

## **CHAPTER THIRTEEN: PROGRAM BENEFITS, COSTS, REVIEWS, AND UPDATES**

### **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.

#### **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 Chandler Municipal. 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 Chandler Municipal Airport noise abatement procedures for fixed-wing aircraft and helicopters will continue to help reduce noise exposure on communities around Chandler Municipal.
- Increasing the altitude of the helicopter training pattern will provide noise reduction for communities around Chandler Municipal.
- Increasing the altitude of arrival/departure corridors for itinerant helicopter operations will provide noise reduction for communities around Chandler Municipal.
- Developing an education plan regarding itinerant helicopter corridors will help raise the awareness of the noise sensitive areas surrounding Chandler Municipal.
- Increasing the altitude of arrival/departure corridors for itinerant fixed wing aircraft operations will provide noise reduction for communities around Chandler Municipal.
- Increasing the altitude of the fixed-wing aircraft training pattern will provide noise reduction for communities around Chandler Municipal.
- Establishing preferred runways for fixed-wing aircraft training will help reduce the number of people exposed to aircraft noise.

#### **Land Use Programs Proposed for the Benefit of Future Residents**

Under the recommended NCP, a primary goal is to ensure compatible land uses around Chandler Municipal. 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.

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- Working with the City of Chandler on updating the, ANO zones will benefit future residents by restricting land uses close-in to Chandler Municipal to only those considered compatible with aircraft operations.
- Working with City of Chandler and Maricopa County to update the rural zoning in unincorporated areas will benefit future residents by limiting residential development in areas where aircraft overflights may take place.
- Working with the City of Chandler to follow the policy guidance provided by the General plan and the Airpark Area Plan when considering zoning and development requests will benefit future residents by limiting residential development in areas where aircraft overflights occur.

### **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, and updating, the existing program to provide avenues for sharing information regarding noise abatement programs, and listening to the public's concerns regarding aircraft noise, will benefit those impacted by aircraft noise in the communities that surround Chandler Municipal.
- Developing and distributing information regarding helicopter operating procedures will help to reduce noise exposure on the communities around Chandler Municipal.
- Purchasing a flight track monitoring system, with public flight track viewing and web-based noise complaint collection components, will provide Chandler Municipal with an effective tool for monitoring the noise abatement programs and disseminating information to the local residents regarding aircraft noise concerns.

### **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 Chandler Municipal 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 the Chandler Municipal Manager continue to 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 Chandler Municipal, will benefit Chandler Municipal by ensuring land uses around the Airport remain compatible with aircraft operations.

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## 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

**TABLE 13.1  
ESTIMATED COST OF NOISE COMPATIBILITY PROGRAM**

	<b>NOISE COMPATIBILITY PROGRAM MEASURE</b>	<b>ESTIMATED COST</b>	<b>IMPLEMENTING AUTHORITY</b>
A.	Increase Altitude of the Helicopter Training Pattern Altitude by 100 feet to 1,900 feet MSL	No cost associated with implementing this action.	FAA ATC Airport Management
B.	Request Training Helicopters Continue to Voluntarily Make Turns at Midfield When Operating Conditions Permit	No cost associated with implementing this action.	Airport Management
C.	Request Helicopters Continue to Voluntarily Avoid Making Turns Over Noise Sensitive Areas When Operating Conditions Permit	No cost associated with implementing this action.	Airport Management
D.	Request Helicopters in the Training Pattern Continue to Remain West of Gilbert Road When Operating Conditions Permit	No cost associated with implementing this action.	Airport Management
E.	Increase Altitude of Arrival/Departure Corridors for Itinerant Helicopter Operations by 200 feet to 2,000 feet MSL	No cost associated with implementing this action.	FAA ATC Airport Management
F.	Develop and distribute an Education Plan Identifying Established Arrival and Departure Corridors and Associated Noise Concerns for ATC Controllers and Helicopter Operators	Working with the FAA ATC to develop an education plan for helicopter operations will cost approximately \$25,000.	Airport Management
G.	Develop and distribute Informational Materials Regarding Itinerant Helicopter Procedures	Developing the informational materials for itinerant helicopter operations will cost approximately \$15,000.	Airport Management
H.	Increase Altitude of Arrival/Departure Corridors for Itinerant Fixed Wing Operations by 300 feet to 2,500 feet MSL	No cost associated with implementing this action.	FAA ATC Airport Management
I.	Increase Altitude of the Fixed Wing Training Pattern Altitude by 50 feet to 2,250 feet MSL	No cost associated with implementing this action.	FAA ATC Airport Management
J.	Continue to Use Runway 4R/22L as the Preferred Runway for Fixed Wing Training Activity When Conditions Permit	No cost associated with implementing this action.	FAA ATC Airport Management
K.	Request Aircraft Continue to Voluntarily Avoid Making Turns Over Noise Sensitive Areas When Operating Conditions Permit	No cost associated with implementing this action.	Airport Management
L.	Request Training Aircraft and Helicopters Voluntarily Limit the Repetitive Training Activity Between the Hours of 8:00 p.m. to 7:00 a.m. When Operating Conditions Permit	No cost associated with implementing this action.	Airport Management

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**TABLE 13.1  
ESTIMATED COST OF NOISE COMPATIBILITY PROGRAM (CONT.)**

	<b>NOISE COMPATIBILITY PROGRAM MEASURE</b>	<b>ESTIMATED COST</b>	<b>IMPLEMENTING AUTHORITY</b>
M.	Update ANO Zones	Working with the City of Chandler regarding the ANO Zone update will have a negligible cost for Chandler Municipal. This task should be incorporated into existing work plans.	Airport Management
N.	Update Rural Zoning in Unincorporated Areas	Working with the City of Chandler and Maricopa County regarding the update to rural zoning will have a negligible cost for Chandler Municipal. This task should be incorporated into existing work plans.	Airport Management
O.	Request the City of Chandler Continue to Follow the Policy Guidance Provided by the Voter-Approved General Plan and the Council-Adopted Airpark Area Plan When Considering Zoning and Development Requests Within the Nine Square-Mile Area Surrounding the Chandler Municipal Airport	Working with the City of Chandler regarding the request to continue to follow the stated guidance will have a negligible cost for Chandler Municipal. This task should be incorporated into existing work plans.	Airport Management
P.	Keep Existing Building Codes Associated with the ANO Zones	Working with the City of Chandler regarding the ANO Zone update will have a negligible cost for Chandler Municipal. This task should be incorporated into existing work plans.	Airport Management
Q.	Manage Noise Compatibility Program	No change from current program.	Airport Management
R.	Retain Noise Line	No change from current program.	Airport Management
S.	Update Airport Webpage with Noise Information	No cost associated with implementing this action	Airport Management
T.	Purchase Flight Track Monitoring System	Purchasing a flight track monitoring system will cost approximately \$100,000 to 300,000.	Airport Management
U.	Noise Program Update	Monitoring the number of operations and operational characteristics at the Airport will have a negligible cost to Chandler Municipal. These tasks can be incorporated into existing work plans	Airport Management

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 Chandler Municipal staff and can continue without waiting for NCP approval.

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**TABLE 13.2  
TIMING FOR IMPLEMENTATION OF THE NOISE COMPATIBILITY PROGRAM**

	<b>NOISE COMPATIBILITY PLAN MEASURE</b>	<b>ESTIMATED TIME FOR IMPLEMENTATION</b>
A.	Increase Altitude of the Helicopter Training Pattern Altitude by 100 feet to 1,900 feet MSL	One year after approval of NCP recommendations.
B.	Request Training Helicopters Continue to Voluntarily Make Turns at Midfield When Operating Conditions Permit	One month after completion of Study.
C.	Request Helicopters Continue to Voluntarily Avoid Making Turns Over Noise Sensitive Areas When Operating Conditions Permit	One month after completion of Study.
D.	Request Helicopters in the Training Pattern Continue to Remain West of Gilbert Road When Operating Conditions Permit	One month after completion of Study.
E.	Increase Altitude of Arrival and Departure Corridors for Itinerant Helicopter Operations by 200 feet to 2,000 feet MSL	One year after approval of NCP recommendations.
F.	Develop and Distribute an Education Plan Identifying Established Arrival and Departure Corridors and Associated Noise Concerns for ATC Controllers and Helicopter Operators	One year after completion of Study.
G.	Develop and Distribute Informational Materials Regarding Itinerant Helicopter Procedures	One year after completion of Study.
H.	Increase Altitude of Arrival and Departure Corridors for Itinerant Fixed Wing Operations by 300 feet to 2,500 feet MSL	One year after approval of NCP recommendations.
I.	Increase Altitude of the Fixed Wing Training Pattern Altitude by 50 feet to 2,250 feet MSL	One year after approval of NCP recommendations.
J.	Continue to Use Runway 4R/22L as the Preferred Runway for Fixed Wing Training Activity When Conditions Permit	One month after approval of NCP recommendations.
K.	Request Aircraft Continue to Voluntarily Avoid Making Turns Over Noise Sensitive Areas When Operating Conditions Permit	One month after completion of Study.
L.	Request Training Aircraft and Helicopters Voluntarily Limit Repetitive Training Activity Between the Hours of 8:00 p.m. to 7:00 a.m. When Operating Conditions Permit	One month after completion of Study.
M.	Update ANO Zones	One year after completion of Study.
N.	Update Rural Zoning in Unincorporated Areas	One year after completion of Study.
O.	Request the City of Chandler Continue to Follow the Policy Guidance Provided by the Voter-Approved General Plan and the Council-Adopted Airpark Area Plan When Considering Zoning and Development Requests Within the Nine Square-Mile Area Surrounding the Chandler Municipal Airport	Ongoing process

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**TABLE 13.2  
TIMING FOR IMPLEMENTATION OF THE NOISE COMPATIBILITY PROGRAM (CONT.)**

P.	Keep Existing Building Codes Associated with the ANO Zones	Ongoing process
Q.	Manage Noise Compatibility Program	Ongoing process.
R.	Retain Noise Line	Ongoing process.
S.	Update Airport Webpage with Noise Information	One month after completion of Study.
T.	Purchase Flight Tracking System	One year after completion of Study.
U.	Noise Program Update	Annual process to begin in late 2010.

## REVIEW AND UPDATES

With the implementation of the actions proposed in this 14 CFR Part 150 Study, the noise-related land use controls around Chandler Municipal 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 programs continue to be used 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 Chandler Municipal 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 Chandler Municipal change significantly. However, since a 14 CFR Part 150 Study is voluntary on behalf of Chandler Municipal management and not required by the FAA, the need and timing for preparing an update would be at the option of Chandler Municipal management.