

CHAPTER 13

PROGRAM BENEFITS, COSTS, REVIEWS, AND UPDATES

13.1 BENEFITS

The Noise Compatibility Program (NCP) is designed to provide noise reduction benefits to the overall community. The NCP gains compatibility through the use of noise abatement operational procedures, land use planning and control mechanisms, and through various means of notification and publications.

13.1.1 Aircraft Operational Programs Proposed for the Benefit of Existing Residents

Under the recommended NCP, a primary goal is to decrease the amount of noise exposure around the OSU Airport. Several programs are recommended to help achieve this goal. Existing residents will benefit from the implementation of these measures, while the future residents will benefit from the preventive land use programs.

- Continuation of the established OSU Airport Noise Abatement Guidelines will continue to help reduce noise exposure on communities around OSU Airport.
- Improving pilot training techniques will help further educating the student pilots on the location of noise-sensitive areas around OSU Airport.
- Educating pilots on why head-to-head operations should not be flown will help decrease the noise exposure on communities around OSU Airport.
- Enhancing the helicopter published procedures by identifying noise-sensitive land uses will help to educate the pilots on the noise-sensitive nature of the communities surrounding OSU Airport.
- Establishing preferential arrival paths will direct aircraft over areas where population density is less, thereby reducing the number of people subjected to aircraft noise exposure.
- Establishing preferential departure paths will direct aircraft over areas where population density is less, thereby reducing the number of people subjected to aircraft noise exposure.
- Developing and publishing RNAV arrival procedures for Runways 9R and 9L (if extended), and RNAV departure procedures for Runways 27R (if extended) and 27L, will direct a portion of arriving and departing aircraft over commercial industrial uses, thereby reducing the number of people subjected to aircraft noise exposure.
- Publishing visual approaches will assist the pilots in avoiding noise-sensitive areas when conditions permit.
- Adding language to the OSU Airport Noise Abatement Guidelines describing the noise sensitive nature of the surrounding area will help raise the awareness of the aircraft operators.

13.1.2 Land Use Programs Proposed for the Benefit of Future Residents

Under the recommended NCP, a primary goal is to ensure compatible land uses around OSU Airport. Several programs are recommended to help achieve this goal. While no corrective land use programs are recommended for existing residents, because there are no incompatible land uses within the existing and future 65 DNL contour, future residents will benefit from the preventive land use programs.

- Working with the City of Columbus on the redesign and establishment of overlay zones will benefit future residents by restricting land uses close-in to OSU Airport to only those uses considered compatible with aircraft operations.
- Working with the City of Columbus on the redesign and establishment of building codes in the overlay zones will benefit future residents by ensuring that the land uses permitted within the overlay zones contain sufficient sound insulation to be compatible with aircraft operations.

13.1.3 Programs Recommended for Continuing Communication with Communities and Airport Users

Communication with local communities and airport users regarding the programs being implemented to reduce incompatible land uses is critical to the success of any NCP.

- Continuing with the existing public involvement program to provide a point of communication for local residents will benefit those impacted by aircraft noise.
- Developing and distributing an insert for pilots to use in conjunction with their Jeppesen charts will help to reduce noise exposure on the communities around OSU Airport.
- Upgrading the AirScene software and hardware to the newest version as they become available will provide OSU Airport with an up-to-date tool for monitoring the noise abatement programs and disseminating information to the local residents regarding aircraft noise concerns.

13.1.4 Programs for the Benefit of Long-Term Airport Investment

The implementation of the proposed land use and operational recommendations in the NCP would help protect the investment in OSU Airport by minimizing current aircraft noise exposure on noise-sensitive land uses and reducing the potential for development of future noise-sensitive land uses in high aircraft noise exposure areas.

- Having OSU Airport staff manage the implementation of the NCP will ensure the continued implementation of the recommended programs.
- Monitoring the need to update the noise exposure maps, based on operations and operational characteristics of OSU Airport, will benefit OSU Airport by ensuring land uses around OSU Airport remain compatible with aircraft operations.

13.2 ESTIMATED PROGRAM COSTS AND TIMING FOR IMPLEMENTATION

Table 13.1 provides the estimated costs for the implementation of the NCP. The cost of some measures may be quantifiable and, for others, both the costs and the benefits are more qualitative and, in most instances, minor. For those cases where the costs are quantifiable, the cost estimate represents a preliminary indication of the noise-related funding that may be requested from the FAA following the approval of the NCP.

The preliminary timing for implementation of each of the elements of the program is presented in **Table 13.2**. The timing assumes that the NCP would be approved by the end of 2010. Many of the recommendations are the responsibility of OSU Airport staff and can continue without waiting for NCP approval.

13.3 REVIEW AND UPDATES

With the implementation of the actions proposed in this 14 CFR Part 150 Study, the noise-related land use controls around OSU Airport to reduce the potential for future incompatible development, as well as to address the existing noise exposure, would be maintained.

The primary review associated with the NCP would be to monitor all elements that make up the NCP and to make sure they are all implemented. This means that the existing Noise Abatement Guidelines continue to be used, updates to those programs are implemented, and new programs proposed are developed and implemented.

The 14 CFR Part 150 Study should be updated on a regular basis. Usually the reason for an update is to ensure that the assumptions used remain valid (particularly the operational activity) and to document the success of the implemented NCP. Sometimes these updates occur when OSU Airport is completing a planning study and new aviation forecasts are prepared that differs significantly from the one used for this Study, or the number of and types of operations at OSU Airport change significantly. However, since a 14 CFR Part 150 Study is voluntary on behalf of OSU Airport management and not required by the FAA, the need and timing for preparing an update would be at the option of OSU Airport management.

**TABLE 13-1
 ESTIMATED COST OF NOISE COMPATIBILITY PROGRAM**

	NOISE COMPATIBILITY PROGRAM MEASURE	ESTIMATED COST	IMPLEMENTING AUTHORITY
A.	Align Downwind Leg of Training Pattern South of OSU Airport with Bethel Road	No cost associated with implementing this action	FAA ATC Airport Management
B.	Establish Map Exhibiting Noise Sensitive Areas	OSU Airport staff developing the map will cost approximately \$500	Airport Management
C.	Enhance Language Regarding Head-to-Head Operations	No cost associated with implementing this action	Airport Management
D.	Discuss Restriction on Head to Head Operations with Pilots	No cost associated with implementing this action	Airport Management
E.	Enhance Helicopter Published Procedures	Working with the FAA and helicopter operators to enhance the existing helicopter procedures will cost approximately \$20,000.	Airport Management
F.	Continue Educating Pilots on the Importance of Optimum Propeller Settings	No cost associated with implementing this action	Airport Management
G.	Establish Preferential Arrival Paths	Working with the FAA to establish the preferential arrival paths will have a cost to airport management and the FAA of approximately \$20,000.	FAA ATC Airport Management
H.	Establish Preferential Departure Paths	Working with the FAA to establish the preferential departure paths will have a cost to airport management and the FAA of approximately \$20,000.	FAA ATC Airport Management
I.	Establish RNAV Procedures	Working with the FAA to develop and publish RNAV procedures will have a cost of approximately \$50,000.	FAA ATC Airport Management
J.	Publish Visual Approach Procedures	Identifying and developing published visual procedures will have a cost to airport management and the FAA of approximately \$50,000.	FAA ATC Airport Management
K.	Add Language Regarding Nighttime Noise Sensitivity to Noise Abatement Guidelines	No cost associated with implementing this action	Airport Management
L.	Discuss Noise Abatement Program with Stakeholders	No cost associated with implementing this action.	Airport Management
M.	Update Overlay Zones	Participating in the City of Columbus' efforts regarding overlay zones will have a negligible cost for OSU Airport. This task should be easily incorporated into existing work plans.	Airport Management
N.	Update Building Codes	Participating in the City of Columbus' efforts regarding building codes will have a negligible cost for OSU Airport. This task should be easily incorporated into existing work plans.	Airport Management
O.	Noise Compatibility Program Management	No change from current program.	Airport Management
P.	Discuss Noise Abatement with Public	No cost associated with implementing this action	Airport Management
Q.	Educate Pilots on Noise Programs	No cost associated with implementing this action.	Airport Management
R.	Develop Jeppesen Insert	Working to develop a Jeppesen chart insert for the noise abatement guidelines at OSU Airport will have a cost to airport management and FAA of approximately \$20,000.	FAA ATC Airport Management

TABLE 13-1
ESTIMATED COST OF NOISE COMPATIBILITY PROGRAM (CONT.)

NOISE COMPATIBILITY PROGRAM MEASURE	ESTIMATED COST	IMPLEMENTING AUTHORITY	
S.	Update Airport Facilities Directory	No cost associated with implementing this action.	Airport Management
T.	Update Noise and Flight Track Monitoring System	OSU Airport staff will work with the vendor on this product to ensure they continue to receive software and hardware updates. No costs associated with this action because the updates are provided as part of the maintenance contract with the vendor of the software.	Airport Management
U.	Noise Program Update	Monitoring the number of operations and operational characteristics at the Airport will have a negligible cost to the Airport. These tasks can be incorporated into existing work plans	Airport Management

**TABLE 13-2
 TIMING FOR IMPLEMENTATION OF THE NOISE COMPATIBILITY PROGRAM**

	NOISE COMPATIBILITY PLAN MEASURE	ESTIMATED TIME FOR IMPLEMENTATION
A.	Align Downwind Leg of Training Pattern South of OSU Airport with Bethel Road	One month after completion of Study. *
B.	Establish Map Exhibiting Noise Sensitive Areas	One month after completion of Study.*
C.	Enhance Language Regarding Head-to-Head Operations	One month after completion of Study.*
D.	Discuss Restriction on Head-to-Head Operations with Pilots	Process is ongoing.
E.	Enhance Helicopter Published Procedures	Six months after completion of Study.*
F.	Continue Educating Pilots on the Importance of Optimum Propeller Settings	Process is ongoing.
G.	Establish Preferential Arrival Paths	One year after approval of NCP recommendations.
H.	Establish Preferential Departure Paths	One year after approval of NCP recommendations.
I.	Establish RNAV Procedures	Two years after approval of NCP recommendations.
J.	Publish Visual Approach Procedures	Two years after approval of NCP recommendations.
K.	Add Language Regarding Nighttime Noise Sensitivity to Noise Abatement Guidelines	One month after completion of Study.*
L.	Discuss Noise Abatement Program With Stakeholders	Currently in place. Will be augmented when Airport Committee is established.
M.	Update Overlay Zones	Process is ongoing.
N.	Update Building Codes	Process is ongoing.
O.	Noise Compatibility Program Management	Currently in place.
P.	Discuss Noise Abatement with Public	Currently in place. Will be augmented when Airport Committee is established.
Q.	Educate Pilots on Noise Programs	Currently in place. Will be augmented when Airport Committee is established.
R.	Develop Jeppesen Insert	One year after approval of NCP recommendations.
S.	Update Airport Facilities Directory	Six months after approval of NCP recommendations
T.	Update Noise and Flight Track Monitoring System	Currently in place.
U.	Noise Program Update	Annual process to begin late 2010

*: Completion of Study is estimated to be the end of 2010.