 2- and 3-engine aircraft (\$250 million) from the Airport/Airway Trust Fund.
- Seek legislation to reduce the Federal air passenger ticket and freight way bill taxes collected for the Airport/Airway Trust Fund from 8% to 6% and from 5% to 3%, respectively.

Effect:

The \$3-3.5 billion flowing into the Aircraft Replacement Fund over 10 years would finance approximately one-half of the \$6.4 billion cost of replacing the some 200 to 275 B-707s and DC-8s that would otherwise be in airline service at the end of 1984, the date by which the noise standards must be met. This would probably be about 10% of the industry-wide capital requirements for this The user taxes flowing into the Airport/Airway Trust Fund under the reduced rates would cover all outlays chargeable to the Fund under the Airport Development Aid Program (ADAP) bill through FY 1980. Without a tax reduction, unused Trust Fund balances will grow rapidly (to \$1.7 billion by 1979) and become a target for tax reductions or unjustified spending proposals, already being advanced by the aviation industry.

Pros:

- Administration of the Fund by the airlines would minimize Federal involvement.
- The capital provided will spark development of a new generation airplane, but will not encourage excess capacity because the surcharge provides only part of the revenues needed for replacement.
- . Interference with market choices is minimal; the carriers have flexibility to decide how to use the revenues from the surcharge.
- Redistribution of surcharge revenues equalizes the impact of the program, avoiding an unduly severe impact on the four carriers that own 60% of the B-707s/DC-8s.
- The cost of noise reductions is placed on the users, like a price increase (and cost-pass-through) imposed by an unregulated industry to meet environmental costs.
- Because the CAB approves air fares on the basis
 of industry wide average historical costs, a surcharge
 is required to pay for future increased costs.
- Because of the reduction in the ticket and freight taxes, the cost of air travel would not be increased.
- "Trading" a reduction in excess revenues in the Airport/Airway Trust Fund for a special surcharge to help meet environmental and broad economic objectives is sound policy.
- The Congress would be tasked to determine whether the minimal noise reduction due to retrofit of 2and 3-engine aircraft is worth the \$250 million cost.

Cons:

- Pooling and redistribution of some revenues is contrary to antitrust policy.
- Controversy over revenue pooling, whether in the Congress or before the Civil Aeronautics Board, may delay announcement of new aircraft programs.
- . Redistribution of revenues penalizes those airlines that do not have large numbers of noisy aircraft.

The principal criticism of Option 1 is that it would create a \$3.5 billion fund, collected from passengers of all carriers in order to make the down payments on new aircraft for those carriers with B-707s or DC-8s. (Many carriers could draw funds toward replacement of 2- and 3-engine aircraft. These total drawing rights, however, would be \$350 million, about 10 percent of the funds collected.) An alternative to the DOT option is:

Option 2: - Modify Option 1 by having each carrier establish its own Aircraft Replacement Account, just as the airport security surcharge used to be handled. Each carrier would collect the charge from its own passengers, use the funds only for retrofit (or an equivalent amount toward replacement), remit excess collections to the Airport/Airway Trust Fund, and report receipts/disbursements regularly to the CAB and DOT. While the surcharge receipts would be taxable, the carriers with severe replacement problems do not have current tax liabilities. For carriers who do have to pay taxes, the existing investment tax credit and accelerated depreciation schedules would preclude too large a tax bite on the surcharge account.

Option 3: - Adopt the DOT noise policy requirements, and leave to the private sector all financing questions and the timing of new U.S. aircraft production. Request the Congress to reduce the ADAP taxes (as in Option 1), but leave to the carriers whether to seek a corresponding fare increase from the CAB.

Option 4: - Issue no noise standards for existing aircraft. Leave to local governments and airports determination of acceptable noise levels.

Option 5: - Request further study, to include development of financing options based 1) on tax incentives for financing new aircraft production, and 2) on using current ADAP funds for R&D expenses of new U.S. aircraft. The following options modify the extent of the DOT proposed statement:

Option 6: - Limit the surcharges in Options 1 or 2 to flights over 850 miles, so that long-range passengers pay the costs associated with long range aircraft, and exempt pre-1975 2- and 3-engine jets from retrofit/replacement requirements.

Option 7: - Modify Option 1 or permit 2 to 2- and 3-engine aircraft to be retrofitted using monies collected by the surcharge (Avoids a Congressional decision on using ADAP funds; does something (even if not much in terms of actual noise reduction) for all air carriers and all jet airports.)

Option 8: - Modify Options 1, 2, or 3 to delete pre-1975 2- and 3-engine aircraft from noise standards, on the grounds that the benefit derived is not worth the cost.

Press Plan

Attached at Tab C for your approval is an announcement to the effect that you have approved a noise policy statement and directed Secretary Coleman to complete some editorial work and issue the statement promptly.

The announcement is intended also as a statement of support for the U.S. aerospace manufacturing industry.



Background Information for DOT Proposed Policy Statement on Aircraft Noise and Replacement

Statement of the Noise Problem

Airport neighbors, environmental groups, members of Congress, air carriers, and airports operators are calling for a clear Federal commitment and action plan to reduce aircraft noise:

- Aircraft noise is a serious problem for about 600,000 Americans, at 26 major air carrier airports; it is a significant problem at about 100 airports.
- Aircraft noise has depressed the value of land surrounding airports.
- Lawsuits for nuisance and condemnation in various cities have cost airport operators \$25 million in judgments and settlements, and hundreds of millions in land and easement acquisitions in the past five years. They have paralized airport planning and expansion.
- To reduce night-time noise, airport operators are being forced to impose use restrictions, such as curfews and jet bans, that may lead to a significant burden on interstate commerce. (The curfews shift the noise incidents into the more conjested daytime hours.)
- A highly vocal group in Congress has held a number of public hearings and introduced legislation to retrofit all airplanes at Federal expense, and create regional land use commissions.
- . EPA, which can establish its own noise regulations under the Federal Aviation Act, has proposed mandatory retrofit of particularly noisy airplanes.
- . Airport operators and air carriers have asked the Federal Government to assume total responsibility for aircraft noise reduction and assume the liability for damages.

Amendments to the Federal Aviation Act in 1968 required the Federal Aviation Administration (FAA) to issue noise standards for <u>new</u> and <u>existing</u> aircraft, taking into account the technological and economical feasibility of any noise standards established. FAA promptly issued noise level standards (Federal Aviation Regulations, Part 36 (FAR 36)) for new-design aircraft. All aircraft designed since 1969 (i.e., the DC-10 and the L-1011) meet FAR 36 standards. As of 1 January 1975 all new production commercial jet aircraft, even though designed prior to 1969, must meet FAR 36 noise level standards. (The affected aircraft types are the B-727, B-737, B-747, and DC-9.)

The FAR 36 standards permit larger aircraft to make more noise than smaller aircraft. They establish maximum permissible noise levels at specified measurement points. Noise generation on take-off is a function of take-off weight (principally fuel load). Thus aircraft not meeting the standards at maximum take-off weight will often generate less noise than the maximum permitted when operated on short flight segments.

The FAA has not, however, issued noise level standards for the 1600 aircraft (77% of the current jet fleet) designed before 1969 and produced before 1975. The public and Congressional pressure for a noise policy statement is directed at these aircraft.

The Aircraft Not Meeting FAR 36 Noise Standards

Three types of aircraft do not meet FAR 36 noise standards:

- <u>B-747</u> about 50 aircraft, half of the present inventory.
- <u>4-engine, narrow-body jets</u> (B-707, DC-8, B-720)none meet the standard (about 500 aircraft) These are the noisiest, oldest, least fuel efficient aircraft.
- <u>2- and 3-engine, narrow-body jets</u> (B-737, DC-9, B-727)some meet standards, some 1000 do not.

Some airlines have already retrofitted their early-production B-747s to meet FAR 36 standards. The retrofit increases fuel economy and lowers operating cost. The cost of retrofit is about \$250,000 per aircraft.

Significant (easily perceived) noise benefits can be realized by retrofit and/or replacement of the 4-engine, narrow-body jets. However, the cost of retrofit is high (\$2-3 million per unit or a total of nearly \$1 billion); retrofit would add to the operating expense, and fuel consumption would increase 1.5 percent. These aircraft should be retired in the normal equipment cycle in the early to mid-1980's. Retrofit of these aircraft cannot be accomplished, for technical reasons, until the early 1980's, the same time period in which replacement is possible, at a cost of about \$6.4 billion.

The B-707/DC-8 aircraft are twice as loud as the existing newer 2- and 3- engine aircraft and 2.5-3 times as loud as new technology aircraft that now could be produced. They are relatively energy inefficient; new technology aircraft could result in fuel and operating cost savings Marginal noise benefits can be realized by retrofit of the 2- and 3-engine narrow-body jets. The ear does not perceive the difference between retrofitted and non-retrofitted aircraft. The cumulative noise level problem is severe at only a few airports. These aircraft will, for the most part, be in service into the mid and late 1980's. They could be retrofitted in four to six years' time at an average cost of \$200,000 and a total cost of \$250 million. The fuel penalty would be negligible. Replacement cost would be about \$14 billion.

Noise Standards for International Aircraft

We should not impose noise level requirements upon U.S. international air carriers more stringent than those applied to foreign carriers operating to/from the United States, for to do so would place U.S. carriers at a competitive disadvantage. Where U.S. air carriers serve both domestic and foreign routes, the domestic requirements should be applied only for that percentage of total operations that are in domestic service.

We have objected in the past to efforts by foreign governments, notably Japan, to impose unilaterally noise standards or taxes on international carriers. State and DOT are strongly of the view that such matters should be placed initially before the International Civil Aviation Organization (ICAO). Only failing agreement through ICAO should the United States unilaterally impose noise standards.

Fleet Replacement

The Nation's air carriers do not have the resources to order the 700 new aircraft that will be required (some \$14 billion) in the next decade for normal replacement and to meet traffic growth, independent of the noise problem. The noise issue, with a possible requirement to retrofit (at a cost of nearly \$1 billion) or to hasten retirement, only compounds this fleet equipment problem.

The major replacement issue is not the replacement mandated by imposition of a Federal noise standard. Rather it is a matter of funding the normal replacement cycle. At worst, a 1984 noise standard deadline would move forward the retirement of a few aircraft by 2-3 years. Relatively few carriers have substantial numbers of B-707s and DC-8s that require replacement:

- . American has 80-90, Delta has 32-34, United has 100, and Western has 18-23.
- Pan American has 57 (but many will be retired in any case by 1981, most are in international service, and so would be exempt from domestic noise standards)
- . TWA has 90-100 (but many are in international service).

Replacement Aircraft for the Next Decade

U.S. airframe manufacturers agree that the primary replacement aircraft for commercial air transportation in the 1980-1990 period will be a 200 passenger, widebody, medium range aircraft incorporating new technology. This aircraft will offer the opportunity for improved fuel efficiency (30-40%), more significant noise reduction, reduced operating costs, and optimal fleet planning.

The worldwide potential market in the next decade is 1400 aircraft, or nearly \$30 billion in sales. If two U.S. manufacturers and one European manufacturer were to start deliveries at the same time, the U.S. market share, based on past experience, would be over 90%. If deliveries by U.S. manufacturers lag only two years behind the European, the U.S. share might be sharply reduced to less than 60%, a loss of \$10 billion in sales. If the lag were four years, then the potential U.S. market share might be so small that no U.S. aircraft would be produced.

Time is a critical factor; decisions made now will have a major impact on U.S. aerospace sales and employment in the 1980's. Once start-up sales are made, it will be four years until certification is attained and before volume deliveries can begin. In real terms this means that if U.S. manufacturers are to start delivery of the next generation aircraft by 1981 -- the probable delivery date for the European counterpart -- major sales commitments must be made by Fall 1977. Because of the lead time required to finalize specifications, U.S. manufacturers' decisions on the next generation aircraft should be made this fall. The impact of market share on employment is substantial. For example, on Boeing's existing lines a difference in the production of thirty aircraft represents a difference of 3,000 jobs. The job-generating potential of the next generation aircraft is even more dramatic. Second year added employment will mean 10,000 new jobs for the airframe company, its engine supplier, and its vendors. By the sixth year approximately 25,000 new jobs will have been created, almost all requiring engineers, technicians and other highly skilled labor.

The U.S. is currently ahead on wing and engine development. If we announce an aircraft before the government-subsidized Europeans, we will have greater total sales, lower aircraft unit costs, and more man-years of employment. This competitive edge is the reason for pushing the production decision to as soon as possible.





THE SECRETARY OF TRANSPORTATION WASHINGTON, D.C. 20590

August 12, 1976

MEMORANDUM FOR:

William Gorog 'Deputy Assistant to the President for Economic Affairs

Subject: Aviation Noise Policy and Aircraft Replacement

As we discussed by telephone this morning, I understand that several members of the White House staff have been considering alternatives to the aircraft replacement financing proposal that I submitted to the President on July 2. I do not believe that these alternatives are well thought through, nor would they obtain the objectives as effectively as the proposal I submitted to the President on July 2. My reasons are as follows:

1. My proposal places primary reliance on revenues from user charges collected by a 2% surcharge on the ticket tax and a 2% surcharge on the waybill freight tax. This surcharge is the substantial equivalent of a price increase in an unregulated industry. The revenues from the surcharge are distributed by a formula which entitles each air carrier to a portion of the fund in the same ratio as its system revenues bear to total system revenues. On an industrywide basis, this means that 85% of the benefits of the fund will accrue to each carrier on the basis of its individual contribution: 15% of the fund will be shared in order to meet the particular needs of carriers that have severe financial problems and a large number of aircraft that do not meet the federal noise standards. The sharing element is a small, but necessary, element of the total program because four air carriers own 60% of the old four-engine jets that do not meet federal noise standards, and three of those carriers (Pan Am, TWA, and American) will have a very difficult time in securing financing for the replacement of these aircraft.

2. The reason why our noise rule would affect different carriers unevenly is at least, in part, a result of the way routes and fares have been regulated by the CAB. The B-707 and DC-8 are used primarily on long thin routes--routes awarded by the CAB and used by TWA, Pan Am, American and United. Consequently these carriers have a substantial portion of the burden. 3. If a surcharge is collected and the distribution is not modified to remedy the gross inequities among the carriers in terms of financial strength and need to replace airplanes, then some carriers with the least need will have a substantial windfall. This windfall will not only give them an unfair competitive advantage, but it may well stimulate certain carriers to purchase more capacity than they need. This perpetuates the problem of the early 70's where excess capacity resulted in low load factors and low profits.

4. My proposal is very similar to one to which the air carriers, with the exception of one airline, have tentatively agreed. This is a good example of a cooperative, joint effort designed to achieve several important national objectives including noise abatement, employment opportunities, new technology, and improved export potential. An Administration that espouses joint industry efforts to meet environmental and other problems should support this industry effort to meet an industry problem.

5. There is a critical need for replacement airplanes for the B-707s and DC-8s in 1981-1982. Without the fund that I propose, such a replacement will probably not be available until a much later date. Moneys from the replacement fund will give aerospace manufacturers sufficient incentive to begin production of a new generation airplane immediately.

6. My proposal would provide about one-third of the cost of replacing the noisiest jets. Carriers would have to secure private sector finances for the remainder. Thus effective management and a good prospective earnings picture would be essential to carrier participation in this program, which would not substitute federal support for private sector decision-making.

7. My proposal would minimize federal involvement. The fund would be managed and operated by the carriers. The revenues would not be federal dollars or a federal subsidy. The carriers would be restricted in only three ways: They must use the money for replacement; they must meet FAA noise regulation deadlines, and unused revenues at the end of ten years would revert to the ADAP Trust Fund. The carriers could decide how to use their entitlement from the replacement fund. Approval of this formula by the CAB is possible under existing statutes; no legislation would be necessary for this purpose.

8. My proposal would provide a portion of these revenues to replacement costs for U.S. flag carriers. Any program that does not include U.S. international service and does not provide for participation by Pan Am, which has not had a profitable year since 1968, and TWA, which had about \$86 million in losses in 1975, would be incomplete, if not grossly unfair, given the fact that these carriers often compete against subsidized foreign air carriers and that they will not benefit as much as the domestic carriers from regulatory reform. My program will greatly enhance the Administration's seven point action plan for U.S. flag carriers and obviate the need for subsidies, guaranteed loans, or other long-term federal aid, which have been requested often by the carriers. It has been carefully designed to permit participation by U.S. flag carriers without the need for providing assistance to foreign carriers and without violating any provision in treaties or bilateral agreements prohibiting discrimination against foreign carriers.

9. Although there are other alternatives, the one I have recommended seeks to achieve the objective in the most equitable, efficient, and short term manner. Other alternatives have problems. For example, a straight fare increase would not permit dedication of the revenues for aircraft replacement and would create pressures for increased labor costs. The CAB sets rates on the basis of industry-wide average historic costs and therefore does not take into consideration either the prospective costs of replacing noisy airplanes or the substantial difference in costs among the air carriers that will result from new federal noise requirements. Thus, the surcharge represents a more equitable substitute for a price increase because of the unique way airline fares are regulated.

Federal loan guarantees would not allow the private market place to operate in making decisions about whether air carriers are a sound investment but would substitute substantial government interference. Government loans would have a similar effect and require more government involvement over a long period of time. If ADAP Trust moneys were used, not only would legislation be required, thus inviting all kinds of Congressional embellishments, but substantial government monitoring and regulating would be required since we would be overseeing the expenditure of dollars that would be characterized as federal. I have recommended the use of ADAP funds for the retrofit of the two and three engine airplanes only, but this is a deliberate attempt on my part to have the Congress address the question of whether the noise reduction achievable is cost effective.

William T. Coleman, Jr.

cc: Judith Hope, Domestic Council Stephen Piper, CIEP

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$\frac{D R A F T}{August 7, 1976}$

Proposed Presidential Statement to Accompany Approval of DoT Noise Policy Proposal

I have reviewed the aviation noise policy statement proposed by the Secretary of Transportation and concur with its recommendation for a definitive program to abate aircraft noise over an 8-year period. On the basis of my review of both the noise issue and the capital investment requirements of the airlines and the aircraft manufacturers, I believe that a limited Federal role in the solution of these problems is necessary and appropriate.

There is a pressing need for clarification of Federal aviation noise policy: 6 million Americans are affected by aircraft noise at the present time. Lawsuits are hampering the development of our air transportation system. The Department of Transportation's statement will announce our action to reduce aircraft noise at its source through the promulgation of noise standards for new planes and the establishment of a fixed timetable for full compliance by all aircraft. The statement will delineate the major responsibilities of the carriers, the airport operators, and the State and local Governments.

Further, the policy statement will promote public recognition and understanding of the economic costs associated with achievement of the socially desirable goal of aircraft noise abatement.

Role of Aerospace Industry

The U.S. aerospace manufacturers, the principal suppliers of commercial jet transport equipment to the world's airlines, have an important role in achieving noise reduction. In terms of both technology and economics, the best means to achieve prompt and significant noise reduction at America's major airports is by production of a new generation of aircraft. Moreover, a commercially viable U.S. airframe and engine manufacturing capability is an important national asset, defense, contributes more to our export trade than any other manufacturing industry, and provides job opportunities for over half a million people in high technology industries.

United States policy should support the private, profitable U.S. aerospace industry so that it can continue to compete in an expanding free and open world market without subsidy. A commercially viable U.S. aviation manufacturing industry can retain world leadership in all phases of aviation, because it can develop and market those products which best satisfy world demand for new aircraft -- aircraft that are tailored to the current and future needs of the marketplace, the need to maximize fuel efficiency and to minimize adverse environmental impacts.

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The role of the Federal Government in supporting the U.S. aircraft and engine manufacturers is important, yet should be limited to: (1) providing assistance in promoting aeronautical research and development; (2) supporting the long term financing of aircraft exports through such facilities as Export-Import Bank credits and guarantees; and (3) seeking the elimination of trade barriers through multilateral government practices, or from the granting of aid and subsidies for the design, manufacture, and marketing of competitive aircraft by foreign governments.

The commercial interests of the U.S. aircraft and engine manufacturers are best served by policies that promote the growth of air transport services world-wide and encourage a return on air carrier earnings sufficient to attract capital and to finance the purchase of advanced technology commercial jet aircraft better suited to current market and environmental needs. It is equally important that U.S. airframe and engine manufacturers have equality of marketing opportunity in all countries. To the extent possible -and within the confines of foreign policy and domestic security considerations -- foreign and United States air carriers should be encouraged and able to purchase aviation equipment on the basis of technological and commercial considerations alone.

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In light of these considerations I have instructed Secretary Coleman to proceed with a program to quite aircraft noise and to 'encourage development and production of new technology aircraft. I have asked that he complete promptly the development of several sections of his proposed policy statement, and to make that statement public not later than September 1.

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