



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

# Memorandum

Chicago Airports District Office  
2300 E. Devon  
Suite 320  
Des Plaines IL. 60018

Subject: **ACTION:** Approval of Noise Compatibility  
Program Greater Rockford Airport, Rockford, IL

Date: September 16, 2003

From: Environmental Program Manager, Chicago  
Airports District Office, CHI-ADO 617

Reply to: Beauchamp  
Attn.of: (847) 294-7364  
FAX: (847) 294-7046

To: Associate Administrator for Airports ARP-1  
ATTN: APP-600  
THRU: AGL-610

Enclosed please find the package for the action referenced above, including the draft approval memo and Record of Approval. Please contact me should you have any questions



Bobb A. Beauchamp

Attachments  
Draft Approval Memo  
NEM/NCP (3 copies)  
NEM/NCP Checklist (included in sponsor's 150 document)  
Federal Register  
Draft Record of Approval

cc: AGL-610 w/attachments (for information)

59/17/03



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

# Memorandum

Chicago Airports District Office  
2300 E. Devon  
Suite 320  
Des Plaines IL. 60018

Subject: **ACTION:** Approval of Noise Compatibility  
Program Greater Rockford Airport, Rockford, IL

Date: September 19, 2003

From: Manager, Chicago Airports District Office,  
CHI-ADO 600

Reply to: Beauchamp  
Attn.of: (847) 294-7364  
FAX: (847) 294-7046

To: Associate Administrator for Airports ARP-1  
ATTN: APP-600  
THRU: AGL-610

On May 8, 2003, the Federal Aviation Administration (FAA) determined that the Noise Exposure Maps (NEM) for Greater Rockford Airport in Rockford, Illinois, are in compliance with applicable requirements of Section 103 (c) of the Aviation Safety and Noise Abatement Act of 1979 ("The Act"). On May 8, 2003, the FAA determined that the Noise Compatibility Program (NCP) conforms to the requirement of FAR Part 150, and is acceptable for detailed review.

Therefore, May 8, 2003 marked the start of the formal 180-day review period for Greater Rockford Airport's proposed NCP under Section 104 (a) of the Act. According to the Act, the NCP must be approved or disapproved by the FAA within 180 days, or it shall be deemed approved. The last date for such approval or disapproval is November 4, 2003. As part of the 180-day official review period, there is also a Federal Register public comment period, which closed July 7, 2003. The latter is concurrent with FAA's detailed review of the NCP.

The Air Traffic Division submitted four comments, which were resolved to Air Traffic's satisfaction in an April 1, 2003 memo from the Airport's consultant. The Rockford Air Traffic Control Tower Division requested a minor modification, which was incorporated into the NCP (see Appendix H, "Public Hearing"). No other comments were received.

As part of the formal 180-day review, each proposed action in the NCP has undergone further review and evaluation on the basis of effectiveness and potential conflict with Federal policy and prerogatives. These include safe and efficient use of the nation's airspace, undue burden on interstate commerce, unjust discrimination, and interference with a Federal regulatory compliance schedule (i.e. FAR part 91, Subpart E).

The proposed NCP has been reviewed and evaluated by the Chicago Airports District Office, Chicago Flight Procedures Office, Rockford Air Traffic Control Tower, and the Flight Standards, Airway Facilities, and Air Traffic Divisions, and the Regional Counsel.

As part of our review, we have concluded that the NCP is consistent with the intent of the Act and that it meets the standards set forth in FAR Part 150 for such programs. The standard Part 150 NCP checklist was reviewed to ensure that all required items were included in the proposed program. That checklist is included in the sponsor's 150 document, which has been reviewed.

# FEDERAL AVIATION ADMINISTRATION

## RECORD OF APPROVAL

Greater Rockford Airport  
Rockford, Illinois

### NOISE COMPATIBILITY PROGRAM

*Sharon Onato*

Assistant Administrator for Aviation Policy,  
Planning, and Environment, AEP-1

*10/10/03*

Date

Concur



Non Concur



*Daphne A. Filler*

for Chief Counsel, AGC-1

*10/29/03*

Date



*04*

*William J. Blodgett*  
Associate Administrator for Airports, ARP-1

*11/3/03*

Date

Approved



Disapproved



# **RECORD OF APPROVAL**

## **Greater Rockford Airport Rockford, Illinois**

### **NOISE COMPATIBILITY PROGRAM**

The Noise Compatibility Program (NCP), for Greater Rockford Airport (RFD) in Rockford, Illinois, describes the current and future non-compatible land uses based upon the parameters established in Federal Aviation Regulations (FAR) Part 150, Airport Noise Compatibility Planning. FAR Part 150 requires that the plan apply to a period of no less than five years into the future.

The Greater Rockford Airport Authority (GRAA) previously submitted an NCP in 1990 and a subsequent update in 1994. All 29 measures were approved in full, or withdrawn at the Airport Authority's request, by the FAA on August 2, 1995. Noise Exposure Maps (NEMs), as part of the 1994 NCP, were accepted by the Federal Aviation Administration (FAA) on January 31, 1995.

This document is a comprehensive update of the NCP that was approved by the FAA on August 2, 1995. The NCP lists 37 recommended measures, which continue or expand the intent of the two previously approved NCPs. The FAA groups these measures into three categories: noise abatement (16), land use (15), and other measures (six). The GRAA recommends 37 measures in this updated NCP to remedy existing noise problems and prevent future non-compatible land uses. Of the 16 noise abatement measures, six measures continue from the 1994 NCP without revisions, five measures were continued with revisions, three measures have either been previously withdrawn or are recommended for withdrawal, and two measures are new. Of the 15 land use measures, two measures are continued as described in the 1994 NCP, three measures are continued with modifications, six measures have either been previously withdrawn or are recommended for withdrawal, and 2 measures are new. Of the six other measures, two measures continue from the 1994 NCP, one measure is continued with revisions, and three measures are new.

Each recommended NCP measure is identified below by type of measure and includes a summary of the recommendations and a cross-reference to page numbers in the NCP where each program measure is discussed. The current NEM is found on Exhibit NEM-1 of the document. The 2003 existing NEM is based on 2001 data and is indicative of current conditions at RFD. The forecast NEM (2008) is found on Exhibit NEM-2. This future NEM is based on reasonable forecasts and planning assumptions contained in the FAA 2001 Terminal Area Forecast and incorporates the NCP noise abatement measures. Appendix D of the report contains the analysis of the noise abatement and land use management alternatives that were considered. Chapter 4 contains the recommended NCP. Table 4-1 on pages 4-2 through 4-10

depicts the recommended NCP, implementation schedule, and an estimate of the cost for each measure. The FAA share of the eligible cost will be the current program rate set by statute at the time of funding of approved program measures.

The approvals listed herein include approvals of actions that the GRAA recommends be taken by the FAA. FAA approval of sponsor recommendations in the NCP indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. Sponsor recommendations for mitigation of forecast conditions at the airport may include measures based on reasonable planning assumptions at the airport, including planned airport development. FAA approval of a noise mitigation recommendation in this NCP is based solely on the noise mitigation potential of the measure and does not constitute a decision by the FAA to implement the action. 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 (ROA) 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.

## **NOISE ABATEMENT MEASURES**

All 14 of the 1994 Noise Abatement Measures found in the 1994 NCP have been carried forward into this updated NCP. Of those 14 measures, 6 measures are without revisions, 5 measures are with revisions, 3 measures have either been previously withdrawn or are recommended for withdrawal, and 2 new measures are being added.

### **NA-1      *Maintain existing noise abatement procedures per Tower Order of June 15, 1984. Page 4-11, Tables 4-1, 4-5, and Exhibit 4-1.***

The GRAA recommends continuation of this measure to maintain existing noise abatement procedures per the Tower Order dated June 15, 1984. This order states that touch and go operations or traffic pattern activity on Runways 1/19 shall be directed to turn so as to keep aircraft west of the airport. Aircraft over 12,500 pounds shall be directed to climb to 2,500 feet mean sea level (MSL) whenever traffic permits. Aircraft making circling approaches shall be kept west of the airport and shall not be permitted to make passes over the airport. For late night training, as winds permit, full stop landings should be made on Runway 1 and takeoffs should be made on Runway 19. The intent of this measure is to abate the effects of nighttime aircraft noise and overflight during airline pilot training occurring between the hours of 10:00 p.m. to 7:00 a.m.

**APPROVED AS VOLUNTARY.** Previously approved in the 1994 NCP. The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed to still be feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the Planning Advisory Committee (PAC).

**NA-2**     *Measure previously revoked: Aircraft in excess of 12,500 pounds departing Runway 25 should be directed to turn 20 degrees to the right or left as soon as practicable after takeoff. Page 4-14 and Table 4-1.*

**PREVIOUSLY WITHDRAWN.** Previously withdrawn in the 1994 NCP.

**NA-3**     *All aircraft departing on Runway 7 should be fanned along three departure tracks: Left, Right, and Center. Page 4-15, Tables 4-1, 4-5 and Exhibit 4-2.*

The GRAA recommends the continued use of this measure implementing the procedure for all aircraft departing on Runway 7 to be fanned along three departure tracks: Left, Right, and Center. The aircraft are routed due east on the center track, to the southwest on the track turning to the right, and to the northwest on the track turning to the left. The intent of this measure is to reduce noise along the centerline and reduce overflights of the communities west of the airport.

**APPROVED AS VOLUNTARY.** Previously approved in the 1994 NCP. The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed to still be feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-4**     *Direct pilots of C-130s to turn as tightly as practicable when training on Runway 19. Page 4-17, Tables 4-1, 4-5 and Exhibit 4-3.*

The GRAA recommends the continuation of this measure where pilots of C-130 aircraft practicing short-field landings and takeoffs on Runway 19 are directed to turn as soon and as tightly as practicable after takeoff. The aircraft should remain as close to the airport as possible when flying through the pattern, provided aircraft maintain pattern altitude of 2,500 feet MSL per the existing Tower Order dated August 25, 2000. The intent of this measure is to direct aircraft traffic to the northwest and away from residential areas southwest of the airport, including the Woodcrest Estates subdivision and the area north of the Rock River near Woodcrest Estates. In addition, the floodplain northwest and adjacent to the airport is a broad, noise-compatible area, and it is desirable for the C-130s to remain over this compatible land use area to the extent practical.

**APPROVED AS VOLUNTARY.** Previously approved in the 1994 NCP. The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was

deemed to still be feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-5**     *Measure previously revoked: Direct pilots of air carrier jets, when training on Runway 1, to begin turning to downwind leg after four Distance Measuring Equipment (DME) from localizer and establishing the downwind leg at five DME. Page 4-20 and Table 4-1.*

**PREVIOUSLY WITHDRAWN.** Previously withdrawn in the 1994 NCP.

**NA-6**     *Revoke the establishment of an informal preferential runway use plan, weather and operating requirements permitting, as follows for aircraft weighing more than 12,500 pounds, using a five-knot tailwind and 15-knot crosswind component for runway assignment. Measure NA-6 has been replaced by NA-10. Page 4-21 and Tables 4-1, 4-5.*

The GRAA recommends withdrawing this measure, which expired in 1997. This measure recommended an informal preferential runway use program to delineate the preferred runway use and order of runway selection. The order stated that, weather and operating conditions permitting, aircraft weighing more than 12,500 pounds, use a five-knot tailwind and 15-knot crosswind component for runway assignment. The intent of this measure was to reduce noise impacts. Per the approved 1994 NCP this measure was replaced by Measure NA-10 when Runway 7/25 was extended to its current length of 10,000 feet, changing the preferred arrival and departure runway during daytime hours from Runway 19 (at 8,199 feet) to Runway 25 the longest runway (at 10,000 feet).

**WITHDRAWN.** Measure expired in 1997.

**NA-7**     *During nighttime hours (10:00 p.m. to 7:00 a.m.) all aircraft over 12,500 pounds departing Runway 25 having departure courses of 250 degrees clockwise through 099 degrees inclusive turn right on course to the Dubuque (DBQ) or the Nodine (ODI) navigational fix as soon as practicable. Pages 4-22, 4-23, Tables 4-1, 4-5 and Exhibit 4-4.*

The GRAA recommends modifying this measure to allow the Air Traffic Control Tower (ATCT) to issue instructions to pilots to fly to one of two fixes, DBQ or ODI when departing Runway 25 during nighttime hours in order to minimize overflight of residential land use (Woodcrest Estates) along the extended runway centerline. The recommended modification would change the ATCT instructions for Runway 25 departures from the previous instructions of a 310-degree heading.

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While the approved instruction is the 310-degree heading, the ATCT currently instructs nighttime aircraft weighing in excess of 12,500 pounds to turn right to the DBQ or ODI fixes. Because the pilot instruction to a specific fix is more efficient and practicable for the nighttime cargo operations at RFD and it simplifies controller instructions to the pilot during peak traffic periods, it is recommended that this previously approved measure be modified, as described above. The intent of this measure is to minimize overflight of Woodcrest Estates by large aircraft departing Runway 25.

**APPROVED AS VOLUNTARY.** The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This revised procedure was deemed feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-8** *During daytime hours (7:00 a.m. to 10:00 p.m.) all aircraft over 12,500 pounds departing Runway 25 having departure courses 100 degrees clockwise through 249 degrees inclusive retain 20-degree left turn and maintain heading until reaching 3,000 feet mean sea level (MSL). Pages 4-25, 4-26, Tables 4-1, 4-5 and Exhibit 4-5.*

The GRAA recommends modification of this measure which directs departure turns from Runway 25 to retain a 20-degree left turn for all aircraft having departure courses from 100 degrees clockwise through 249 degrees inclusive and to maintain that heading until reaching 3,000 feet MSL to apply to only daytime operations. This measure previously applied to both daytime and nighttime operations.

As modified, this measure recommends that all daytime aircraft departures to the southwest and west from Runway 25 use this procedure to avoid overflying existing residential land uses along the extended centerline of Runway 25. The ATCT would direct traffic to turn on course toward the Cedar Rapids (CID), Iowa City (IOW), and Bradford (BDF) navigational fixes as soon as practicable.

Modified Measure NA-8 is a companion to continued Measure NA-13, which provides for departure turns to the southwest from Runway 25 for nighttime operations. To allow for performance and destination differences between the cargo carriers, which operate at RFD during nighttime hours, and the general aviation traffic, which operates at RFD during the daytime hours, this measure should be retained for daytime use. Therefore, the GRAA recommends that this measure be retained and modified as noted.

**APPROVED AS VOLUNTARY.** The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-9**     *During nighttime hours (10:00 p.m. to 7:00 a.m.) all aircraft over 12,500 pounds departing Runway 19 having departure courses of zero degrees clockwise through 190 degrees maintain runway heading until reaching 3,000 feet MSL before turning on course. Page 4-28, Tables 4-1, 4-5 and Exhibits 4-6, 4-7.*

The GRAA recommends modifying this measure to direct all jet aircraft weighing more than 12,500 pounds to maintain runway heading until reaching 3,000 feet MSL before turning on course. This modification puts the aircraft at a location and altitude where the turn on course would occur at the extent of the future 2008 NEM/NCP 65 DNL (Day-Night Average Sound Level) noise contour and it would minimize aircraft overflight of residential land uses to the southeast of the airport. The recommended modification would change the ATCT instructions for Runway 19 departures from the previous instructions of climbing on runway heading to 1,200 feet MSL and then turning to 170 degrees until reaching 3,000 feet MSL.

Maintaining runway heading to 3,000 feet MSL would provide an operational benefit because 3,000 MSL is a standard noise abatement altitude used by ATCT controllers. Therefore, it would simplify controller instructions to the pilot during peak traffic periods.

**APPROVED AS VOLUNTARY.** The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-10**     *Establish an informal preferential runway use plan for all daytime and nighttime operations after Runway 7/25 is extended. Pages 4-32, 4-33 and Tables 4-1, 4-5.*

The GRAA recommends modifying the informal runway use program to delineate the preferred runway use and order of runway selection to reduce aircraft noise impacts. The previous program included Runway 25 as the secondary arrival runway for nighttime operations but this portion of the program was not implemented because Runway 7 is equipped with an Instrument Landing System (ILS), which allows for precision approaches. Runway 25 does not have ILS. As modified, this measure would change the secondary nighttime arrival runway for nighttime hours from Runway 25 to Runway 7. The recommended runway use program, as modified, is outlined below:

#### **All Departures**

- Runway 19 preferred for all departures.
- Runway 25 would be used for departures when Runway 19 could not be used due to wind, weather, or operational necessity.
- Runway 1 would be used for departures when both Runway 19 and Runway 25 could not be used due to by wind, weather, or operational necessity.

### **Daytime Arrivals**

- The runway that would maximize traffic flow would be used for arrivals.

### **Nighttime Arrivals**

- Runway 1 preferred for all arrivals.
- Runway 25 would be used for arrivals when Runway 1 could not be used due to wind, weather, or operational necessity.

This measure would retain all other elements of the approved program; Runway 7 is being used as the second preferred arrival runway because it is equipped with ILS and arrivals on both Runway 1 and Runway 7 during peak arrival times is the most operationally efficient. The ATCT would use this preferred runway use program when weather, safety, and operational conditions are favorable. The intent of this measure is to result in a large proportion of departures being made to the south or west of the airport over the most compatible land uses.

**APPROVED AS VOLUNTARY.** The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

### **NA-11     *For all aircraft requiring more than 8,000 feet certified takeoff length, Runway 25 preferred. Page 4-34 and Tables 4-1, 4-5.***

The GRAA recommends continuing this measure to direct all aircraft requiring more than 8,000 feet certified take-off length use Runway 25. This measure was implemented after Runway 7/25 was extended by 3,500 feet to its current length of 10,000 feet. Occasionally large aircraft will not be able to take heavy loads off on an 8,000-foot runway (Runway 1/19 is 8,199 feet long). These include the DC-8 freighter, the 767-300 freighter, and the KC-135 tanker when wind velocities are above three knots. When these circumstances preclude the use of Runway 19, the preferred runway for takeoff, Runway 25 should be used.

The intent of this measure was to establish Runway 25 as the preferred runway for all aircraft requiring more than 8,000 feet certified take-off length.

**APPROVED AS VOLUNTARY.** Previously approved in the 1994 NCP. The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow.

**NA-12** *During daytime hours (7:00 a.m. to 10:00 p.m.) all aircraft over 12,500 pounds departing Runway 25 having departure courses of 250 degrees clockwise through 099 degrees inclusive turn right on course to the Dubuque (DBQ) or the Nodine (ODI) navigational fix as soon as practicable. Pages 4-35, 4-36 and Tables 4-1, 4-5.*

The GRAA recommends modifying this measure to allow the ATCT to issue instructions to pilots departing Runway 25 to the northwest during daytime hours to fly to one of two fixes, DBQ or ODI when departing Runway 25 in order to minimize overflight of residential land use (Woodcrest Estates) along the extended runway centerline. The recommended modification to previously approved Measure NA-12 would change the ATCT instructions for Runway 25 departures from the previous instructions of a 310-degree heading.

While the approved instruction is the 310-degree heading, the ATCT currently instructs nighttime aircraft, weighing in excess of 12,500 pounds, to turn right to the DBQ or ODI fixes. In order to make daytime departure procedures for larger aircraft consistent with nighttime departure procedures, it is recommended that this previously approved measure be modified.

This measure is a companion to Measure NA-7, which provides for departure turns from Runway 25 for nighttime operations. To allow for performance and destination differences between the cargo carriers, which operate at RFD during the nighttime hours, and the general aviation traffic, which operates at RFD during the daytime hours, this measure should be retained for daytime use.

The purpose and intent of this measure as modified in this 2003 NCP would continue to minimize overflight of Woodcrest Estates by large aircraft departing Runway 25 during daytime hours.

**APPROVED AS VOLUNTARY.** The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-13** *During nighttime hours (10:00 p.m. to 7:00 a.m.) all aircraft over 12,500 pounds departing Runway 25 having departure courses 100 degrees clockwise through 249 degrees inclusive turn to a heading of 200 degrees as soon as practicable and maintain heading until reaching 3,000 feet MSL. Pages 4-37, 4-38, Tables 4-1, 4-5 and Exhibit 4-5.*

The GRAA recommends the continuation of this measure which directs nighttime departure turns from Runway 25 to turn to a heading of 200 degrees as soon as practicable for nighttime departures by aircraft weighing more than 12,500 pounds and to maintain heading until reaching 3,000 feet MSL.

This measure is a companion to modified Measure NA-8, which provides for departure turns to the southwest from Runway 25 for daytime operations. To allow for performance and destination differences between the cargo carriers, which operate at RFD during nighttime hours, and the general aviation traffic, which operates at RFD during the daytime hours, this measure should be continued for nighttime use.

All aircraft departing to the southwest and west from Runway 25 would use this procedure to avoid overflight of the Woodcrest Estates subdivision located along the extended centerline of Runway 25.

**APPROVED AS VOLUNTARY.** Previously approved in the 1994 NCP. The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed to still be feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-14     *Aircraft weighing more than 12,500 pounds conduct touch and go and low approach training activity on the south side of the airport when using Runways 7 or 25. Page 4-39, Tables 4-1, 4-5 and Exhibit 4-8.***

The GRAA recommends the continuation of this measure, which directs aircraft weighing more than 12,500 pounds to conduct touch and go and low approach training activity on the south side of the airport when using Runways 7 or 25.

The 3,500-foot extension of Runway 7/25 in 1997, which extended this runway to 10,000 feet, provided the opportunity for more southwesterly traffic flows, thus resulting in more frequent pattern traffic north or south of the airport. This measure was intended to minimize the effects of aircraft training overflights on the more densely populated noise-sensitive land uses to the north and east of the airport and thus reduce the potential for noise complaints to occur.

**APPROVED AS VOLUNTARY.** Previously approved in the 1994 NCP. The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed to still be feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-15** *During nighttime hours (10:00 p.m. to 7:00 a.m.) all aircraft over 12,500 pounds departing Runway 1, maintain runway heading until reaching 3,000 feet MSL before turning on course. Page 4-41, Tables 4-1, 4-5 and Exhibits 4-9, 4-10.*

The GRAA recommends this new measure to direct all nighttime departures of aircraft weighing more than 12,500 pounds to maintain runway heading until reaching 3,000 feet MSL before turning on course. This measure would place the aircraft at a location and altitude where the turn on course would occur beyond the extent of the future 2008 NEM/NCP 65 DNL noise contour, and it would therefore minimize aircraft overflights of residential land uses on Blackhawk Island.

This measure is intended to minimize overflight of residential land uses on Blackhawk Island to the west of the airport. Maintaining runway heading to 3,000 feet MSL would provide an operational benefit because 3,000 MSL is a standard noise abatement altitude used by ATCT controllers. Therefore, it would simplify controller instructions to the pilot during peak traffic periods.

**APPROVED AS VOLUNTARY.** The pilots and air traffic controllers retain the responsibility to deviate from these procedures as necessary to ensure safe, orderly, and expeditious traffic flow. This procedure was deemed feasible by the Air Traffic Controllers who participated in this Part 150 Study Update as members of the PAC.

**NA-16** *Encourage the use of noise attenuating construction standards for all new on-airport structures/facilities and use those structures as noise barriers/buffers to adjacent off-airport land uses. Page 4-45 and Tables 4-1, 4-5.*

This new measure would encourage GRAA to consider noise reduction benefits derived from the design, location, and positioning of structures and facilities to use as barriers to residential land uses adjacent to the airport. The structure height, type of materials, shape, and placement on the airport could reduce ground noise for the communities nearest the airport.

**APPROVED AS VOLUNTARY.** The GRAA would use best judgement and management practices when locating new structures/facilities on the airport.

## LAND USE MANAGEMENT MEASURES

All 12 of the 1994 Land Use Management Measures have been carried forward into this updated NCP: 2 measures without revisions, 3 with revisions, 5 have either been withdrawn or are recommended for withdrawal, 2 are complete, and 2 new measures are being added.

**LU-1**     *Measure previously revoked: Rezoning of land south of US Route 20 Bypass and west of 20<sup>th</sup> Street from agricultural to medium-density multi-family by the city of Rockford and Winnebago County. Page 4-47 and Tables 4-1, 4-5.*

**PREVIOUSLY WITHDRAWN.** Previously withdrawn in the 1994 NCP.

**LU-2**     *Adopt noise overlay zoning prohibiting development of selected noise-sensitive land uses within the 60-65 DNL noise contour, high occupancy uses in the "double-clear zone" area, and residential uses in the 65+ DNL noise contour of the 2008 NEM/NCP within the "double-clear zone area"—city of Rockford and Winnebago County. Pages 4-48, 4-49, Tables 4-1, 4-5 and Exhibits 4-11, 4-12.*

The GRAA recommends modifying this measure from the 1994 NCP which recommended the adoption of noise overlay zoning using the 2000 NCP. The modification is to use the 2008 NEM/NCP to implement this measure. Currently, neither the city of Rockford nor Winnebago County have adopted noise overlay zoning and the GRAA would encourage both jurisdictions to do so because of their location within the 2008 NEM/NCP 60 DNL noise contour, see Exhibit 4-12. It is recommended that three overlay districts be established. The most restrictive zone should follow an area 5,000 feet long and 2,500 feet wide, centered on the runway and beginning 200 feet from the physical end of the runway.<sup>1</sup> This area is also known as the "double-clear zone" area and is not related to a noise contour. The outer boundaries of the other two overlay districts should be based on the 60 DNL and 65 DNL noise contours of the 2008 NEM/NCP. To provide flexibility in the administration and enforcement of a noise overlay zone, the city of Rockford and Winnebago County should work with GRAA to define the overlay zones using legal boundaries, such as roadways. The three zones are described in more detail below:

Within the AC-1 zone, corresponding to the 2008 NEM/NCP 60-65 DNL noise contour, the zoning ordinance would prohibit mobile homes, hospitals, nursing homes, amphitheaters, resorts, and group camps.

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<sup>1</sup> FAA Memorandum, Action: Land Acquisition – eligible Runway Protection, Object Free Area, and Approach and Transitional Zones, dated April 30, 1991.

Within the AC-2 zone, corresponding to the 2008 NEM/NCP 65+ DNL noise contour, the ordinance would prohibit all non-transient residences that are also located in the "double-clear zone" area of Zone AC-3, as well as uses prohibited in the AC-1 zone. Sound insulation would be required for new residential units built within the 2008 NEM/NCP 65 DNL noise contour.

Within the AC-3 zone, corresponding to the "double clear zone" area, the AC-1 and AC-2 prohibitions would also apply. In addition, schools, and all forms of residential land use, both transient and non-transient, would be prohibited. The standards in the AC-3 zone are intended to avoid the development of uses that typically involve large numbers of occupants, in addition to avoiding noise-sensitive uses. Currently, there are no residences within the AC-3 zone.

**APPROVED.** This measure was previously approved in the 1990 NCP and subsequently approved for revision in the 1994 NCP. The GRAA desires to modify this measure to reflect updated noise conditions. This measure is a local government action.

**LU-3**     *Measure previously revoked: Amend comprehensive plans to show planned industrial or commercial uses at interchanges of US 20 Bypass and South Main Street – city of Rockford and Winnebago County. Page 4-56 and Tables 4-1, 4-5.*

**PREVIOUSLY WITHDRAWN.** Previously withdrawn in the 1994 NCP.

**LU-4**     *Amend local comprehensive plans by adopting the updated Part 150 Noise Compatibility Plan as their noise compatibility elements in the plans – city of Rockford and Ogle and Winnebago counties. Pages 4-57, 4-58 and Tables 4-1, 4-5.*

The GRAA recommends continuing this measure to amend local comprehensive plans by adopting the updated 2003 NCP as the noise compatibility element in those documents. Ogle County implemented this measure using the 1994 NCP; in the next comprehensive plan update, the plan should reflect this 2003 NCP. The GRAA should encourage the city of Rockford and Winnebago County to incorporate the 2008 NEM/NCP 60 DNL and 65 DNL noise contours and the 2003 NCP into the next update of the local comprehensive plans.

**APPROVED.** Previously approved in the 1994 NCP. Local government has the authority to implement this measure. As members of the PAC, representatives from the city of Rockford, Winnebago County, and Ogle County expressed interest in including



the 2008 NEM/NCP 60+ DNL noise contours in the next update of comprehensive plans.

**LU-5      *Adopt guidelines for discretionary review of development projects – city of Rockford, Winnebago County, Ogle County, and the GRAA. Pages 4-59, 4-60 and Tables 4-1, 4-5.***

The GRAA recommends modification of this measure to include GRAA in the local discretionary review process for the city of Rockford, Winnebago County, and Ogle County. This would provide GRAA staff an opportunity to review and comment on applications for variance, conditional use, rezoning, and subdivision plan approval. This special notification requirement is not intended to apply to simple applications for building and zoning permits and occupancy certificates.

The noise overlay zones defined in Measure LU-2 could be used as a reference for the city of Rockford, Winnebago County, and Ogle County planners to decide whether or not a proposed development would be located in an area subject to aircraft noise or overflights. If the proposed development would be located in such an area, the planners should include GRAA in the review process.

The intent of this measure is to prevent future development of incompatible land uses.

**APPROVED.** Previously approved in the 1994 NCP. Discretionary review is already conducted by the jurisdictions. The local jurisdictions are encouraged to include the GRAA in this process.

**LU-6      *Measure previously revoked: Acquire homes off the approach end of Runway 19 – city of Rockford and the Greater Rockford Airport Authority. Page 4-61 and Tables 4-1, 4-5.***

**PREVIOUSLY WITHDRAWN.** Previously withdrawn in the 1994 NCP.

**LU-7      *Measure previously revoked: Encourage Forest Preserve District to consider acquisition of land adjacent to the existing Forest Preserves south of the airport. Page 4-62 and Tables 4-1, 4-5.***

**PREVIOUSLY WITHDRAWN.** Previously withdrawn in the 1994 NCP.

**LU-8      *Voluntary acquisition of single-family residences on Blackhawk Island in the 2008 NEM/NCP 65 DNL noise contour. Pages 4-63, 4-64, 4-65, Table 4-1 and Exhibits 4-11, 4-12.***

The GRAA recommends modifying Measure LU-8 from the 1994 NCP. The approved 1994 measure recommended that the GRAA "acquire homes and land on Blackhawk Island, relocate residents, redevelop as a park." Five single-family residences and 16 vacant parcels in the 2000 (future) NCP were acquired after the FAA issued a ROA on the 1994 *Part 150 Study*. The GRAA recommends modifying Measure LU-8 to remove the language concerning the acquisition of vacant land zoned for residential use in the 65 DNL noise contour and redevelopment of the property as a park. Measure LU-8, in the 2003 NCP, recommends only the voluntary acquisition of existing single-family residences on Blackhawk Island in the 2008 NEM/NCP 65 DNL noise contour. The homeowners of these residences would be relocated pursuant to 49 CFR Part 24, *Uniform Relocation Assistance and Real Property Acquisition Regulations For Federal and Federally Assisted Programs*, and FAA Order 5100.37A, *Land Acquisition and Relocation Assistance for Airport Projects*.

The ROA for the 1994 NCP states that the redevelopment of parcels on Blackhawk Island as a park is a local prerogative. In order to maintain compliance with other environmental requirements, (specifically those regarding public parks and recreational facilities), the measure as previously approved stated that the GRAA should include in any deed or lease agreement language confirming the compatibility of any proposed recreational use. However, local funding to develop a park on Blackhawk Island has not materialized, it currently is not available, and it is not likely that local funding will be available in the foreseeable future. Therefore, it is recommended that "redevelopment as a park" be withdrawn from the NCP because: Blackhawk Island is not contiguous to airport property, it is prone to flooding from the Rock River, potential incompatible development in this area is addressed in Measure LU-2 (noise overlay zoning) of this updated NCP, and there is no existing, or reasonably foreseeable, development pressure in this area.

Vacant parcels zoned for residential use on Blackhawk Island that are within the 2008 NEM/NCP 65 DNL noise contour also would be subject to Measure LU-2. Based on the FAA's Mitigation Policy<sup>2</sup>, residences constructed after October 1, 1998, would be ineligible for participation in future Part 150 mitigation. Therefore, if residences were developed in the future, those structures would need to be constructed so as to be compatible with airport and aircraft operations. For these reasons, it is recommended that the acquisition of vacant land be withdrawn from the NCP.

Fifteen (15) single-family residences would be located in the 2008 NEM/NCP 65 DNL noise contour. Therefore, as modified, Measure LU-8 will continue the voluntary acquisition program for single-family residences in the 65 DNL noise contour. The

<sup>2</sup> The FAA's Mitigation Policy was published as a final notice on March 27, 1998, and became effective as FAA policy on October 1, 1998. Source: Department of Transportation, Federal Aviation Administration, 14 CFR Part 150, [Docket No. 28149], *Final Policy on Part 150 Approval of Noise Mitigation Measures: Effect on the Use of Federal Grants for Noise Mitigation Projects*. ACTION: Notice of Final Policy. Issued in Washington, DC, on March 27, 1998, John R. Hancock, Acting Assistant Administrator for Policy, Planning, and International Aviation.

homeowners would be relocated to a residence not significantly impacted by aircraft noise if they chose to participate in the program. The GRAA would request that Winnebago County change the zoning on all acquired property from residential to a zoning district that is compatible with airport operations.

**APPROVED.** Initially approved in the 1990 NCP, subsequently approved for revision in the 1994 NCP, and now modified to remove the language concerning voluntary acquisition of vacant lots and redevelopment of the acquired property into a park. Acquisition programs under FAR Part 150 are regulated by 49 CFR Part 24, *Uniform Relocation Assistance and Real Property Acquisition Regulations For Federal and Federally Assisted Programs*, and FAA Order 5100.37A, *Land Acquisition and Relocation Assistance for Airport Projects*.

**LU-9      *Redevelop airport-owned land parcels located along Kishwaukee Street south of Research Parkway – Greater Rockford Airport Authority. [sic] Page 4-66, Table 4-1 and Exhibits 4-11, 4-12.***

The GRAA recommends continuation of this measure to redevelop airport-owned properties along Kishwaukee Street south of Research Parkway. The intent of this measure is for the GRAA to redevelop existing vacant, airport-owned land into revenue-generating uses that are compatible with aircraft operations.

**APPROVED.** Previously approved in the 1994 NCP.

**LU-10      *Revoke consideration of transfer of GRAA land of high natural value along the Kishwaukee River to the Forest Preserve or park district to be maintained as a natural area and airport noise buffer. Pages 4-67, 4-68, Tables 4-1, 4-5 and Exhibit 4-11.***

The GRAA recommends withdrawing this measure which recommended that GRAA consider the transfer of the management of GRAA land of high natural value along the Kishwaukee River to the Forest Preserve or park district to be maintained as a natural area and airport noise buffer.

At the time the 1994 NCP was developed and approved, the Winnebago County Forest Preserve District had expressed strong interest in assuming responsibility for this land to preserve wildlife habitat. In addition, because portions of this land area are forested, wetland, and/or riparian, and are within the Floodway for the Kishwaukee River, the land cannot be used for aviation, commercial, or industrial use. However, no further discussions have occurred for several years nor have any been initiated by the Forest Preserve or park district, regarding a potential land transfer.

The mitigation of potential impacts resulting from airport development projects nationwide has become more stringent, since the FAA issued the ROA on the 1994 NCP.

If the management of this land were transferred to a park district, it could be subject to future environmental analysis and potential Section 303(c)<sup>3</sup> impacts, should future airport development projects be proposed. Also, if the GRAA retains ownership of this land it could be used to mitigate future potential wetland and floodplain impacts that could result from airport development projects. Thus, given the current environmental regulatory climate, it is in the best interest of the GRAA to retain management and ownership of this land. In addition, by withdrawing this measure from the 2003 NCP and not transferring the management of this land, the Winnebago County Forest Preserve District would not incur additional operating costs.

**WITHDRAWN.**

**LU-11**     ***Acquire development and overflight rights via purchase of land use and aviation easement over undeveloped parcel in Runway 7L approach area on south side of Kishwaukee River. Page 4-69 and Tables 4-1, 4-5.***

**NO FAA ACTION REQUIRED.** Previously approved in the 1994 NCP. Measure is complete.

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<sup>3</sup> Federal statute Title 49 USC 303(c) was previously known as Section 4(f) of the *Department of Transportation Act of 1966*. The *Department of Transportation Act of 1966* was one of the earliest and most significant pieces of transportation legislation relative to environmental protection. Under this Act, it is stated that: "The Secretary shall not approve any program or project which requires the use of any publicly-owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance as determined by the Federal, state, or local officials having jurisdiction thereof, or any land from an historic structure of national, state, or local significance as so determined by such officials unless: there is no feasible and prudent alternative to the use of such land; and, the project includes all possible planning to minimize harm to the land resulting from such use."

**LU-12**     *Offer options of voluntary sale to GRAA or sound insulation to owner of one [single-family] residence south of the airport in the 65 DNL contour of the 1993 NCP [near-term plan]. Page 4-70 and Tables 4-1, 4-5.*

**NO FAA ACTION REQUIRED.** Previously approved in the 1994 NCP. Measure is complete.

**LU-13**     *Encourage the city of Rockford and Winnebago County to require plat notes on new subdivision plats and to record the notes on deeds for new subdivisions within the Airport Noise Overlay Zones AC-1 and AC-2. Pages 4-71, 4-72 and Tables 4-1, 4-5.*

The GRAA recommends this measure to encourage the city of Rockford and Winnebago County to require plat notes on new subdivision plats and to record the notes on deeds for new subdivisions within Airport Overlay Districts AC-1 and AC-2, which would be based on the 2008 NEM/NCP 60-65 and 65+ DNL noise contours as described in Measure LU-2. The intent of this measure is to disclose to a prospective buyer that a plat is located in an area where aviation activity occurs.

Establishing certain requirements to include airport compatibility (i.e., the disclosure of aircraft noise exposure and noise levels) as part of the subdivision plat approval process is a strategy that can be implemented by communities. The inclusion of plat notes on subdivided parcels is an administrative responsibility of each jurisdiction that can be achieved with little or no additional cost to the community. Its success as a method of disclosure may be limited because many homebuyers may not review the approved plat map prior to purchasing the property. A more effective mechanism would be to require that the plat note also be recorded on the individual plot plans and recorded on the property deed of all newly subdivided parcels.

**APPROVED.** Local government has authority to implement this measure. All surrounding communities were represented on the PAC.

**LU-14**     ***Encourage Winnebago County, the city of Rockford, the Village of New Millford, and the Village of Davis Junction not to allow an increase in the residential density in the Agricultural Priority (AG) or Rural Residential (RR) zoning districts (Winnebago County) in the 2008 NEM/NCP 60+ DNL noise contour. Pages 4-73, 4-74 and Tables 4-1, 4-5.***

The GRAA recommends this measure to encourage Winnebago County not to increase the residential density in the AG or RR zoning districts in the 2008 NEM/NCP 60+ DNL noise contour to discourage the encroachment of incompatible land uses toward areas experiencing aircraft noise.

The AG zoning district allows 0.3 dwelling units per acre, while the RR zoning district allows 1.7 dwelling units per acre. Both of these zoning districts are within the 2008 NEM/NCP 60+ DNL noise contour. In order to minimize the potential number of people exposed to potential future aircraft noise, GRAA should encourage that Winnebago County, and the planning departments of the city of Rockford, Village of New Millford, and the Village of Davis Junction, which are within one and one-half miles of these two county zoning districts, not to permit zoning changes that would allow a higher density of residential development on parcels within the 2008 NEM/NCP 60+ DNL noise contour. This measure should be implemented along with Measure LU-2 to ensure that if new residential development does occur within the 2008 NEM/NCP 65+ DNL noise contour it is compatible with aircraft noise.

**APPROVED.** Local government has authority to implement this measure. All surrounding communities were represented on the PAC.

## **OTHER MEASURES**

All three of the 1994 Other Measures have been carried forward into this updated NCP: two measures without revisions, one measure with revisions, and three new measures being added.

**OM-1**     ***Noise monitoring, contour updating, and land use implementation assistance. Page 4-75 and Tables 4-1, 4-5.***

The GRAA recommends continuing this measure, which provides for monitoring compliance with the recommended Noise Abatement Plan. The GRAA staff should periodically check with the ATCT regarding operational compliance with the Plan, as well as with business users, military users, and air carriers. It is also recommended that the DNL noise contour maps be updated approximately every five years, or more often, if operations levels change significantly in comparison with existing or forecast conditions, as determined by the FAA Area Equivalency Method.

The intent of this measure is to foster the implementation of land use compatibility planning measures that would be implemented by local planning agencies. Therefore, GRAA staff should formally request that local planning officials implement each specific

land use planning measure recommended in the updated NCP. Follow-up and technical assistance should be provided to the extent required. This measure would disclose any future incompatible land uses that may occur as the result of changes in airport facilities or operations.

**APPROVED.** Previously approved in the 1994 NCP.

**OM-2      *Noise complaint response system and computer database. Page 4-76 and Tables 4-1, 4-5.***

The GRAA recommends modification of this measure, which recommends that the GRAA establish a standard system for recording, analyzing, and responding to aircraft and airport noise complaints, to include the development of a computerized noise complaint database. This database will enhance the responsiveness of this system.

The intent of such a database is to provide an automated tracking system to better assess complaint trends and to enhance the responsiveness of this system and allow the GRAA to prepare timely responses to community noise complaints.

**APPROVED.** Slight modification to provision previously approved in the 1994 NCP.

**OM-3      *Plan review and evaluation. Page 4-77 and Tables 4-1, 4-5.***

The GRAA recommends continuation of this measure for GRAA staff to periodically review the NCP and consider revisions and refinements, as necessary. It is anticipated that a complete plan update will be needed every five years to respond to changing conditions in airport operations and activity, change in the local area or changes in the aviation industry. An update may be needed sooner, if major changes occur; or later, if conditions at the airport and in the surrounding area remain stable.

The intent of this measure is to disclose any future incompatible land uses that may occur as the result of changes in airport facilities or operations.

**APPROVED.** Previously approved in the 1994 NCP.

**OM-4      *Establish a Pilot/Community Awareness Program. Page 4-78 and Tables 4-1, 4-5.***

The GRAA recommends this new measure to establish a Pilot/Community Awareness Program to provide information to air carriers, air traffic control personnel, and local communities.

Information about the noise abatement measures would be published in the form of posters and/or flyers for pilots and would also be given to the airlines and fixed-based operators (FBOs) to display in locations where pilots would pick up the materials. A brochure would be created for interested citizens and local officials to summarize the NCP measures. A summary of the NCP could be placed on the GRAA website as another means of providing information to the public.

The intent of this measure is to demonstrate to the community that the GRAA is being pro-active in addressing the concerns of local communities. This program would also provide another forum for the GRAA to share information and educate the airlines, airport tenants, and the community about the NCP.

**APPROVED.**

**OM-5      *Publication of Instrument Departure Procedures for Runways 1, 19, and 25. Page 4-79 and Tables 4-1, 4-5.***

The GRAA recommends this new measure to publish instrument departure procedures (DP) to simplify the communication of pilot instructions between the ATCT and the pilot from departure to the transition to en route airspace.

In order to assure that the noise abatement procedures recommended for Runways 1, 19, and 25 are properly implemented and executed, the GRAA staff should encourage FAA to publish the DP for Runways 1, 19, and 25. The DP for RFD should be published graphically and named. The procedure name would be listed in Section C of the Terminal Procedures Publications by airport name and runway.

The intent of this measure is to simplify the communication of pilot instructions between the Air Traffic Control and the pilot from departure to the transition to en route airspace and assures that the noise abatement procedures recommended for Runways 1, 19, and 25 are properly implemented and executed.

**APPROVED.**



**OM-6      *Update airport information in the Airport Facilities Directory. Page 4-80 and Tables 4-1, 4-5.***

The GRAA recommends this measure to update airport information in the *Airport Facilities Directory*, which contains airport-specific information including the airport identifier, the location of the nearest town or navigational aid, the number of runways, threshold crossing heights, and air traffic pattern altitudes.

The intent of this measure is to update information concerning RFD in the *Airport Facilities Directory* to include a notice of the approved noise abatement procedures and to update the air traffic pattern altitudes used at RFD.

**APPROVED.**