## Part 150: Records of Approval

### Oakland County International Airport, Waterford, Michigan

#### **Approved on 8/25/99**

The Noise Compatibility Program (NCP) for Oakland County International Airport in Waterford, Michigan, describes the current and future non-compatible land uses based upon the parameters as established in FAR Part 150, Airport Noise Compatibility Planning. The Oakland County Airport Committee recommended eleven (11) measures in its NCP to remedy existing noise problems and prevent future non-compatible land uses.

Each measure of the recommended NCP is identified below, which includes a summary of the airport operator's recommendations (Issues), the category of the measure (Land Use, Noise Abatement, and Program Management) and a cross reference to page numbers in the NCP where each measure can be found. The current Noise Exposure Map (NEM) (existing 1996) and forecast NEM (2002) are found on pages C.47 and H.4, respectively. The forecast conditions NEM at

page H.4. includes noise mitigation measures recommended for approval. Chapter H deals with recommended noise abatement strategies and land use strategies, along with the program management recommendations. Chapter I describes the priority for implementation, and the Roles and Responsibilities for each recommendation.

The approvals listed herein include approvals of actions that the airport recommends be taken by the Federal Aviation Administration. It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. These approvals do not constitute decisions to implement the actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements.

The recommendations in the Record of Approval summarize as closely as possible the airport operator's recommendations in the NCP. 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.

### <u>Issue One, Land Use Measure, Voluntary Acquisition of Residences (pages H5-H7)</u>

The Airport will purchase, on a voluntary basis, all homes within the 70 DNL noise contour as shown on the Existing Noise Exposure Map (page C.47) and the Noise Remedy Boundary Map found on page H.7. The Airport could then sell or lease the property for a compatible use. Those homeowners not wishing to sell would be eligible for sound attenuation.

FAA Determination: Approved. Approximately 66 homes would be eligible for this home purchase option.

# <u>Issue Two, Land Use Measure, Reduction of Noise Sensitive Land Uses Within the Airport Environs (pages H8-H9)</u>

The Airport will sound attenuate, on a voluntary basis, those single family homes within the 65 or greater DNL noise contour, which are economically feasible to attenuate, based on the Existing Noise Exposure Map and the Noise Remedy Boundary Map found on page H.7. A pilot program would be instituted to determine, through acoustical surveys, what type of sound attenuation is necessary to reduce noise levels to achieve at least a maximum 45 dB interior noise level. The airport would receive a noise easement in return for the sound attenuation.

FAA Determination: Approved. Approximately 700 single family homes are within the DNL 65 dB noise contour. In addition, the airport has indicated that homeowners within the DNL 70 dB noise contour that do not wish their homes to be purchased would be eligible for this option. (supplemental letter dated June 18, 1999)

## <u>Issue Three, Program Management Measure, Noise Complaint/Citizen Liaison Program (page H10)</u>

The Airport will continue its Noise Concern/Citizen Liaison Program to record all noise concerns received from citizens. This action would assure that the airport can explain the nature of the concern and what caused the concern. Records of these concerns would assist in the annual review of the Part 150 study to determine the effectiveness of the noise abatement procedures and in identifying new noise sensitive areas. This liaison is also important in the implementation of the Fly Quiet Program.

FAA Determination: Approved.

Issue Four, Program Management Measure, Update and Review of the FAR

#### Part 150 Study (pages H11-H13)

The Airport will update and monitor the FAR Part 150 Study at the five-year increments or when there is a significant change in aircraft types or numbers of operations. The Airport will monitor the aircraft types and numbers which operate at the Airport to determine changes in the forecasts contained in the FAR Part 150 Study. The Airport would reevaluate the program when there is a significant change in operations or aircraft types or at the end of the five-year timeframe.

FAA Determination: Approved.

Issue Five, Noise Abatement Measure, Reduction of Potential Noise Intrusion in the Airport Environs ("Fly Quiet" Program) (pages H14-H17, Figure F4, Table F1, pages G2 and G3, and supplemental sponsor letter dated June 18, 1999)

The Airport will institute a Fly Quiet Program in an effort to voluntarily reduce the noise levels associated with aircraft operations at the airport. The Fly Quiet Program consists of five elements:

Noise Abatement Departure Procedures. Jet aircraft are to depart using NBAA departure procedures. This element of the Fly Quiet program is to reduce the single event noise levels during departure.

Pilot Awareness Pamphlet. A pamphlet is to be prepared that outlines the sensitivity of noise impacts at this airport and what noise abatement measures are within the program. The pamphlet is to describe where the noise sensitive land uses are and the preferred flight paths in and out of the airport.

Loudest Noise Event Tracking. The airport currently operates a noise complaint hotline. When complaints are received, the airport will make efforts to identify the operator of that aircraft and notify them about the airport.

Spot Noise Monitoring. This may be completed to determine the single event noise levels from aircraft operating at the airport. Aircraft operations that generate higher than typical levels for that type of aircraft will be identified and notice given concerning the airport's Fly Quiet program.

Stage II Phase Out Efforts. The airport institutes a program to voluntarily reduce the percentage of Stage II [aircraft weighing less than 75,000 pounds] operations at the airport. These efforts are for both daytime and nighttime operations. Annual goals are established for which the actual levels are compared against. Airport staff will meet with the various airport tenants and major transient operators to work with them in the phase in of Stage III aircraft with the goal being an all Stage III fleet.

FAA Determination: Approved as voluntary. For reasons of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in-situ measurement of any pre-set noise thresholds (the FAA notes that the OAK NCP does not include such thresholds). Table F1 shows the benefits of the Fly Quiet Program. The noise abatement departure procedures would provide a single event reduction; the Stage II phase out efforts, if successful, would reduce the numbers of people impacted from 1,180 to 941.

<u>Issue Six, Noise Abatement Measure, Reduction of Noise Intrusion Due to Maintenance Run-Ups</u> (pages H18-H19; Figures G1, G2, page G4; Table F1; supplemental letter dated June 18, 1999)

The Airport will construct a run-up enclosure to be used for all business jet run-up operations. The enclosure should be constructed in the southwest portion of the airport. The Airport will construct the facility and require all operators to use it.

FAA Determination: Approved. This measure is expected to reduce the numbers of people exposed to noise on the ground by nearly 300 people (Table F1, Alterna- tive A2). The airport operator also has indicated that an increase in airport efficiency can be expected because location and use of the enclosure would eliminate the movement of taxiing aircraft to and from the existing locations.

<u>Issue Seven, Noise Abatement Measure, Reduce Noise Intrusion Due to Aircraft Ground Operations (pages H20-21, supplemental letter dated June 18, 1999)</u>

The Airport will construct a noise wall along the north boundary of the airport in the northeast section of airport property. There are several homes adjacent to the north boundary of the airport that experience aircraft noise due to ground operations at the airport. In addition, a noise wall is to

be constructed on the northeast corner of the airport only if the homes recommended for purchase are not purchased.

FAA Determination: Approved.

<u>Issue Eight, Noise Abatement Measure, Reduce Noise Intrusion Due to Aircraft Ground</u> Operations (page H22)

Until the noise wall is built, the Airport will amend its Rules and Regulations to require the use of tugs in the northeast FBO area to pull Stage II jet aircraft to the taxiway. This action is temporary in nature and is recommended only until the noise wall is constructed.

FAA Determination: Approved as voluntary. This is a temporary measure whereby the noisier, Stage II aircraft will be towed from the apron to the taxiway in preparation for takeoff. This activity will cease upon completion of the noise wall.

<u>Issue Nine, Land Use Measure, Reduction of Potential Noncompatible Land Uses (pages H23-H25)</u>

Amend the Comprehensive Plan for both Waterford and White Lake Townships to reflect compatible future land use development. It is recommended that all noise sensitive uses (schools, churches, hospital, libraries, etc.) along with "in fill" residential development be prohibited from the 65 DNL noise contours unless sound attenuated to achieve at least a 25 dB inside noise reduction. An avigation easement should be granted to both the Township and County as part of the building permit process for any such use to be constructed within the designated noise contours shown on the Existing Noise Exposure Map. All such structures should be prohibited within the 70 DNL noise contour. It is also recommended that the Townships require disclosure statements on all subdivision plats for those subdivision, within the noise contours.

FAA Determination: Approved. This action is considered to be within the authority of the affected local governments.

<u>Issue Ten, Program Management Measure, Reduction of Potential Noise Intrusion in the Airport Environs (pages H26-H27, Table H1, page G3, Table F1, page F2, Figure F1)</u>

If it is determined that the Fly Quiet Program is not meeting the voluntary Stage II phase out goals, then the Airport should initiate the request to fund an FAR Part 161 Study to evaluate the use of Stage II business jets at night, or other measures as appropriate. After the Fly Quiet Program is in place for five years, a determination will be made concerning the initiation of an FAR Part 161 Study.

FAA Determination: Approved for study. The airport operator proposes to evaluate mandatory airport noise or access restrictions to further reduce the DNL 65 dB noise contour if the Fly Quiet Program does not accomplish the anticipated DNL reduction. Approval to conduct an analysis of proposed mandatory restrictions in accordance with 14 CFR Part 161 requirements may not be construed as approval of any action to implement a recommendation contained in that analysis. Neither is approval to conduct the analysis required by 14 CFR Part 161 a commitment by FAA to grant approval of any recommendation nor to otherwise concur in any recommendation.

In the comparison of alternatives on page F10, Table F1, the Fly Quiet Program is expected to reduce the numbers of people impacted from 1,420 to 941. These residual impacted properties

are expected to be only partially mitigated through the sound attenuation and purchase programs. If the Fly Quiet Program does not achieve this mitigation, the airport anticipates that a nighttime curfew on Stage 2 aircraft operations may reduce the number of impacted people to 665 (page H3, Table H1).

<u>Issue Eleven, Program Management Measure, Evaluation of Noise Abatement Program and Land Use Changes (pages H28-H29, supplemental letter dated June 18, 1999)</u>

The Advisory Committee organized for the Part 150 Study will remain in place subsequent to the completion of the Part 150 Study and meet on a semi-annual basis to discuss noise abatement issues and to evaluate the progress of the Fly Quiet Program. The meetings will be facilitated by a Consultant familiar with the aircraft noise and land use issues at the airport.

FAA Determination: Approved.