

**2000 RECORD OF APPROVAL  
APPENDIX**

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U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Memorandum

Subject: ACTION: Approval of the Anchorage International  
Airport Noise Compatibility Program

Date: November 3, 1999

From: Manager, Airports Division, AAL-600

Reply to  
Attn. of: Patti Sullivan, AAL-612C

To: Acting Associate Administrator for Airports, ARP-1

On March 1, 1999, a notice was published in the Federal Register announcing the FAA's determination that the noise exposure maps submitted by the State of Alaska, Department of Transportation and Public Facilities, for the Anchorage International Airport under the provisions of Title I of the Aviation Safety and Noise Abatement Act of 1979 and 14 CFR Part 150 were in conformance with applicable requirements.

On July 15, 1999, a notice was published in the Federal Register announcing that the FAA's formal 180-day review period for the Anchorage International Airport proposed noise compatibility program submitted under the provisions of 49 U.S.C. Sec 47504(a), began on July 9, 1999. The July 15, 1999 notice announced that the FAA must approve or disapprove the program within the 180 days or it shall be deemed to be approved as provided for in 49 U.S.C. Sec. 47504 (b). The final date for such approval or disapproval is January 4, 2000.

On September 10, 1999 a notice was published in the Federal Register extending the Public Comment Period for 30 days from September 6, 1999 to October 6, 1999. The extension of the Public Comment period was done in response to a request from State Legislative Representatives to allow additional opportunity for public review and comment. This Federal Register Notice extended the public comment period only and did not alter the total 180-day FAA review period for the proposed noise compatibility program. The last date for approval or disapproval of the program remains January 4, 2000.

During the extended Public Comment Period, two public meetings sponsored by State Legislative Representatives were conducted to provide residents in the neighborhoods surrounding the Airport an additional opportunity to learn about the Airport's existing and proposed Noise Compatibility Program (NCP), the Laws and Regulations governing the conduct of the Airport's proposed NCP, and the implementation of the program measures included in the proposed plan. These meetings were in addition to the public participation and consultation conducted by the Airport prior to submission of the NCP to the FAA for review and approval.

The following discussion summarizes some of the major issues raised in the extended Public Comment Period.

A number of the comments received during the extended Public Comment Period related to concerns about Airport growth in general and specific development projects underway, and the potential impacts of Airport development on surrounding neighborhoods. Many of these comments included a request that the NCP be delayed until other Airport and municipal planning studies currently underway are completed. Although

other planning evaluations are underway to address these broader impacts of Airport growth outside the FAR Part 150 Study process, the Alaskan Region supports immediate adoption of the NCP to address current noise impacts, because a delay in implementation of the NCP will not provide any benefits to the residents of Anchorage or the Airport. It is expected that the NCP will continue to be reviewed and revised as needed in the future to address any changes that might occur as a result of the planning efforts currently underway or future changes in aircraft operations.

A number of comments addressed concerns over ground noise impacts. The Airport and the FAA entered into a grant agreement in August 1999 for a Ground Noise Study using the Airport's Entitlements funds. This study will identify the sources of ground noise, develop noise abatement measures to reduce noise at the source, and evaluate and recommend noise mitigation measures, such as sound buffers and barriers, to minimize the impacts of ground noise that cannot be abated at the source. The Alaskan Region proposes to issue a revised Record of Approval after completion of the Ground Noise Study to incorporate recommended ground noise abatement and mitigation measures that meet Part 150 Study approval standards, enabling those measures to be eligible for Airport Improvement Program Noise discretionary funds.

Many of the comments received also reflected a desire for the Airport to focus on noise reduction at the source and for less focus on land use measures off-site. The Airport, the FAA and the operators have worked to reduce noise at the source since 1988 and continue to address this as shown in the discussion of the noise abatement measures included in the NCP. The Airport and the FAA recognize the importance of noise abatement, but also recognize the need for compatible land use planning in the areas adjacent to the Airport to minimize the impacts of Airport noise on the community.

The Airport is owned and operated by the State of Alaska Department of Transportation and Public Facilities while the land surrounding the Airport is part of the Municipality of Anchorage (MOA). The MOA has land use control authority over the lands surrounding the Airport. A number of the comments received during the Public Comment period note that most of the land use measures included in the 1988 NCP were not implemented. Although, it is true that the land use measures have not been completely implemented, many have been partially implemented through case by case review of development proposed within the noise contours. The intent of including these measures in the Revised NCP is to encourage the Airport and the MOA to work together to draft and adopt ordinances to fully implement the land use measures through codification of the recommended compatible land use guidelines in the NCP. Approval of land use control measures in the proposed NCP, including measures from the previous NCP which have not been fully implemented, is important to the continued progress and eventual implementation of a balanced comprehensive NCP for Anchorage International Airport and the residents of Municipality of Anchorage. The MOA has submitted a letter to the FAA recognizing the importance of the MOA working with the Airport to address these issues. A representative from the MOA participated in the development of the revised NCP as a member of the Technical Advisory Committee.

The comments received during the public comment period and the responses to those comments are attached to the Record of Approval. These will be appended to the NCP to become part of the official public record.

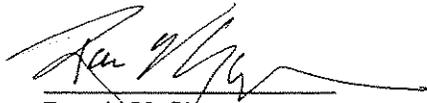
We have reviewed and evaluated the proposed NCP and have concluded that it is consistent with the intent of these statutory provisions of the Aviation Safety and Noise Abatement Act of 1979, and that it meets the standards set forth in FAR Part 150 for such programs. The requirements of Part 150 are itemized in a checklist included in the NCP, Table 1.1, pages 8-12, to ensure that all required items were present in the proposed program.

The checklist, and documentation submitted by the Director of the Anchorage International Airport were reviewed by Airports, Air Traffic, Flight Standards, and the Regional Counsel's Office. No substantive comments have been received from other participants in the study.

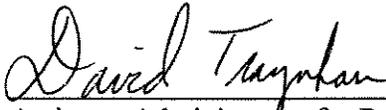
Each proposed action in the Anchorage International Airport's NCP was then reviewed and evaluated on the basis of effectiveness and potential conflict with federal policies and prerogatives. These include safe and efficient use of national airspace system, and foreign and interstate commerce free from undue burden.

Our recommendations on each of these proposed actions are described in the attached Record of Approval. Each proposed action is described in detail in the Anchorage International Airport NCP.

Based on the evaluation procedure described above, we recommend the approval of all but three of the NCP measures. At this time we recommend disapproval of Noise Abatement Measures # 1, "Enhance Nighttime Runway Use Program", and # 4, "Commuter Departure Corridor to the Southeast". Land Use Measure # 12, "Investigate Sound Barriers/Buffers" is recommended for disapproval pending the results of the Land Use Measure # 13, "Conduct Detailed Ground Noise Study".

  
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Ronnie V. Simpson

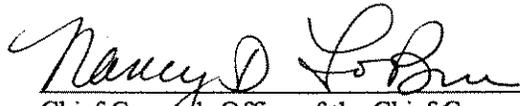
Concur

  
\_\_\_\_\_  
Assistant Administrator for Policy, Planning, and International Aviation, API-1

12/20/97  
(Date)

Nonconcur

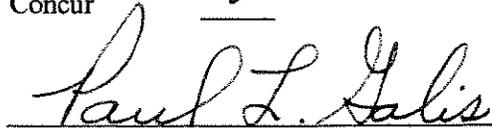
Concur

  
\_\_\_\_\_  
Chief Counsel, Office of the Chief Counsel, AGC-1

1/3/2000  
(Date)

Nonconcur

Concur

  
\_\_\_\_\_  
Acting Associate Administrator for Airports, ARP-1

1/4/00  
(Date)

Approve

Disapprove

**RECORD OF APPROVAL  
ANCHORAGE INTERNATIONAL AIRPORT  
ANCHORAGE, ALASKA**

**FEDERAL AVIATION REGULATION PART 150  
NOISE COMPATIBILITY PROGRAM**

**INTRODUCTION**

The Noise Compatibility Program (NCP) for Anchorage International Airport (ANC) includes measures to abate aircraft noise, control the development of non-compatible land use in the airport vicinity, mitigate the impact of noise on existing non-compatible land uses, and implement the program. Federal Aviation Regulation (FAR) Part 150 requires that the plan apply to a period of no less than five years into the future. The FAA approved the first NCP at ANC October 11, 1988. This is ANC's first revision.

The objective of the noise compatibility planning process is to improve the compatibility between aircraft operations and noise sensitive land uses in the area, while allowing the airport to continue to serve its role in the local, state, and national air transportation systems.

The approval activities listed herein include all those that the airport sponsor recommends be taken by the FAA. It should be noted that the approvals indicate only that the actions, would, if implemented, be consistent with the purposes of FAR Part 150. These approvals do not constitute decisions to implement the actions. Subsequent decisions concerning possible implementation of these actions may be subject to applicable environmental, aeronautical study or other procedures or requirements. The program elements below summarize as closely as possible the airport operator's recommendations in the noise compatibility program. The statements contained within the summarized recommendations and before the indicated FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

**PROGRAM ELEMENTS**

**NOISE ABATEMENT MEASURES**

Table 3.2, page 21 of the NCP is a "Summary of the Proposed Noise Abatement Elements of the Revised NCP, Compared to the FAA-Approved Elements of the Existing NCP." The FAA Record of Approval, dated August 31, 1988, of the Original Part 150 Study Noise Compatibility Program for Anchorage International Airport, is contained in Appendix A of the proposed NCP. Table 2.1, page 14, "Summary of Noise Abatement Measures, as Approved and As Implemented" summarizes the status of the Noise Abatement Measures included in the previous NCP. One of the measures, implementation of a runway use program for Lake Hood Float Plane Base was tied to the expansion of the float plane facility. As noted in Table 2.1, although the expansion of the float plane facility did not occur, a preferential runway use program was implemented based on the existing Lake Hood Seaplane base and gravel strip configuration.

### Preferential Runway Measures:

1) Enhance Nighttime Runway Use Program (Measure 3.2.1, page 21). The objective of this measure is to minimize the noise contours and the number of people significantly impacted by modifying the airport's runway use program. This measure modifies the preferential runway use measure that was included in the 1988 NCP. The earlier measure was implemented through the Airport's Preferential Runway Use Program and Noise Abatement Bulletin. The airport's primary runway use configuration consists of north flows for departures, on runway 32, and east flows for arrivals, on runway 6L and 6R, during the day. Runway 6R is used as a secondary departure runway. This measure proposes reversing the primary flows between 10 p.m. and 7 a.m. to maximize west flows for departures and south flows for arrivals. This measure would re-designate the depart Runway 24L, arrive Runway 14 configurations as the preferred nighttime runway use configuration. This measure would reduce departures to the east on runway 6R, the secondary departure runway, at night, by directing these departures to the west away from residential areas thereby maximizing over-water operations and minimizing nighttime over flight of residential areas. The benefits of this measure include a reduction of flights over east Anchorage, a shrinking of the 60-65 DNL contours resulting from fewer east departures, and a reduction in the total number of people significantly impacted by airport noise.

**FAA Determination: Disapproved for purposes of Part 150.** The population within the unabated contours (Tables 6.4 - 6.7, pages 157-161) was compared to the population in the abated contours (Tables 4.3 and 4.4, pages 45-46). There are reductions in population within the 65-69 DNL (117 people) for the 1997 comparison, there is a small increase in the population in the 70-75 DNL contour (73 people). However, the information submitted by the airport operator indicates that the net noise benefit of this measure would not continue and that the number of people in the 65-75 DNL contour may increase (45 people) by 2002.

### Noise Abatement Flight Procedures:

2) Implement Consistent Noise Abatement Departure Profiles (NADP's) on Runways 6R, 6L and 14 (Measure 3.2.2, page 22). The 1988 NCP included a measure to implement AC 91-53 and the National Business Aviation Association's (NBAA's) Close-in procedure for operations at Anchorage International Airport. The NADP's have been incorporated into the Airport Preferential Runway Use and Noise Abatement Bulletins. The purpose of this measure is to minimize the number of people significantly affected by aircraft noise from departures to the east and south. The proposed measure would require air carriers to adopt the FAA's Advisory Circular (AC) 91-53A "Close-in" or the International Civil Aviation Organization (ICAO) B for NADP's for departures on Runways 6R, 6L and 14. This measure is a modification to the 1988 NCP measure. It is designed to improve the noise reduction that can be achieved through reduced thrust settings by aircraft departing to the south and east through more *consistent* use of these approved procedures. It is anticipated that most domestic air carriers would adopt AC 91-53A "Close-in" while most foreign air carriers would adopt the ICAO B NADP procedures.

The benefits of this measure were evaluated on a Single Event basis. As shown in Figures 5.8 and 5.9, pages 70 and 81, it was determined that use of the NADP's outlined above would result

in a significantly lower number of people impacted by single event departures on runways 6R and 14.

Some pilots have indicated that they feel that the wording of the ANCHORAGE 2 and KNIK 5 Standard Instrument Departure Procedures (SID's) do not allow for use of a NADP. Specifically, the NADP requirement to reduce thrust settings has been interpreted by some carriers to be in conflict with the ANCHORAGE 2 and the KNIK 5 SID's which require aircraft to climb as rapidly as practical. The Anchorage Air Traffic Control Tower has indicated that NADPs can be used although a slight modification to the ANCHORAGE 2 and KNIK 5 SIDs may be required to ensure that there is no conflict between the SID's and the NADP's. Additionally, some pilots have also indicated that they may not have a sufficient climb gradient for departures to the east if they use an NADP, resulting in potential air space conflicts with general aviation traffic east of Seward Highway and inability to execute a turn prior to encountering high terrain to the east. The FAA acknowledges that for the heavier loaded cargo aircraft this is a valid concern. (Table 5.6, page 76)

**FAA Determination: Approved as voluntary.** This measure is approved recognizing that not all aircraft will be able to implement the NADP's consistent with the published SID's. Section 7. Operational Guidelines of AC 91-53A which states "e. This AC should not be construed to affect the responsibilities and authority of the pilot in command for the safe operation of the airplane" provides for this possibility. The FAA and the sponsor will work together to ensure that the NADP's are implemented consistent with the SID's. The NADP's would have to be implemented consistent with safe and efficient use of the airspace.

3) Conduct Detailed NADP Study (Measure 3.2.3, page 22) . The purpose of this measure is to minimize the number of people affected by aircraft departures to the east and south. Each airline adopts a close-in and a distant NADP for each aircraft type they operate. Through this study, the sponsor proposes to work with the airlines to identify the best NADP for each aircraft they operate. It may be more beneficial for some airlines to use the distant NADP instead of the close-in NADP for some aircraft types. This measure recommends a detailed study to help the sponsor and the airlines identify the optimum FAA and ICAO approved procedures for use at Anchorage International Airport by airline, aircraft type, and runway end. This would not be a modification to the airlines NADP, but would ensure that the most appropriate NADP (close-in or distant) is being used.

The benefits of this measure would be most noticeable in terms of a lesser number of people experiencing single event impacts for each departure. This measure "fine tunes" the Noise Abatement Measure 2 above and ensures that the lowest possible number of people possible are impacted during east or south departures. The single event reduction would be expected to correlate to smaller DNL contours to the east and south. (Table 5.11, page 107)

**FAA Determination: Approved for study.** This approval is based on the premise that the selection of the close-in or distant NADP will be based on each airline's adopted and published procedures consistent with AC 91-53A, or ICAO A or B NADP procedures. Further, the NADP

selected must be consistent with the safe and efficient use of the airspace and the ability to comply with published SID's.

Noise Abatement Flight Paths:

4) Noise Abatement Departure Track for Commuter Aircraft Departing to the Southeast. (Measure 3.2.4, page 22). The purpose of this measure is to reduce noise impacts to the south and east of the airport by concentrating commuter flights over areas that are primarily non-residential, over Minnesota Boulevard. This measure is intended to reduce noise from aircraft that are not following the preferential runway use configuration for air traffic separation purposes. The airports primary objective for daytime operations, between the hours of 7 a.m. and 10 p.m., is to maximize north flows for departures and east flows for arrivals. Noise Abatement Measure 1 Enhance Nighttime Preferential Runway Use above, proposes reversing the primary flows between 10 p.m. and 7 a.m. To accommodate the mix and volume of traffic at Anchorage International Airport, during high traffic periods a secondary departure flow is used to direct commuter aircraft to the east. This measure is expected to keep commuter aircraft out of the air carrier departure flow, thereby allowing Air Traffic to more efficiently implement the preferential runway use configuration. This measure also appeared to have benefits associated with reducing commuter aircraft flights over residential areas, resulting in fewer people being impacted by aircraft over flights. (Table 5.11, page 107)

**FAA Determination: Disapproved pending the submission of additional information to make an informed analysis.** Operationally, this measure is not efficient. Air Traffic controllers would lose much of the flexibility that is essential in creating an effective flow of air traffic in the Anchorage Area. The separation required between aircraft on the same flight track, as this measure proposes, is greater than aircraft on diverging tracks. Currently controllers can release a successive departure once the preceding aircraft is diverging from the runway heading. With this recommendation, the controller would have to wait until the preceding aircraft is at least 2 miles away, thereby, increasing congestion during peak periods. FAA Air Traffic would only consider this measure if the noise benefits clearly outweigh the loss in air traffic control efficiency. The NCP currently does not provide sufficient information to quantify benefits. Use of the Noise Monitoring System (Continuing Program Measure #2) may assist in providing better documentation in support of this measure.

LAND USE MEASURES

Land Use Measures are designed to prevent the addition of future new non-compatible land uses and to mitigate existing non-compatible land uses. Section 3.3, pages 23-28 summarizes the sponsor's basis for selection of the land use measures included in the revised NCP. Refer to Table 3.3, page 24, "Summary of the Proposed Land Use Elements of the Revised NCP Compared to FAA-Approved Elements of the Existing NCP", and Table 6.12, page 169, "Implementation Status of Land Use Measures Recommended in the Original AIA Part 150 Study" Table 6.25, pages 185-186 for a summary of the land use measures recommended in the revised NCP.

Study” Table 6.25, pages 185-186 for a summary of the land use measures recommended in the revised NCP.

A number of the comments received during the Public Comment period note that most of the land use measures included in the 1988 NCP were not implemented. Although, it is true that the land use measures have not been completely implemented, many have been partially implemented through case by case review of development proposed within the noise contours. The intent of including these measures in the revised NCP is to encourage the Airport and the MOA to work together to draft and adopt ordinances to fully implement the land use measures through codification of the recommended compatible land use guidelines in the NCP. The MOA has submitted a letter to the FAA recognizing the importance of the MOA working with the Airport to address these issues. This letter dated May 4, 1999, and signed by the Mayor of Anchorage, is included in Appendix C of the NCP.

The MOA is updating its Comprehensive Plan. Inclusion of the Airport’s noise contours and compatible land use guidelines in the Comprehensive Plan would provide the framework for implementation of all other land use control measures. Approval of land use control measures in the proposed NCP, including measures from the previous NCP which have not been fully implemented, is essential to the continued progress and eventual implementation of a balanced comprehensive NCP for Anchorage International Airport and the residents of the Municipality of Anchorage.

Sections 6.4-6.6, page 148-166, of the NCP present the sponsor’s rationale for adoption of the DNL 60 dB as the contour for application of the land use control measures which are designed to prevent the addition of future non-compatible land uses. Table 6.10, page 166, shows that there are approximately 3,760 residents within the DNL 60dB and greater contours. Measures 3.3.1 through 3.3.10 are preventative land use measures.

Measures 3.3.11, and 3.12 are remedial measures intended to mitigate existing non-compatible development within the DNL 65 dB and greater contours. Measure 3.3.13 is for ground noise study.

As of October 1, 1998, in accordance with FAA policy announced in the April 3, 1998 Federal Register (63 FR 16409-16414), the FAA will approve under FAR Part 150 only remedial noise mitigation measures for existing non-compatible development and only preventative measures in areas of potential new non-compatible development. The FAA will not approve remedial noise mitigation measures for new non-compatible development that occurs after October 1, 1998. Accordingly FAA approval of remedial measures contained in this NCP extends only to existing non-compatible development.

1) Existing Measure, Compatible Use Zoning. (Measure 3.3.1, page 23) The objective of the measure is to minimize the number of people significantly impacted by airport noise by the MOA establishing a firm policy against re-zoning or authorizing conditional uses for any new development of residences within the 1997 DNL 60 dB and above contours. This measure was included in the 1988 NCP and has been partially implemented through the sponsor’s review and

comment on rezoning applications within the noise contours. This measure revises the 1988 NCP measure by updating the applicable contour to the 1997 DNL 60 dB and above contour. The sponsor will assist the MOA in preparation of an ordinance to implement this measure. (Table 6.25, page 185)

**FAA Determination: Approved.**

2) Existing Measure, Mobile Home and Camper Park Restrictions (Measure 3.2.2, page 25). The objective of this measure is to minimize the number of people significantly impacted by airport noise by the MOA establishing a firm policy against re-zoning or conditional uses that would allow any new development of mobile home structures and camper parks within the 1997 DNL 60 dB and above contours. This measure is designed to prevent the development of any new mobile homes or camper parks within the DNL 60 dB and above noise contour. This measure was included in the 1988 NCP and has been implemented on a case by case basis through the sponsor's review and comment on rezoning applications with these contours. The sponsor will assist the MOA in preparation of an ordinance to implement this measure. (Table 6.25, page 185)

**FAA Determination: Approved.**

3) Revised Measure, Soundproofing Requirement for New Development (Measure 3.3.3, page 25). The purpose of this measure is to reduce noise impacts by requiring that all new residential development within the 1997 DNL 60 dB and above contours incorporates sound attenuation measures to reduce interior noise levels. This measure would be implemented by the MOA through local modifications to the Uniform Building Code. This measure was included in the 1988 NCP and was partially implemented through plat notes on new subdivisions with the noise contours. This measure has been modified to increase flexibility in meeting the noise reduction requirements. The sponsor will assist the MOA in preparing proposed revisions to the building code. (Section 6.2.4, page 144 and 185)

**FAA Determination: Approved.** This is within the authority of the responsible local land use planning jurisdictions. The FAA believes that prevention of additional residential land uses with the DNL 65 dB noise contour is highly preferred over allowing such uses even with sound attenuation. The airport operator and the MOA are urged to pursue all possible avenues to discourage new residential development within these levels of noise exposure.

4) Existing Measure, Noise Levels on Plats (Measure 3.3.4, page 25). The objective of this measure is to reduce noise impacts on Anchorage residents by ensuring that the noise environment is taken into consideration during construction, and that potential land-owners are notified of the noise environment before the land is purchased. This measure was included in the 1988 NCP and has been implemented by the MOA by inclusion of plat notes on new subdivision plats. The sponsor and the MOA continue to work to improve the wording of the plat notes and to ensure that these notes are effective. Inclusion of this measure in the Revised NCP will help assure that work continues on this measure and that airport noise impacts are minimized in newly

platted areas. The sponsor will assist the MOA in revising the wording of plat notes and in ensuring that the plat notes used are effective. (Page 185)

**FAA Determination: Approved.** This is within the authority of the responsible local land use planning jurisdictions. The FAA believes that prevention of additional residential land uses with the DNL 65 dB noise contour is highly preferred over allowing such uses even with sound attenuation. The airport operator and the MOA are urged to pursue all possible avenues to discourage new residential development within these levels of noise exposure.

5) Existing Measure, Comprehensive Planning (Measure 3.3.5, page 25). The objective of this measure is to reduce future noise impacts on Anchorage residents by ensuring that land use planning and development within the noise contours is consistent with the land use compatibility guidelines in the NCP. This measure was included in the 1988 NCP. The MOA Comprehensive Plan has not been updated since 1982. Inclusion of the sponsor's noise contours and land use compatibility guidelines in the MOA Comprehensive Plan would provide the framework for implementation of all other land use measures. The sponsor is working with the MOA on their Comprehensive Plan Update, which is currently underway. Inclusion of this measure in the Revised NCP ensures that this important work continue through adoption of the Comprehensive Plan Update. The sponsor will continue to work with the MOA to ensure that the Comprehensive Plan adequately addresses land use compatibility in the Airport vicinity. (Section 6.2.1, page 141, and 185)

**FAA Determination: Approved.**

6) Existing Measure, Planning Commission Review (Measure 3.3.6, page 26). The objective of this measure is to reduce future noise impacts on Anchorage residents by ensuring that land use planning and development within the noise contours is consistent with the land use compatibility guidelines in the NCP. The measure would be implemented through the Planning Commission's adoption of the land use compatibility guidelines in the NCP. This measure was included in the 1988 NCP. The sponsor has briefed the Planning Commission on Airport noise compatibility issues and has provided comments on land use compatibility on a case by case basis for proposed developments within the contours. Inclusion of this measure in the Revised NCP will facilitate full implementation of this measure through adoption of the guidelines. The sponsor will continue to work with the Planning Commission on the adoption of the land use compatibility guidelines. (Page 186)

**FAA Determination: Approved.**

7) Existing Measure, Public Land Development Criteria, Measure 3.3.7, page 26). The objective of this measure is to reduce future noise impacts on Anchorage residents by ensuring that public lands within the noise contours are developed compatibly. The measure would be implemented through the Planning Commission's adoption of the land use compatibility guidelines in the NCP and inclusion of the guidelines in the MOA Comprehensive Plan Update. This measure was included in the 1988 NCP. The sponsor has briefed the Planning Commission on Airport noise compatibility issues and has provided comments on land use compatibility on a case by case

basis for proposed public land developments within the contours. Inclusion of this measure in the Revised NCP will allow full implementation of this measure through adoption of the land use compatibility guidelines in the NCP. The sponsor will continue to work with the Planning Commission on the adoption of the land use compatibility guidelines for development of public lands. (Table 6.25, page 186)

**FAA Determination: Approved.**

8) New Measure, Noise Overlay Zone (Measure 3.3.8, page 25). The objective of this measure is to reduce future noise impacts on Anchorage residents by ensuring that land use planning and development within the noise contours is consistent with the land use compatibility guidelines in the NCP and by ensuring that potential land owners are aware of the noise environment prior to making a land purchase decision. This measure will also serve to facilitate implementation of many of the other land use measures discussed above. This measure would be implemented through adoption of a zoning ordinance by the MOA Assembly. The sponsor will work with the MOA to draft this ordinance. (Table 6.14, page 172)

**FAA Determination: Approved.**

9) New Measure, Fair Disclosure Policy (Measure 3.3.9, page 26). The objective of this measure is to reduce future noise impacts on Anchorage residents through ensuring that potential land owners are aware of the noise environment prior to the land purchase decision. The sponsor will work with the State Real Estate Commission or the State Legislature to implement this measure through changes to the State Real Estate Disclosure Form and/or changes to the State Statutes on Real Estate Disclosure. The sponsor is also working with the State Real Estate Commission to implement this measure. (Table 6.16, page 174)

**FAA Determination: Approved.** This is within the authority of the responsible local land use planning jurisdictions.

10) New Measure, Land Banking (Measure 3.3.10, page 27). The objective of this measure is to reduce future noise impacts on Anchorage residents and prevent the addition of new non-compatible land uses through purchase of vacant residentially zoned lands in the 65 DNL dB and above noise contours. This measure is intended to acquire noise-impacted property for future public use. It involves the fee-simple acquisition of privately owned, vacant land by a local public agency, either the State of Alaska DOT& PF or the MOA, to prevent non-compatible development within the 1997 DNL 65 dB and greater noise contours. The sponsor proposes to acquire up to 37 acres of vacant residentially zoned property within the 1997 DNL dB and greater contour. Based on current zoning, this could prevent the development of roughly 154 new residences with an estimated population of 354.

The sponsor has included this measure in the revised NCP since these vacant tracts of land are threatened with “imminent development” due to lack of existing compatible use zoning and the lack of certainty associated with the time frame for the MOA to implement compatible use zoning. The Municipality of Anchorage is currently updating its Comprehensive Plan. One of

the major issues being addressed in the Comprehensive Plan is the lack of sufficient land for residential development. Because the Anchorage Bowl is geographically limited, with mountains on one side and water on the other, there is a limited land base. The existing supply of vacant residential land is not expected to be sufficient to meet housing needs over the next 20 years at current zoning densities. Thus, vacant residential lands throughout Anchorage are in high demand for residential development.

The lands included under this measure are thus considered to be under imminent threat of development. These lands are close to the airport and are significantly impacted when the airport is in certain runway use configurations. These areas are also impacted by ground noise, which is not reflected in the INM noise contours. Many of these lands are currently being reviewed by the MOA's Platting Board or the Planning & Zoning Commission for proposed moderate density residential development. There is very little chance that any of these lands would be developed in compatible uses, when there is such a high demand for residential development. (Table 6.22, page 181)

**FAA Determination: Approved** under 14 CFR Part 150 for acquisition by the airport operator with respect to vacant land within the DNL 65 dB and above where it can be demonstrated that the property is in imminent danger of being developed non-compatibly. The FAA understands that, as part of this measure, the DOT & PF and the MOA will pursue compatible land use zoning changes to permit property disposal in accordance with 49 USC 47107( c) (2)(A). FAA does not consider this to be "land banking", but rather acquisition of land to prevent noncompatible land uses, which is consistent with Part 150 approval criteria. Land acquired under this measure must comply with AC 150/5100-17 "Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects", and FAA Order 5100.38A "Airport Improvement Program Handbook", Chapter 2, Land Acquisition Projects."

11) New Measure, Soundproofing for Existing Development (Measure 3.3.11, page 27). The objective of this measure is to reduce existing noise impacts on Anchorage residents through soundproofing existing residential areas within the 65 DNL dB and above contours. There are approximately 645 residences within the 1997 DNL 65 dB and greater contours with an estimated population of 1,500. A pilot program would be used to establish appropriate construction techniques to achieve the required Noise Reduction Level. The sponsor intends to obtain avigation easements in return for property owner participation in the sound insulation program. The estimated cost to implement this measure is \$13.5 million. (Table 6.23, page 182)

**FAA Determination: Approved.** Consistent with FAA's "Policy on Approval of Noise Mitigation Measures: Effect on the Use of Federal Grants for Noise Mitigation Projects" published in the Federal Register on April 3, 1998, FAA approval of this measure extends only to existing non-compatible development constructed before October 1, 1998. Soundproofing would be eligible for homes or schools that meet FAA Order 5100.38A "Airport Improvement Program Handbook", Section 712. Noise Insulation Projects, for a measurable Noise Reduction Level (NRL) of at least 5 dB to obtain an interior noise level of DNL 45 dB or less.

12) New Measure, Investigate Sound Barriers/Buffers (Measure 3.3.12, page 27). The objective of this measure is to reduce existing and future noise impacts on Anchorage residents through construction of noise buffers, barriers, berms, or ground ramp enclosures to reduce noise in nearby areas. The sponsor would implement this measure by conducting a ground noise study to determine how best to reduce ground noise or otherwise mitigate ground noise impacts.

**FAA Determination: Disapproved pending the results of the detailed study conducted under Measure 3.3.13, Conduct Detailed Aircraft Ground Noise Study, to determine the noise benefits and acceptability of the location of proposed sound barriers and/or berms.** Upon submission of additional information, including proposed types, location, and expected noise level reduction and numbers of people expected to benefit from any proposed barriers or buffers, the FAA will reevaluate this measure.

13) New Measure, Conduct Detailed Aircraft Ground Noise Study (Measure 3.3.13, page 27-28). The objective of this measure is to address concerns regarding noise from aircraft ground operations. The sponsor would implement this measure by conducting a detailed ground noise study that will examine the extent of aircraft ground noise, identify changes in aircraft ground operations to abate ground noise, and recommend appropriate mitigation measures, such as barriers, berms, and ground ramp enclosures.

**FAA Determination: Approved for Study.** The FAA and the sponsor entered into a grant agreement in August 1999 to conduct this Ground Noise Study using the Airport's Entitlement funds.

### CONTINUING PROGRAM MEASURES

Continuing program measures are administrative actions which the State DOT & PF will use to implement, monitor, and manage the noise abatement and land use measures. Sections 3.4.1 through 3.4.10, page 28 through 33, summarize the sponsor's basis for recommending these continuing program measures. Table 3.4, page 29, summarizes the ten proposed measures, noting whether each is an existing measure, a modification to an existing measure, or a new measure.

1) Existing Measure, Noise Advisory Committee (Measure 3.4.1, page 28). Although the establishment of a Noise Advisory Committee (NAC) was a recommendation of the 1988 NCP, the Committee was never established. NACs are critical to the successful implementation of NCPs. A NAC would monitor the sponsor's progress in implementing the NCP, provide input and guidance when difficulties arise, streamline the decision making process, and provide a means of disseminating information about the NCP directly to the affected public. The current Airport Part 150 Update TAC membership, which includes members of the community, airport users, the sponsor, and the FAA, provides a logical starting point for the creation of an ongoing NAC. The TAC has been intimately involved in the development of the revised NCP.

**FAA Determination: Approved.**

2) Revised Measure, Noise Monitoring (Measure 3.4.2, page 28) The purpose of the monitoring system is to provide the sponsor with objective and accurate information to use in implementing NCP elements, monitoring the effectiveness of the NCP, and responding to citizen inquiries. It is particularly effective as a tool for educating pilots on proper noise abatement procedures. The 1988 NCP included noise monitoring by a consultant on an as-needed basis. The sponsor conducted a limited number of noise measurements using noise measurement equipment which has since become outdated. Noise measurements were taken during the development of the revised NCP. The results were useful in identifying the cumulative noise exposure in the community as well as identifying differences in the noise exposure of individual aircraft operations. Noise monitoring continues to be a useful element of the NCP. The flight track monitoring system is critical to the monitoring and implementation of the approved noise abatement measures. The sponsor seeks to purchase an integrated aircraft noise and flight track monitoring system with a combination of permanent and portable noise monitors, flight track monitoring system, and central database management capabilities.

**FAA Determination: Approved.**

3) Existing Measure, Complaint Response (Measure 3.4.3, page 30). The sponsor has implemented the 1988 NCP recommendation of collecting and analyzing aircraft noise complaints. The current complaint hotline provides information on airport operations and allows the caller to record a noise comment or complaint. The noise complaint hotline is also checked on weekdays by the airport's noise program manager. This revised measure recommends that noise complaints be entered into the airport's noise complaint database. The level of noise complaints could require airport administrative staff to transcribe complaints and enter them into the database. Continuation of the current complaint system provides an efficient means of recording and responding to noise complainants and provides a method of tracking noise complaint data.

**FAA Determination: Approved.**

4) Existing Measure, Regulations and Agreements (Measure 3.4.4, page 30). The objective of this measure is to increase adherence to noise abatement measures through widespread notification and dissemination of the noise abatement regulations. This measure included in the 1988 NCP covered a wide range of techniques designed to establish airport noise abatement regulations, obtain agreements with the FAA ATCT, and disseminate the noise abatement procedures to the aircraft operators. The sponsor has implemented most of the recommendations covered under this measure in the 1988 NCP including established preferential runway use programs, agreements with the ATCT and other airport policies to implement the airport's noise abatement program. The outstanding measures will be implemented as part of the revised NCP to ensure that pilots are more aware of the airport's noise abatement program. These measures included signs (Continuing Program Measure #8), implementation of consistent noise abatement departure procedures (Noise Abatement Measure #2), and a pilot information brochure (Continuing Program Measure # 10).

**FAA Determination: Approved.** The sponsor has prepared an errata sheet to clarify certain elements of the NCP. The errata sheet clarified that this measure applied only to “airport regulations” and not to FAA regulations. Any airport regulation, policy or agreement amended to implement this measure must be in compliance with Federal laws, regulation, and policies.

5) Existing Measure, NEM and NCP Review and Revision, (Measure 3.4.5, page 30-31). This measure provides for updating the NEM and the NCP as needed, to ensure their continued accuracy, efficiency and effectiveness. The NCP would be updated to respond to changes in airport operating conditions and to changes in external conditions, such as land uses. This element provides continuing review and revision of the NEM and NCP as well as providing for amendments to the NCP between updates. This measure would be implemented consistent with section 150.21(d) of FAR Part 150 outlining the conditions for submission of revised noise exposure maps.

**FAA Determination: Approved.**

6) New Measure, Noise Program Manager (Measure 3.4.6, page 31). Following the original Part 150 1988 Study, the sponsor established a Noise Program Manager position. This measure recognizes the existence of the position and acknowledges the key role the Noise Program Manager will play in implementing the revised NCP. The Noise Program Manager serves as a community liaison regarding noise issues, collection of and response to noise complaints, implementation of the NCP, and ongoing noise compatibility planning efforts. The Noise Program Manager’s current duties include other non-noise issues. The Noise Program Manager is a critical element of the ongoing implementation and success of the NCP.

**FAA Determination: Approved.**

7) New Measure, Noise Information Page on Anchorage International Airport (AIA) Web Site (Measure 3.4.7, page 32). The objective of this measure is to provide another method for the sponsor to disseminate information about its noise abatement and mitigation efforts and to receive input from interested parties. AIA maintains a home page on the Internet that includes information about the airfield layout, available services, and historical level of operations. AIA’s web page also provides information about the airport’s aircraft noise control bulletins, AIA’s noise abatement program, and the AIA Part 150 Update. This measure would enhance the sponsor’s web page by adding an e-mail link to the Noise Program Manager and information on the adopted NCP and implementation status of the approved measures.

**FAA Determination: Approved.**

8) New Measure, Airfield Signs (Measure 3.4.8, page 32) This measure is an important means of maximizing the benefits of noise abatement measures. The sponsor plans to install up to eight signs on AIA and Lake Hood Float Plane facility that inform departing pilots of the key noise abatement procedures and indicate locations and headings for ground runup procedures. The signs will be located where aircraft hold prior to takeoff and where aircraft conduct runups.

Although the original AIA Part 150 Study NCP included signs, the sponsor has not acquired and installed them.

**FAA Determination: Approved.** This approval does not extend to the wording on, or placement of, signs which must be reviewed and approved by the Alaskan Region Airports Division prior to installation.

9) New Measure, Public Information Program (Measure 3.4.9, page 32). The objective of this measure is to communicate with outside parties, to ensure that the NCP is efficiently and effectively implemented. The sponsor will pursue a public information program through verbal and written briefings to the NAC, MOA Planning and Zoning Commission, and neighboring Community Councils. This program would also include an educational seminar on aircraft noise disclosure for local realtors, developers, and lenders. The sponsor will develop AIA “fact sheets” on aircraft noise issues at AIA that respond to frequently asked questions about noise at AIA. The sponsor may also develop a quarterly newsletter dedicated to airport noise issues.

**FAA Determination: Approved.**

10) New Measure, Pilot Manual Insert (Measure 3.4.10, page 33). The objective of this measure is to maximize the benefits of the noise abatement measures. Most pilots operating at AIA in multi-engine or jet aircraft and many of those operating in single engine aircraft subscribe to a service which provides regular updates to a reference manual on instrument procedures in use at airports. This publication is produced by Jeppesen-Sanderson, Inc. Under this measure, the sponsor would arrange for the printing of a full-color informational insert in a format that is compatible with the Jeppesen- Sanderson manual. These types of inserts have been a very successful means of educating pilots on the details of noise abatement procedures at other locations. Based on their effectiveness at other airports, the sponsor proposes to include this measure.

**FAA Determination: Approved.** Proposed language should be submitted to the FAA for review prior to publication.