The original documents are located in Box 1, folder "Aircraft Noise (4)" of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

Aviation Noise

THE WHITE HOUSE

WASHINGTON

August 13, 1976

7 to

MEMORANDUM FOR: JIM CANNON

FROM: JUDITH RICHARDS HOPE

SUBJECT: Aviation Noise

I attach a copy of the package on aviation noise which Jim Connor sent to you. It contains OMB's first decision memo (Tab A), OMB's second decision memo (Tab B) and Bill Gorog's draft decision memorandum (Tab C).

The second OMB decision memorandum contains three options: 1. Bill Coleman's proposal; 2. Defer decision ; and 3. limited role which would require the airlines to meet noise standards but provide no financing method to assist them.

The Gorog draft presents 8 options, including three OMB options. Neither memorandum reflects current agency views nor senior staff opinions on the various options presented.

In accordance with your suggestion, I propose to consolidate these two memoranda into one. It could be circulated in quick interagency review for comments. I will then incorporate these views and send the document by courrier to Kansas City or Vail.

Approve _____ Disapprove _____

Attachment

THE WHITE HOUSE

WASHINGTON

August 13, 1976

ADMINISTRATIVELY CONFIDENTIAL

MEMORANDUM FOR: JIM CANNON

FROM: JIM CONNOR JEC

SUBJECT: 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 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

JUL 19 1976

ACTION

MEMORANDUM FOR: THE PRESIDENT

FROM: James T. Lynn

SUBJECT: Proposed Aviation Noise Policy Statement

Secretary Coleman wishes to issue an aviation noise policy statement as soon as possible. He proposes to announce a major new program to curb aircraft noise and stimulate new plane production. The following discussion covers the background of the aviation noise issue, presents options concerning what the policy statement should say, and discusses the financing choices associated with one of the options.

A. Issuance of Statement

Background

-- The extent of the aviation noise problem varies widely, basically depending upon proximity of residential areas to airports (e.g., LaGuardia Airport in New York causes annoyance to over a million people, Dulles to 3,500). In all, about six million people are significantly affected by airport noise.

-- For several years environmental groups and airport-adjacent residents have pushed for federal aircraft noise reduction action. Their ranks have recently been joined by local airport authorities who are liable for noise damages and have lost several damage suits.

-- The main federal action to date has been issuance of noise standards for new aircraft in 1969. However, given the longevity of jet aircraft, over 75% of the current air carrier fleet does not meet the standards.

-- For purposes of considering the noise problem, aircraft can be divided into three groups:

1) The original jets (e.g., B-707 and DC-8 types which are the noisiest) made before the issuance of federal standards. These aircraft make up about 25% of the commercial jet fleet.

2) Later versions (e.g., B-727, DC-9) which are less noisy but still don't meet the 1969 standards. About half of all airline planes are in this category.

3) Most recent model types, such as the B-747 (wide body), and later model B-727s and DC-9s which comply with the federal standards. These make up the remaining 25% of the jet fleet.

-- 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). This is the most effective method, but is not widespread due to the service reduction and accompanying financial loss it can entail.

2) Operational techniques such as earlier power reduction on takeoff (e.g., Northwest reduces power at 1,000 instead of the usual 1,500 feet), runway use adjustments, schedule adjustments to avoid the use of the noisiest types of planes at close-in airports (e.g., at LaGuardia Airport, use of B-707 and DC-8 planes is prohibited).

3) Land purchase, sound proofing buildings and local zoning measures.

4) Retrofit of existing aircraft engines with sound-absorbing material or replacement of the engines with quieter ones.

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:

1) Issue the statement and include in it a 6-10 year, $3.5 billion program funded mainly by an environmental surcharge. This would stimulate additional private sector financing to replace the noisiest aircraft with new technology and retrofit some of the later model planes to meet the 1969 standards.

2) Defer making a policy statement for a few weeks 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 that which is attainable within the airlines' own resources.

Discussion of Options

Option #1--This option would require most commercial aircraft operating in the U.S. to meet the 1969 noise standards within 6-10 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. The statement would also delineate the responsibilities of state and local authorities for taking certain actions (e.g., zoning) to limit aircraft noise exposure. A fuller discussion of this option can be found in Attachment A, prepared by DOT.

Key arguments in favor of this option are:

-- It would significantly lower aircraft noise levels over 4-10 years and take action on the long standing noise problem.

-- By taking affirmative federal action on the 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.

-- Replacing the noisiest aircraft would create sizable orders for new aircraft and could 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 a decision paper could 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 problem airports, 4) establishment of a noise pollution tax which escalates with the degree of noise an aircraft emits.

Factors in favor of this option are:

-- In its present form 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. It may be advisable to consider all viable options before endorsing a particular course of action.

-- Some of the other approaches to noise reduction 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 on planes which account for only 10% of the operations at noise-problem airports. The non-hardware noise reduction methods available also appear to offer substantial noise reductions. The use of curfews, for example, could be effective and not too disruptive if used selectively. However, the costs of these methods have not been fully identified.

-- Options such as initiation of a noise pollution tax on non-standard aircraft and imposition of partial curfews 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. A noise tax would afford a community the means to undertake a limited land purchase/soundproofing program, but at the expense of higher air fares.

-- 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.

Option #3--This option would proceed with the issuance of a noise policy statement but 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 low 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) as noted earlier, 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. 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. An individual's threshold for being annoyed may simply drop over time to the new level.

-- 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.

-- Several of the airlines cannot finance a replacement/retrofit without federal aid. This is a de facto proof that such a proposal is not economically reasonable, which is one of the factors which DOT must consider in any rulemaking action in noise regulation.

-- 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 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.

Decision

Option #1, issue the replacement/retrofit noise policy statement _____.

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

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

B. Financing Alternatives (necessary only if Option #1 was chosen)

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.)

Option B--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.

Option C--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.

Option B, 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.

-- Represents less of a "hands-on" federal role than Option A, since it does not establish a special account and no formal pooling arrangement would be mandated. The escrow account can be viewed as anti-competitive since it would work against new entrants by building up entitlements for existing carriers based upon the revenues of each.

-- 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.

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 _____.

Attachment

Buchen Comments

THE WHITE HOUSE

WASHINGTON

July 22, 1976

MEMORANDUM FOR: ED SCHMULTS

FROM: BOBBIE KILBERG

SUBJECT: Lynn Memo (7/19) re: Proposed Aviation Noise Policy Statement

Suggested response:

The Counsel's Office has reviewed the attached memorandum on a proposed aviation noise policy statement and would like to be recorded as supporting Option No. 2. After reviewing the memorandum and the attached appendices, it is our opinion that the President should be presented with the relative costs, benefits, and effectiveness of the full range of noise reduction options. If this can be accomplished within a few weeks as the memo indicates, it is our opinion that the delay would be worthwhile.

ACTION MEMORANDUM WASHINGTON LOG NO.: 8:45 a.m.

Date: July 22 Time:

FOR ACTION: Bob Hartmann cc (for information):

FROM THE STAFF SECRETARY

DUE: Date: Friday, July 23 Time: 2:00 p.m.

SUBJECT:

Lynn memo (7/19) re: Proposed Aviation Noise Policy Statement

ACTION REQUESTED:

____ For Necessary Action _X_ For Your Recommendations

____ Prepare Agenda and Brief ____ Draft Reply

_X_ For Your Comments ____ Draft Remarks

REMARKS:

Option 2 —

(1) Why do we have to read all this junk until Option 2 has been done?

(2) Why does DOT do this (if it is done) instead of the President himself?

RT

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipat delay in submitting the required material, pl telephone the Staff Secretary immediately.

Jim Connor
For the President

THE WHITE HOUSE

ACTION MEMORANDUM WASHINGTON LOG NO.: JUL 20 1976

Date: July 20, 1976 Time: due: 7/22 2:00

FOR ACTION: Jack Marsh
Phil Buchen
Jim Cannon
Max Friedersdorf
Bill Seidman

cc (for information): Brent Scowcroft
David Gergen

FROM THE STAFF SECRETARY

DUE: Date: Thursday, July 22 Time: 2:00 p.m.

SUBJECT:

Lynn memo (7/19) re: Proposed Aviation Noise Policy Statement

ACTION REQUESTED:

_____ For Necessary Action

_____ Prepare Agenda and Brief

__X__ For Your Comments

__X__ For Your Recommendations

_____ Draft Reply

_____ Draft Remarks

REMARKS:

July 24, 1976

Option 2 -- This option does not preclude the eventual selection of Option 3. Based on the experience with the establishment of future standards of production in reference to air emission, there is the likelihood that selection of Option 3 at this time could lead to the promulgation of Federal standards which would be restrictive and so burdensome that they may retard the production of aircraft in the future. The selection of Option 2 at this time does not preclude the selection of Option 3 after there has been more careful study of the problem.

On Financing -- Recommend Option A.

Jack Marsh

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Jim Connor
For the President

Date: July 20, 1976 Time:

FOR ACTION: Jack Marsh
Phil Buchen
Jim Cannon
Max Friedersdorf
Bill Seidman
FROM THE STAFF SECRETARY

~~XXXXXXXXXXXX~~:
Brent Scowcroft
David Gergen

1:16

DUE: Date: Thursday, July 22 Time: 2:00 p.m.

SUBJECT:

Lynn memo (7/19) re: Proposed Aviation Noise Policy Statement

ACTION REQUESTED:

____ For Necessary Action

____ Prepare Agenda and Brief

__X__ For Your Comments

__X__ For Your Recommendations

____ Draft Reply

____ Draft Remarks

REMARKS:

Recommend Option #3; Concur from Jim Cannon's standpoint.

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Jim Connor
For the President

Date: July 20, 1976 Time:

FOR ACTION: Jack Marsh
Phil Buchen
Jim Cannon
Max Friedersdorf
Bill Seidman
Brent Scowcroft
David Gergen
FROM THE STAFF SECRETARY

DUE: Date: Thursday, July 22 Time: 2:00 p.m.

SUBJECT:

Lynn memo (7/19) re: Proposed Aviation Noise Policy Statement

ACTION REQUESTED:

____ For Necessary Action
____ Prepare Agenda and Brief
__X__ For Your Comments
__X__ For Your Recommendations
____ Draft Reply
____ Draft Remarks

REMARKS:

I recommend selection of OPTION #1 with Financing Alternative "A".....However, prior to final decision and announcement, a paper is needed providing details concerning implementation including consideration of (1) tax consequences, (2) legislation needed, (3) Timing, (4) Precedent implications, etc.

Bill Seidman
+ Bill Gorog

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Jim Connor
For the President

MEMORANDUM

THE WHITE HOUSE 4129

WASHINGTON

July 26, 1976

MEMORANDUM FOR: JIM CONNOR

FROM: BRENT SCOWCROFT

SUBJECT: Comments and Recommendations on Secretary Coleman's Proposed Noise Policy Statement

There are two international questions connected with Secretary Coleman's proposed noise policy statement and ~~implication~~ implementation program:

1. How would we plan to deal with foreign flag carriers serving the U.S. and required to meet the new noise standards? If we are not prepared to offer the same or equal subsidy to the foreign flag carriers to help defray aircraft replacement, we may be in violation of the non-discriminatory obligation of the Chicago Convention.

2. U.S. unilateral action to impose noise standards on foreign flag carriers who serve the U.S. will be objected to in ICAO, and some preparatory work should be done before the promulgation of such a U.S. policy.

Since Secretary Coleman's proposal is silent on both these issues, I would recommend that ~~either~~ the paper be revised to address the international issues involved and present options to deal with them. If, for some reason unknown to me, it is essential that the paper go before the President right away, his approval option should be in principle only, ... until there can be a satisfactory resolution of the international problems that may be connected with that policy.

Log No.:

Date: July 20, 1976

Time:

FOR ACTION: Jack Marsh
Phil Buchen
Jim Cannon
Max Friedersdorf
Bill Seidman
FROM THE STAFF SECRETARY

~~XXXXXXXXXXXXXX~~:
Brent Scowcroft
David Gergen

DUE: Date: Thursday, July 22 Time: 2:00 p.m.

SUBJECT:

Lynn memo (7/19) re: Proposed Aviation Noise Policy Statement

→ Jim Connor

ACTION REQUESTED:

____ For Necessary Action

____ Prepare Agenda and Brief

__X__ For Your Comments

__X__ For Your Recommendations

____ Draft Reply

____ Draft Remarks

REMARKS:

1) The President should not recommend anything right now which places a new surcharge on airline tickets.

2) With all due respect, the President ought to know at this memo and ask for a 3-page paper written in English. He should not have to do the work of the staff; the staff should.

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

Jim Connor
For the President

Dave Fe
July 20

B

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
ACTING DIRECTOR

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 new 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:

1) 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.

Option #3--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.)

Option B--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.

Option C--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.

Option B, 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

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 industries. (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.

Bill

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. CAB would be asked to approve, 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 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.)

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.

CARRIER CONTRIBUTION AND ENTITLEMENT
(Dollars in millions)

Carrier	Contribution (2% Passenger & Waybill Surcharge-10 Years, 1977-1986)	Number of Non-Complying 707's & DC-8's	Total Entitlement 1/	Entitlement less Contribution
Trunk				
American	$ 424.8	91	$ 377	$ (47.8)
Braniff	119.8	11	124	4.2
Continental	132.5	5	112	(20.5)
Delta	384.0	34	299	(85.0)
Eastern	357.1	-	342	(15.1)
National	83.2	-	75	(8.2)
Northwest	162.3	10	171	8.7
Pan American	28.7	79	353	324.3
Trans World	319.4	90	379	59.6
United	598.3	100	469	(129.3)
Western	126.2	23	109	(17.2)
Total Trunk	$ 2736.2	443	$ 2810	$ 73.8
Local Service				
Allegheny	$ 103.5	-	$ 80	$ (23.5)
Frontier	41.2	-	37	(4.2)
North Central	39.6	-	34	(5.6)
Ozark	31.5	-	28	(3.5)
Piedmont	35.9	-	28	(7.9)
Air West	44.0	-	36	(6.0)
Southern	26.3	-	25	(1.3)
Texas International	15.8	-	17	1.2
Total Local Service	$ 337.8	-	$ 287	$ (50.8)

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.

Carrier	Contribution (2% Passenger & Waybill Surcharge- 10 Years, 1977-1986)	Number of Non-Complying 707's & DC-8's	Total Entitlement	Entitlement less Contribution
Cargo				
Flying Tiger	31.1	16	8	(23.1)
Seaboard	17.4	11	46	28.6
Airlift	4.5	5	24	19.5
Total Cargo	$53.0	32	78	25.0
Other				
Supplemental Carriers	48.2	31	92	43.8
Intrastate Carriers	125.5	-	42	(83.5)
Hawaiian	14.8	-	11	(3.8)
Aloha	11.5	-	7	(4.5)
Total Other	$200.0	31	152	(48.0)
TOTAL	$3327.0	495	3327.0	- 0 -
Other Carriers 2/		17		
TOTAL		523		

2/ Includes commercial operators and flying clubs. Revenue contribution and entitlements for these carriers are not provided due to lack of revenue data.

Attachment 2

REVENUE COLLECTIONS - AIRCRAFT REPLACEMENT FUND

T REPLACEMENT FUND	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	Ten Year Total
et Surcharge	224	244	258	271	284	303	322	341	360	377	2484
bill Surcharge	22	26	28	32	36	38	38	40	40	42	342
otal	246	270	206	303	320	341	360	381	400	419	3327

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	1892	2105
Plus Trust Fund Revenues	969	254	1046	1128	1205	1268	1338
Subtotal	1858	1523	2424	2648	2898	3160	3443
Less: ADAP	412	103	525	555	590	625	
Maintenance	-	-	250	275	300	325	
F&E	250	62	250	250	250	250	
RE&D	68	18	77	85	90	95	
Subtotal	1128	1340	1322	1483	1668	1865	
Plus Estimated Interest *	141	38	198	210	224	240	
Ending Uncommitted Balance	1269	1378	1520	1693	1892	2105	

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.

Beginning Cash Balance	2013	2393	2502	2644	2817	3016	3229
Plus Revenues Less Expenses	239	71	-56	-37	-25	-27	
Ending Cash Balance	2252	2464	2446	2607	2792	2989	
Average Cash Balance			(2474)	(2625)	(2804)	(3002)	
+ Interest	141	38	198	210	224	240	
Balance Carried Forward	2393	2502	2644	2817	3016	3229	

5/27/76

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

(In $ Millions)

	1976	TQ	1977	1978	1979	1980	1981
eginning Uncommitted Balance	889	1269	1378	1276	1165	1038	884
us Trust Fund Revenues	969	254	811	874	932	981	1035
Subtotal	1858	1523	2189	2150	2097	2019	1919
ss: ADAP	412	103	525	555	590	625	
Maintenance	-	-	250	275	300	325	
F&E	250	62	250	250	250	250	
RE&D	68	18	77	85	90	95	
Subtotal	1128	1340	1087	985	867	724	
us Estimated Interest *	141	38	189	180	171	160	
ding 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	2013	2393	2502	2400	2289	2162	2008
Plus Revenues Less Expenses	239	71	-291	-291	-298	-314	
Ending Cash Balance	2252	2464	2211	2109	1991	1848	
rage Cash Balance			(2351)	(2254)	(2140)	(2005)	
Interest	141	38	189	180	171	160	
ance Carried Forward	2893	2502	2400	2289	2162	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. CAB would be encouraged through an expression of legislative 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. Appropriations would be authorized from the Airport and Airways Trust Fund to pay the cost of retrofitting those non-FAR 36 aircraft 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

...by $225 million.

Option #2

1. 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. 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.

7. 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. An escrow fund would be created and would receive moneys from 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 replac 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 narrow-bodied 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

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* 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 narrow-bodied 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.

- 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 in the 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. <u>The Need for a New-Generation Aircraft</u> (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.

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* 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 new-technology replacement aircraft would be delivered) the total savings in jet fuel is estimated to amount to about 2.5 billion gallons.

  -- Productivity: Measured against existing aircraft, a new-technology 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 reduct 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

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* 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 four-engine 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 AND 1984

(Current Dollars in Billions)

Uses of Funds	1977	1980	1984	1977-198
Property & Equipment	$1.2B	$1.6B	$5.7B	$24.4B
Debt Repayment	.5	.5	.4	3.6
Dividends & Other	.3	.6	.1	1.1
Total Uses	$2.0B	$2.7B	$6.2B	$29.1B
Sources of Funds				
Depreciation	1.1	1.1	1.6	10.0
Sales of Aircraft	.1	.0	.1	.4
Total Sources	1.2	1.1	1.7	10.4
Uses Less Internal Sources	$ .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%

TABLE 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 Investment 1/
1967	$6,117	$638	10.4%	8.5%
1968	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	6.0
1973	10,905	287	2.6	5.6
1974	12,865	447	3.5	6.8
1975	13,374	(121)	(-)	2.8
9 Yr. Total	$84,653	$2,076	2.5%	NA

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

Source: CAB Form 41/TPI-32 Reports

TABLE 3

SELECTED FINANCIAL DATA FOR TRUNK CARRIERS (Including Pan Am) 1971 TO 1975

Carriers with Large Numbers of 4-Engine Aircraft	Operating Revenues ($ Millions)	Net Income (Loss) ($ Millions)	Profit (Loss) Margin (Percent)	Debt as a Propor of Total Capitali (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	268.8	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

TABLE 4

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

AIRLINE	ANTICIPATED CAPITAL EXPENDITURES (1977-1984)	LONG TERM DEBT/ EQUITY 1/			ADDITIONAL REPLACEMENT CAPITAL REQUIRED BY 1984 2/	DEBT/EQUITY RATIO INCLUDING REPLACEMENT FINAN (1984)
		1976	1980	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	$2-.3	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

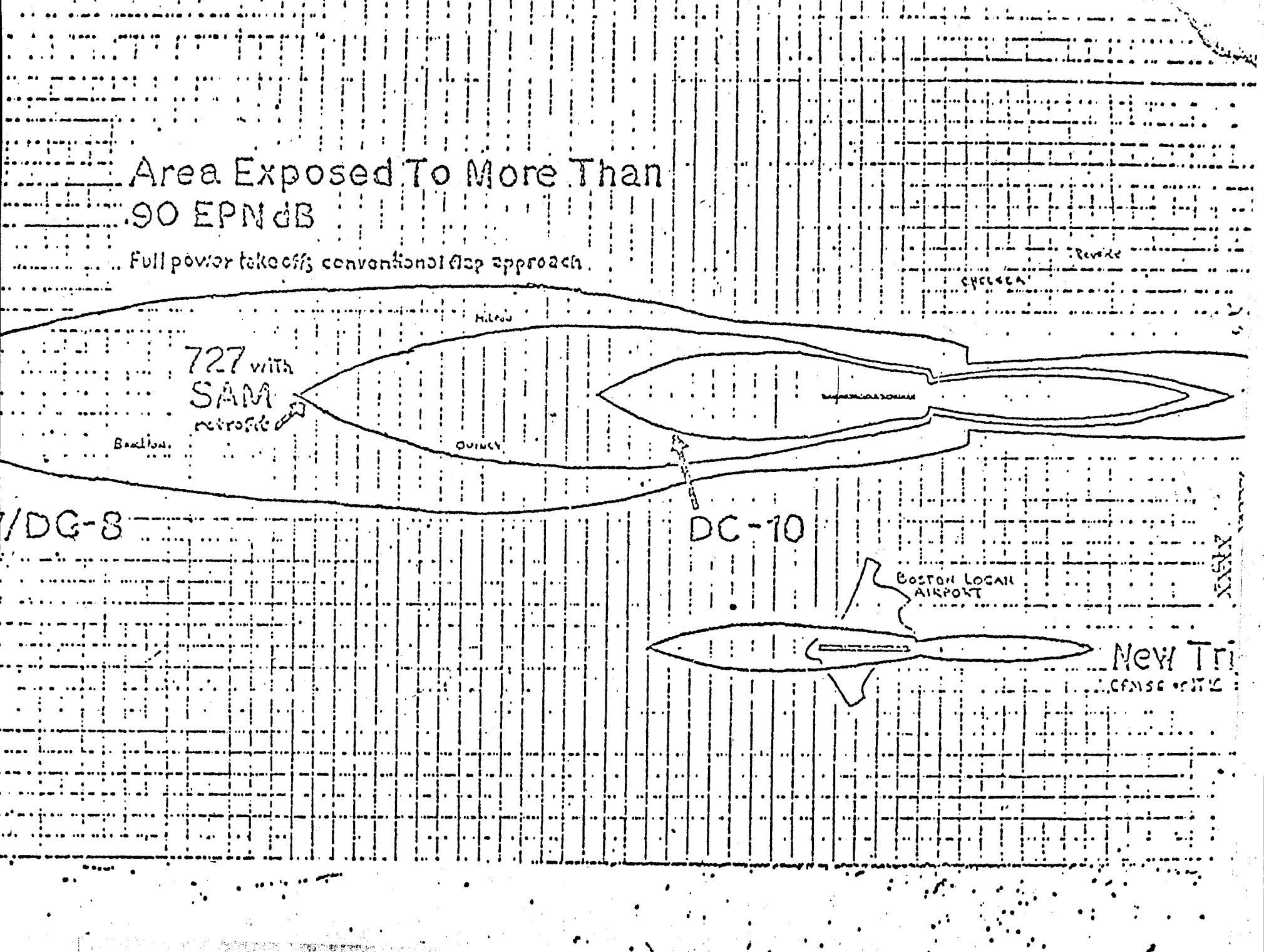
- Technological advances possible today will result in a new aircraft with greater payload for its size and weight--an aircraft that is more reliable, more easily maintained, costs less to operate, and costs less to acquire per unit of productivity. These benefits accrue to the public, the air traveler, 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.


Area Exposed To More Than
90 EPNdB
Full power takeoffs conventional flap approach
727 with
SAM
retrofit
Boston
Milton
Quincy
Revere
Chelsea
DC-10
Boston Logan
Airport
New Tri

- 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, 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. 1/ 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, high-technology 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 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 GNP, 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. and world markets. A loss of only 5 percent of present 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.

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* 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.

DRAFT

THE WHITE HOUSE

WASHINGTON

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% quieter 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 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 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 2- and 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 new and existing 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:

- B-747 - about 50 aircraft, half of the present inventory.
- 4-engine, narrow-body jets (B-707, DC-8, B-720)- none meet the standard (about 500 aircraft) These are the noisiest, oldest, least fuel efficient aircraft.
- 2- and 3-engine, narrow-body jets (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 of 30-40% per seat-mile.

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 industry-wide 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.

Bill

William T. Coleman, Jr.

cc: Judith Hope, Domestic Council
Stephen Piper, CIEP

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 defense asset, 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.

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.

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.