



CHICAGO DEPARTMENT OF AVIATION
CITY OF CHICAGO

June 20, 2016

Ms. Amy Hanson (CHI-ADO-603)
Chicago Airports District Office
Federal Aviation Administration
2300 E. Devon Avenue, Room 320
Des Plaines, IL 60018

Subject: Chicago O'Hare International Airport
Fly Quiet Runway Rotation Test for a Six-Month Period

Dear Ms. Hanson:

The Chicago Department of Aviation ("CDA") is respectfully submitting a Fly Quiet Runway Rotation Test to the Federal Aviation Administration for review and approval of a six-month test. As detailed in the enclosed document, the purpose of the test is to evaluate a condition that could be in place until Runway 14R/32L is permanently closed. The CDA proposes to conduct the runway rotation test during the overnight hours when air traffic demand requires one arrival and one departure runway.

The CDA looks forward to the FAA's approval. As always, please do not hesitate to call me with any questions you may have.

Sincerely,

Aaron J. Frame
Deputy Commissioner of Environment

AJF/ajf

Enclosure

cc: Commissioner Ginger S. Evans, Aviation
Jonathan Leach, Aviation
Jeanette Camacho, O'Hare Noise Compatibility Commission
CDA Environment Division file

CHICAGO O'HARE INTERNATIONAL AIRPORT

FLY QUIET RUNWAY ROTATION TEST



JUNE 20, 2016

Table of Contents

1.0 BACKGROUND	page 2
1.1 History of the Fly Quiet Program	page 3
1.2 Interim Fly Quiet Evaluation	page 5
2.0 PUBLIC INVOLVMENT.....	page 6
2.1 MOU Meetings.....	page 6
2.1.1 MOU Meeting 1 – June 29, 2015	page 6
2.1.2 MOU Meeting 2 – July 20, 2015.....	page 6
2.1.3 MOU Meeting 3 – July 31, 2015.....	page 6
2.2 ONCC Fly Quiet Committee Meetings	page 7
2.2.1 Fly Quiet Meeting 1 – October 19, 2015	page 7
2.2.2 Fly Quiet Meeting 2 – November 16, 2015.....	page 7
2.2.3 Fly Quiet Meeting 3 – December 14, 2015.....	page 7
2.2.4 Fly Quiet Meeting 4 – January 25, 2016	page 8
2.2.5 Fly Quiet Meeting 5 – February 16, 2016	page 8
2.2.6 Fly Quiet Meeting 6 – March 11, 2016	page 8
2.3 ONCC Full Meetings	page 8
2.3.1 ONCC Meeting – January 8, 2016	page 8
2.3.2 ONCC Meeting – March 11, 2016	page 8
2.3.3 ONCC Meeting – May 6, 2016.....	page 8
2.4 ONCC Technical Committee Meeting	page 8
2.4.1 ONCC Meeting – January 8, 2016	page 8
3.0 INTERIM FLY QUIET ROTATION.....	page 9
3.1 Methodology.....	page 9
Exhibit A	page 13
Exhibit B	page 14
Exhibit C	page 15
4.0 CITIZEN FEEDBACK	page 22

APPENDICES

1.0 BACKGROUND

The Chicago Department of Aviation (CDA) is submitting a Fly Quiet Runway Rotation Test (Test) to the Federal Aviation Administration (FAA) for approval of a six-month test period. The purpose of the test is to evaluate a condition that could be in place until runway 14R/32L is permanently closed. The Test is intended to occur during the overnight hours when demand requires one arrival and one departure runway. The Test includes a 25-week schedule that consists of 12 weekly periods intended to balance the overnight noise. Each new week would begin on Sunday evening at 10 p.m. or after when demand allows for one arrival and one departure runway. This plan includes stakeholder input from the following groups:

- O'Hare Noise Compatibility Commission (ONCC)
- Suburban O'Hare Commission (SOC)
- Fair Allocation in Runways Coalition (FAiR)
- Federal Aviation Administration (FAA)

The subsequent sections outline a background on the Fly Quiet Program (Fly Quiet), the efforts undertaken to date, public involvement on the revisions to Fly Quiet, and the methodology used to develop the recommended Test.

1.1 History of the Fly Quiet Program

Since the 1970s, the Chicago Department of Aviation (CDA) has implemented a nighttime noise abatement program at Chicago O'Hare International Airport (O'Hare). In 1996, the O'Hare Noise Compatibility Commission (ONCC) was formed to provide input and oversight to the implementation of all noise programs, including the Fly Quiet Program.

On June 17, 1997, the City of Chicago announced that airlines operating at O'Hare International Airport had agreed to use designated noise abatement flight procedures in accordance with the Fly Quiet Program. The Fly Quiet Program was implemented in an effort to reduce the impacts of aircraft noise on the surrounding neighborhoods further. The Fly Quiet Program is a voluntary program that encourages pilots and air traffic controllers to use designated nighttime preferential runways and flight tracks developed by the CDA in cooperation with the O'Hare Noise Compatibility Commission (ONCC), the airlines, and the air traffic controllers. These preferred routes are intended to direct aircraft over less-populated areas, such as forest preserves, highways, and commercial and industrial areas. As part of the Fly Quiet Program, the CDA prepares a Quarterly Fly Quiet Report. This report is shared with the ONCC, the airlines, the FAA and the general public. The Fly Quiet Report contains detailed information regarding nighttime runway use, flight operations, flight tracks, noise complaints, and 24-hour tracking of ground

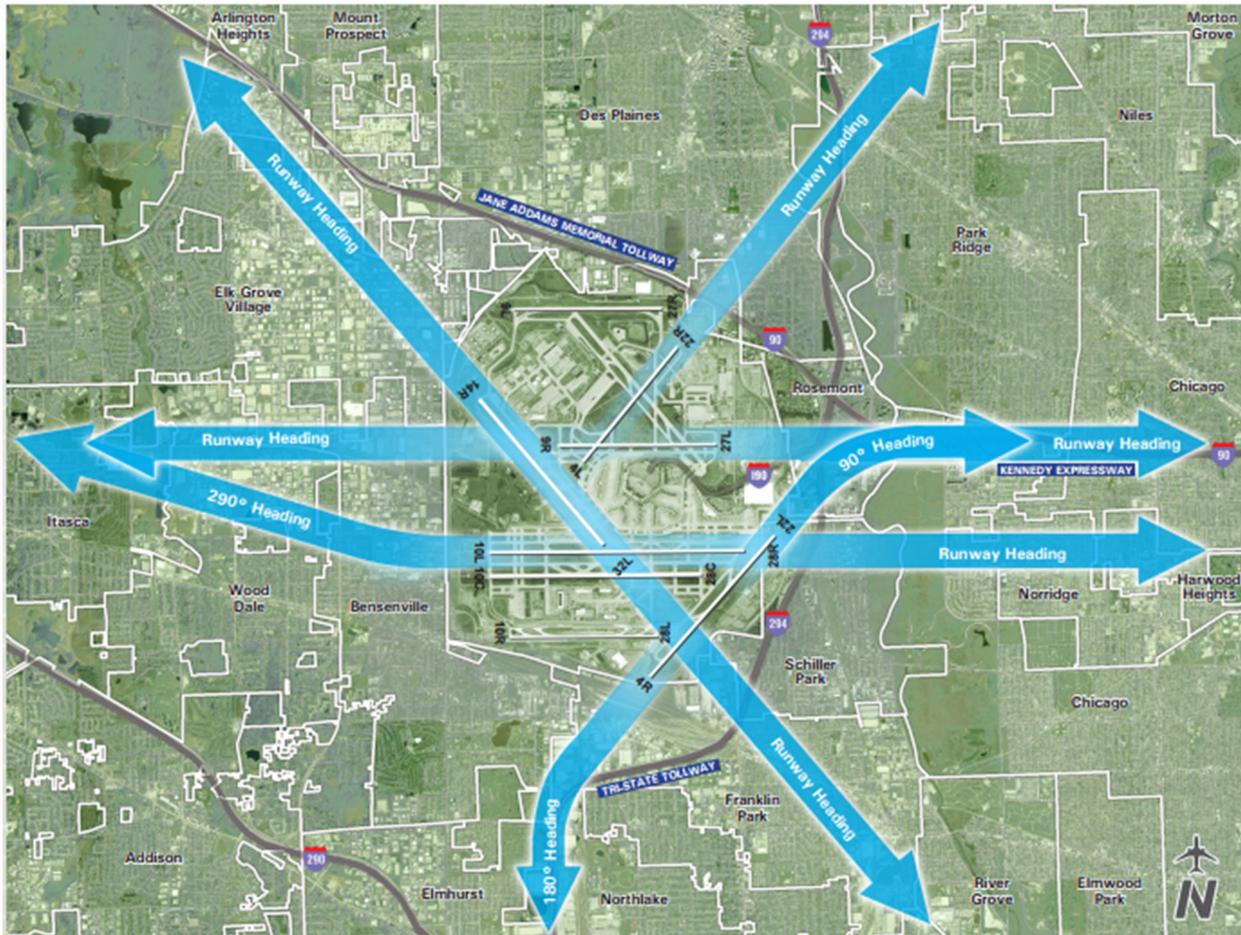
aircraft engine run-ups (ground run-ups). The data presented in the Fly Quiet Report are compiled from the Airport Noise Management System (ANMS) and airport operation logs. The Fly Quiet Report was prepared in consultation with the O'Hare Noise Compatibility Commission.

O'Hare has eight runways that are utilized at different times depending primarily upon the prevailing wind conditions on the airfield, as well as other weather conditions, airfield conditions, and air traffic conditions. O'Hare is located in a noise sensitive area surrounded by residential communities. The preferential runway use plan at O'Hare is voluntary and advisory in nature and does not compromise safety. When feasible, these procedures should be implemented between 10:00 p.m. and 7:00 a.m. (2200 and 0700 hours local time) in order to minimize the effects of nighttime noise on the surrounding communities. Unless weather, runway closures, or loss of navigational aids dictate otherwise, the FAA, at its sole discretion will implement the following runway use configurations in no particular order:

- Arrivals on 14R and departures on 28R and 14R
- Arrivals on 27L and departures on 28R and 32L
- Arrivals on 22R and departures on 28R and 22R
- Arrivals on 10L and departures on 9R and 10L

Any runway may be closed on any given night for routine safety inspections.

The Fly Quiet Program includes the following arrival and departure procedures for noise abatement. These procedures are advisory in nature and do not compromise safety. Recommended Nighttime Arrival Procedures: 10 p.m. to 7 a.m. (2200-0700 hours local time) I. Descent: Aircraft should not be lower than 4,000 feet MSL when turning on final approach. II. Reverse Thrust: Limit the use of reverse thrust between 10 p.m. to 7 a.m. (2200-0700 hours local time) to reduce nighttime noise impacts on local communities.



Ground run-ups are routine aircraft engine maintenance tests which require the operation of an engine at high power for extended periods of time generating continuous elevated noise levels. The Ground Run-Up Enclosure (GRE), sometimes referred to as a “hush house,” is a structure that uses acoustical dampening principles to reduce the noise impacts of aircraft engine ground run-ups. The purpose of the GRE at O’Hare is to minimize noise generated from all aircraft engine test runs during maintenance and repair procedures, and to reduce the number of communities impacted by aircraft ground run-up noise. The GRE is located on the Scenic Hold Pad, adjacent to the airline maintenance area, and is oriented to direct aircraft noise toward the center of the airport and the terminal core. All run-ups of aircraft jet engines require the pilot or mechanic to obtain approval from CDA Operations. The Fly Quiet Program includes the following ground run-up procedures listed below. Ground run-ups must be conducted at the following locations in preferential order:

- 1) Ground Run-Up Enclosure (on the Scenic Hold Pad)
- 2) Alternate Run-Up locations to be used when the Ground Run-Up Enclosure is in-use or winds are not conducive for run-ups in the Ground Run-Up Enclosure. For further details regarding the Ground Run-Up Enclosure, alternative run-up locations or procedures for ground run-ups, please refer to the CDA Ground Run-Up Procedures Manual.

The Fly Quiet Program is currently delivered to airlines and pilots in four forms:

- Automatic Terminal Information Service (ATIS) is the continuous broadcast of recorded non-control information that is updated when there is a significant change in the information. O'Hare ATIS broadcasts "Noise Abatement Procedures are in effect" while O'Hare is in Fly Quiet. All pilots listen to ATIS before contacting Air Traffic Control.
- Noise Abatement Signs are located on the airfield. See Airport Layout Diagram for example and locations.
- Air Traffic Control (ATC) provides approved Fly Quiet flight instructions to pilots before the aircraft is cleared for takeoff. ATC provides vectors (Fly Quiet headings) and informs the pilot to maintain heading until 3,000' MSL and contact departure control (TRACON). The controller may or may not explain these headings are noise abatement procedures.
- The ONCC provides outreach to airline chief pilots, station managers and other airline representatives (www.oharenoise.org).

1.2 INTERIM FLY QUIET EVALUATION

The purpose of evaluating the Fly Quiet Program is to develop a balanced, cost-effective plan to reduce current aircraft noise impacts over noise-sensitive land uses and, where practical, to limit the potential for future noise impacts. FAA cooperation through the involvement of air traffic control professionals and FAA review of the recommended change is required before any change may occur. The general goals and objectives of the evaluating the Fly Quiet Program include:

- **Provide Near-Term Relief** – Six-month test with citizen feedback
- **Reduce Impacts to the Highest Impacted Communities** – Provide relief to the highest impacted communities
- **Provide Predictability** – Publish a rotation schedule that allows citizens to predict periods of relief to the extent possible

2.0 PUBLIC INVOLVEMENT

2.1 MOU MEETINGS

Under the terms of a formal Memorandum of Understanding (MOU) approved on May 29, 2015, the CDA hosted three meetings with elected officials, representatives of the ONCC, FAiR, SOC, and members of the public (See Appendix 1).

2.1.1 MOU Meeting 1 – June 29, 2015

Under the terms of a formal Memorandum of Understanding (MOU) approved on May 29, 2015, the CDA met with met with elected officials, representatives of the ONCC, FAiR, SOC, and members of the public on June 29, 2015. The FAiR Coalition outlined its recommendation to increase the utilization of diagonal runways (Runways 4L/22R, 4R/22L, 14R/32L, and 14L/32R).

2.1.2 MOU Meeting 2 – July 20, 2015

The CDA met with met with elected officials, representatives of the ONCC, FAiR, SOC, and members of the public on July 20, 2015 (See Appendix 2). The CDA provided a detailed presentation on the following:

1. History of Noise Initiatives at O'Hare
2. Residential Sound Insulation of 10,922 homes at a cost of approximately \$273 million
3. School Sound Insulation of 123 schools at a cost of approximately \$350 million
4. Noise Monitoring Program consisting of 32 permanent noise monitors
5. Fly Quiet Program consisting of:
 - a. Preferential Runway Use Program
 - b. Preferential Flight Tracks
 - c. Ground Run-Up Enclosure (1st in the U.S.)
 - d. Noise Abatement Signs
 - e. Fly Quiet Manuals for Pilots and Air Traffic Controllers
 - f. Construction Awareness Flyers
 - g. Fly Quiet Reports – Quarterly
6. History of airfield evolution and operational challenges

2.1.3 MOU Meeting 3 – July 31, 2015

The CDA met with met with elected officials, representatives of the ONCC, FAiR, SOC, and members of the public on July 20, 2015 (See Appendix 3). The CDA provided a detailed presentation on the following items:

1. Noise Recommendations – a 24-point plan to address noise issues around O'Hare. These recommendations included a runway rotation plan.
2. Supplemental White Papers – consisted of 12 educational white papers dealing with operation and noise topics.
3. Response to Suburban O'Hare Commission (SOC) Reports regarding operational and noise studies and recommendations.
4. Independent Legal Analysis on the evaluation of the public process of the environmental review for the O'Hare Modernization Program (OMP).

2.2 ONCC FLY QUIET MEETINGS

On September 18, 2015, the ONCC formed an ad hoc Fly Quiet Committee (Committee) to review, modify and make recommendations regarding nighttime noise abatement procedures at O'Hare (See Appendix 4). The Committee was formed as a result of the CDA's Noise Recommendations modifying the Fly Quiet Program which were announced during the MOU meetings. This role for the Committee is directly in line with the Federal Aviation Administration (FAA) Record of Decision (ROD) on the O'Hare Modernization Plan (OMP), which states that ONCC is the "official facilitating body with the responsibility to oversee O'Hare noise mitigation efforts, which include the Fly Quiet and Sound Insulation programs."

The Committee consists of nine members representing Chicago and suburban communities near O'Hare that are tasked to review and recommend modifications to the airport's nighttime noise abatement program. The Committee invited FAiR and SOC consultants to participate as official guests.

2.2.1 Fly Quiet Committee Meeting 1 – October 19, 2015

The CDA met with the Committee and reviewed the history of Fly Quiet, in depth analysis of operational demand at night, and adherence to the existing Fly Quiet Program (See Appendix 5).

2.2.2 Fly Quiet Committee Meeting 2 – November 16, 2015

The CDA met with the Committee regarding new and modified departure procedures and additional Fly Quiet initiatives to expand Fly Quiet (See Appendix 6).

2.2.3 Fly Quiet Committee Meeting 3 – December 14, 2015

The CDA met with the Committee regarding new Fly Quiet periods to adapt to higher periods of demand during the nighttime hours (See Appendix 7).

2.2.4 Fly Quiet Committee Meeting 4 – January 25, 2016

The CDA met with the Committee regarding new and modified departure procedures, new periods of Fly Quiet, and rotation of runways. The Committee approved departure procedure criteria (See Appendix 8).

2.2.5 Fly Quiet Committee Meeting 5 – February 16, 2016

The CDA met with the Committee regarding the rotation of runway and new periods of Fly Quiet aimed at expanding the Fly Quiet Program. The Committee approved criteria for a runway rotation and criteria for three Fly Quiet Programs (See Appendix 9).

2.2.6 Fly Quiet Meeting 6 – March 11, 2016

The CDA met with the Committee regarding existing and new departure procedures and reapproved departure procedure criteria (See Appendix 10).

2.3 ONCC FULL MEETINGS

The ONCC members discussed the progress of the Committee during regularly scheduled full ONCC meetings.

2.3.1 ONCC Meeting – January 8, 2016

The CDA met with the ONCC and discussed the Committee progress (See Appendix 11).

2.3.2 ONCC Meeting – March 11, 2016

The CDA met with the ONCC and discussed the Committee progress (See Appendix 12).

2.3.3 ONCC Meeting – May 6, 2016

The ONCC formally approved the Fly Quiet runway rotation plan with 45 of the 53 members voting in favor of implementing a six-month test (See Appendix 13).

2.4 ONCC TECHNICAL COMMITTEE MEETING

The ONCC members discussed the progress of the Committee during regularly scheduled Technical Committee meetings.

2.4.1 ONCC Technical Committee Meeting – April 18, 2016

The CDA met with the ONCC Technical Committee and other ONCC members to discuss the progress of the Fly Quiet Committee work plan (See Appendix 14).

3.0 INTERIM FLY QUIET ROTATION

3.1 Methodology

The following Fly Quiet II Runway Rotation was developed based on criteria developed and approved by the Committee.

There are 10 Fly Quiet II (FQ) runway operating configurations. These configurations are designed with the following operating characteristics:

1. No more than two runways are used in each configuration consistent with ONCC Criterion 1.
2. The configurations are designed to use either only the east/west runways or only the diagonal runways. This approach will assist in satisfying ONCC Criteria 3, 4 and 5.
3. Departure runways attempt to utilize, as much as possible, runways that have at least 9,600 feet (ft.) available for departing aircraft to assist in satisfying ONCC Criterion 4. It is important to note that runway operating configurations that do not utilize Runway 10L/28R may still experience departure operations from Runway 10L/28R by aircraft having an operational requirement after prior coordination with CDA Operations.

Exhibit A depicts the FQ II runway operating configurations. Runway operating configurations A through E are east flow arrival configurations while runway operating configurations F through J are west flow arrival configurations. There are 5 east flow arrival runway operating configurations with 3 configurations using only east/west runways and 2 configurations using only diagonal runways. Similarly, there are 5 west flow arrival runway operating configurations with 3 configurations using only east/west runways and 2 configurations using only diagonal runways.

East arriving runway operating configurations are:

- Configuration A arrives and departs Runway 10L.
- Configuration B arrives and departs Runway 14R.
- Configuration C arrives Runway 9R and departs Runway 10C.
- Configuration D arrives Runway 4R and departs Runway 32L.
- Configuration E arrives Runway 10L and departs Runway 10C.

West arriving runway operating configurations are:

- Configuration F arrives and departing Runway 28R.
- Configuration G arrives Runway 22R and departs Runway 32L.
- Configuration H arrives Runway 27L and departs Runway 28C.
- Configuration I arrives Runway 22R and departs Runway 22L.

Runway 22L has less than 9,600 ft. available for departure and is being utilized in this configuration to disperse noise more equitably in the area.

- Configuration J arrives and departs Runway 28C.

The runway operating configurations are then utilized in a 12-week Runway Rotation Test. Important characteristics of the Test are:

- For each week, a primary runway operating configuration is designated with an alternate configuration designated to provide additional wind coverage if needed.
- The runway operating configurations are used such that a minimum amount of physical concrete is used. This attempts to minimize the disruption caused by nighttime runway maintenance and construction.
- The runway operating configurations are utilized to alternate between east flow arrivals and west flow arrivals configurations consistent with ONCC Criteria 1 and 2.
- The runway operating configurations are also utilized to alternate between configurations that use east/west runways oriented and diagonal runways to assist in satisfying ONCC Criteria 1, 3, 4 and 5.

Weeks 1 through 6 of the rotation operate as follows:

- Week 1: The primary runway operating configuration is west arrival flow configuration F (arrivals and departures on Runway 28R) with east arrival flow configuration A (arrivals and departure Runway 10L) serving as the alternate configuration.
- Week 2: The primary runway operating configuration is east (ONCC Criterion 2) arrival flow configuration B (arrivals and departures on Runway 14R) (ONCC Criteria 4 and 5) with west arrival flow configuration G (arrivals on Runway 22R and departures on Runway 32L) serving as the alternate configuration. The use of a diagonal orientated configuration minimizes additional impacts to the communities impacted during Week 1 (ONCC Criteria 3).
- Week 3: The primary runway operating configuration is west (ONCC Criterion 2) arrival flow configuration H (arrivals on Runway 27L and departures on Runway 28C) (ONCC Criteria 4) with east arrival flow configuration C (arrivals on Runway 9R and departures on Runway 10C) serving as the alternate configuration. The use of an east/west orientated configuration avoids additional impacts to the communities impacted during Week 2 (ONCC Criteria 3).
- Week 4: The primary runway operating configuration is east (ONCC Criterion 2) arrival flow configuration D (arrivals on Runway 4R and departures on Runway 32L) (ONCC Criteria 4 and 5) with west arrival configuration I (arrivals on Runway 22R and departures on Runway

- 22L) serving as the alternate configuration. The use of diagonal orientated configuration minimizes additional impacts to the communities impacted during Week 3 (ONCC Criterion 3).
- Week 5: The primary runway operating configuration is west (ONCC Criterion 2) arrival flow configuration J (arrivals and departures on Runway 28C) (ONCC Criteria 4) with east arrival flow configuration E (arrivals on Runway 10L and departures on Runway 10C) serving as the alternate configuration. The use of an east/west orientated configuration minimizes additional impacts to the communities impacted during Week 4 (ONCC Criterion 3).
 - The rotation through Week 5 has runways oriented east/west operating in west arrival flow while the diagonal orientated runways are operating in east arrival flow. In order to achieve a more balanced distribution of noise exposure (ONCC Criterion 1), east/west orientated runways must be transitioned to serve the east arrival flow and the diagonally orientated runways must be transitioned to serve west arrival flow. Week 6 executes that transition by using a diagonal runway operating configuration to serve west arrivals.
 - Week 6: The primary runway operating configuration is west arrival flow configuration G (arrivals on Runway 22R and departures on Runway 32L) (ONCC Criteria 4 and 5) with east arrival flow configuration B (arrivals and departures on Runway 14R) serving as the alternate configuration. While this transition Week results in two consecutive weeks of west arrival flow, the use of diagonal orientated configuration minimizes additional impacts to the communities impacted during Week 5 (ONCC Criterion 3).

Weeks 6 through 12 of the rotation operate as follows:

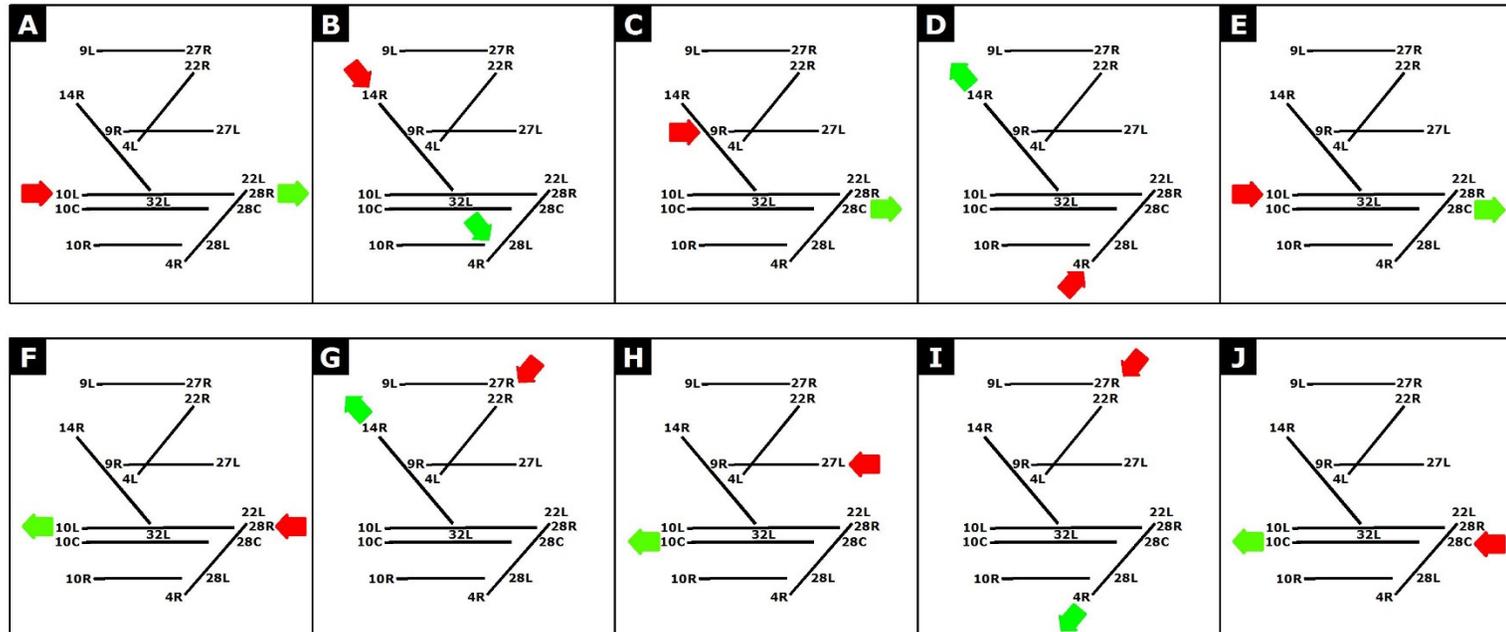
- Week 7: The primary runway operating configuration is east (ONCC Criterion 2) arrival flow configuration A (arrivals and departures on Runway 10L) with west arrival flow configuration F (arrivals and departures on Runway 28R) serving as the alternate configuration. The use of an east/west orientated configuration minimizes additional impacts to the communities impacted during Week 6 (ONCC Criteria 3).
- Week 8: The primary runway operating configuration is west (ONCC Criterion 2) arrival flow configuration I (arrivals on Runway 22R and departures on Runway 22L) (ONCC Criteria 4 and 5) with east arrival flow configuration D (arrivals on Runway 4R and departures on Runway 32L) serving as the alternate configuration. The use of a diagonal orientated configuration minimizes additional impacts to the communities impacted during Week 7 (ONCC Criterion 3).

- Week 9: The primary runway operating configuration is east (ONCC Criterion 2) arrival flow configuration C (arrivals on Runway 9R and departures on Runway 10C) (ONCC Criteria 4) with west arrival flow configuration H (arrivals on Runway 27L and departures on Runway 28C) serving as the alternate configuration. The use of an east/west orientated configuration minimizes additional impacts to the communities impacted during Week 8 (ONCC Criterion 3).
- Week 10: The primary runway operating configuration is west (ONCC Criterion 2) arrival flow configuration G (arrivals on Runway 22R and departures on Runway 32L) (ONCC Criteria 4 and 5) with east arrival flow configuration B (arrivals and departures on Runway 14R) serving as the alternate configuration. The use of diagonal orientated configuration minimizes additional impacts to the communities impacted during Week 9 (ONCC Criterion 3).
- Week 11: The primary runway operating configuration is east (ONCC Criterion 2) arrival flow configuration E (arrivals on Runway 10L and departures on Runway 10C) (ONCC Criteria 4) with west arrival flow configuration J (arrivals and departures on Runway 28C) serving as the alternate configuration. The use of an east/west orientated configuration minimizes additional impacts to the communities impacted during Week 10 (ONCC Criterion 3).
- Week 12 executes the transition to using a diagonal orientated configuration to serve east arrival flow and the east/west orientated runways to serve west arrival flow.
- Week 12: The primary runway operating configuration is east arrival flow configuration D (arrivals on Runway 4R and departures on Runway 32L) (ONCC Criteria 4 and 5) with west arrival flow configuration I (arrivals on Runway 22R and departures on Runway 22L) serving as the alternate configuration. While this transition week results in two consecutive weeks of east arrival flow, the use of a diagonal orientated configuration minimizes additional impacts to the communities impacted during Week 11 (ONCC Criterion 3).

Upon the completion of Week 12, the runway rotation repeats with Week 1. **Exhibit B** depicts a 25-week Test schedule on a single page with a proposed start date of July 3, 2016. **Exhibit C** depicts the same 25-week Test schedule broken out on seven pages.

Exhibit A

PROPOSED FLY QUIET II RUNWAY CONFIGURATIONS



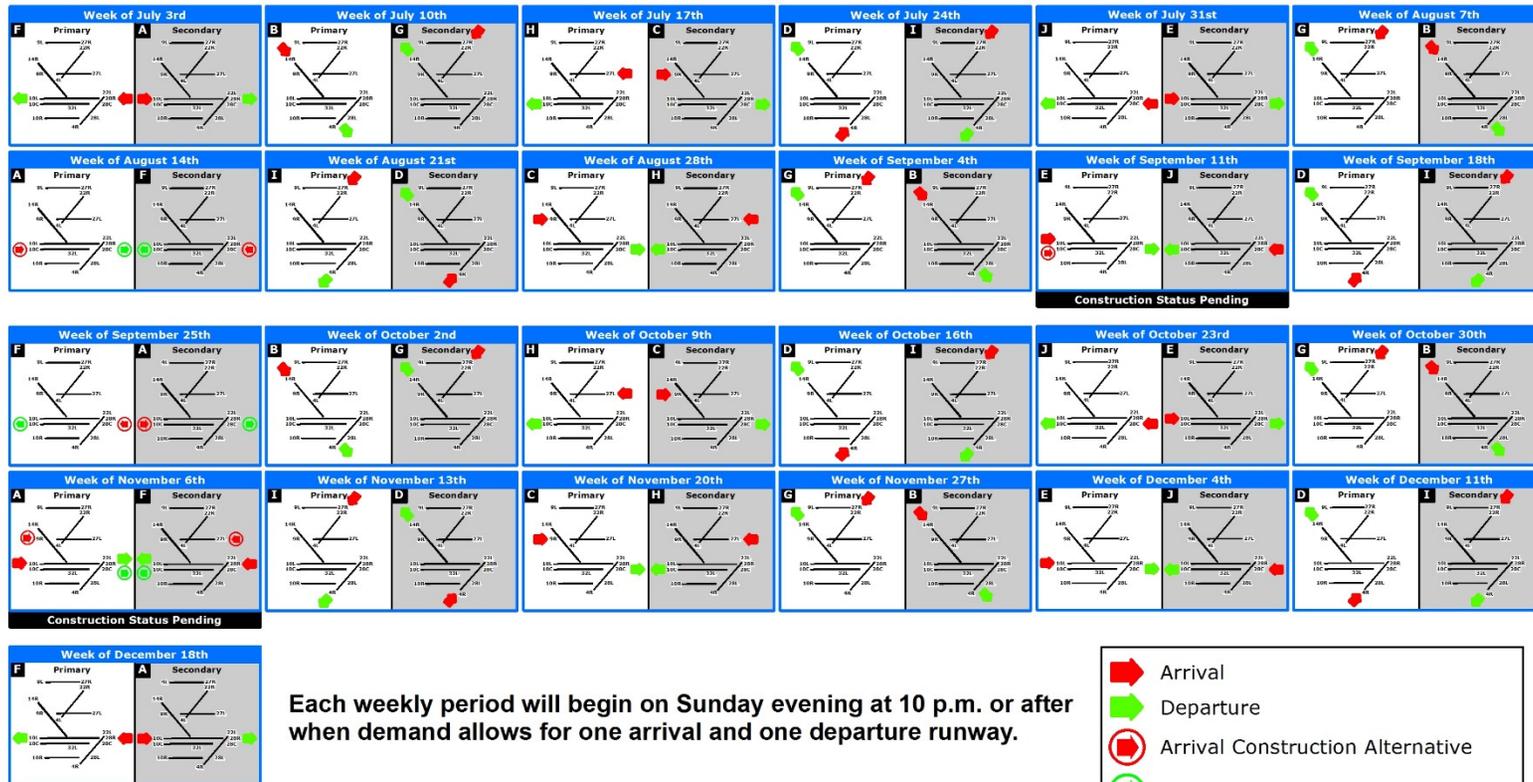
Notes

- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by CDA Operations, and prevailing winds.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.

4/14/2016

Exhibit B FLY QUIET II RUNWAY ROTATION PLAN (Weeks 1-25)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Each weekly period will begin on Sunday evening at 10 p.m. or after when demand allows for one arrival and one departure runway.

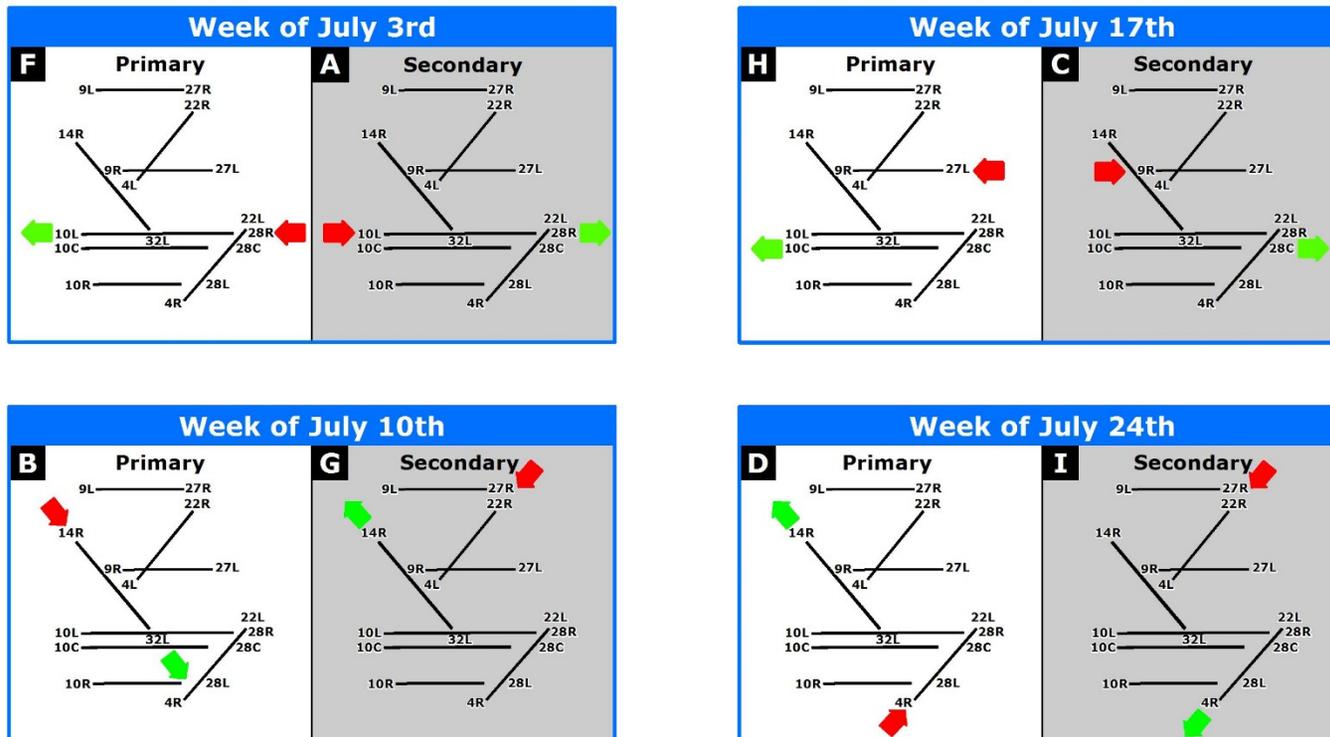
Notes

- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.

6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Weeks 1-4)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

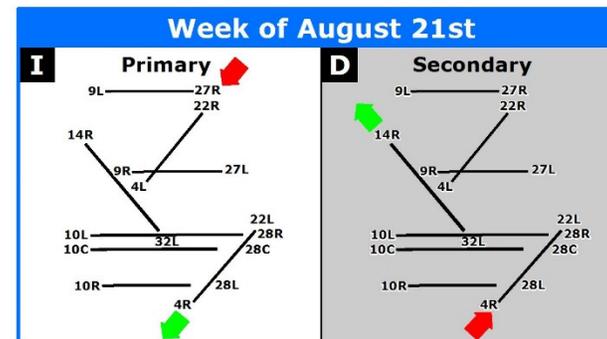
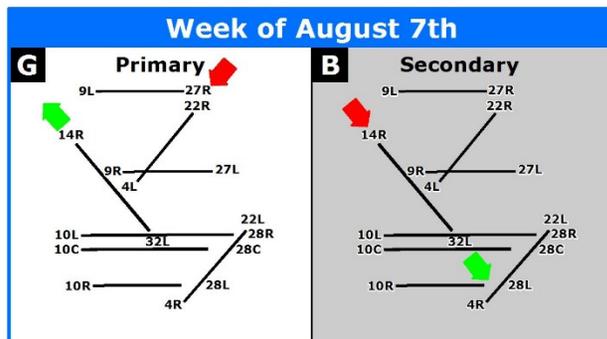
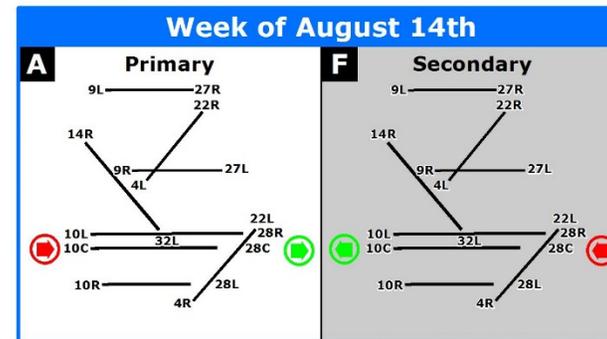
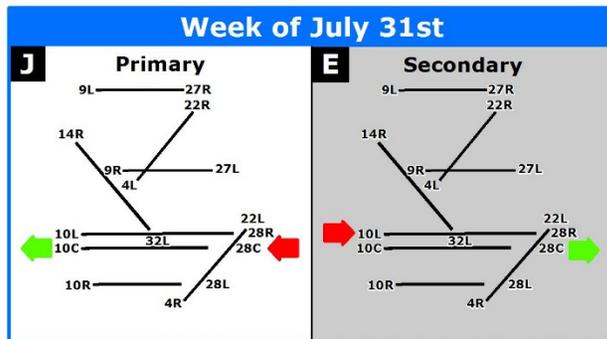
- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Weeks 5-8)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

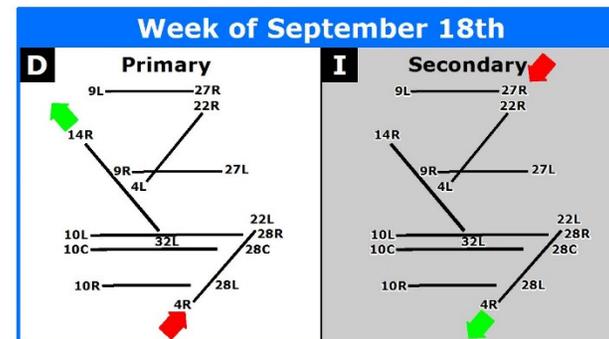
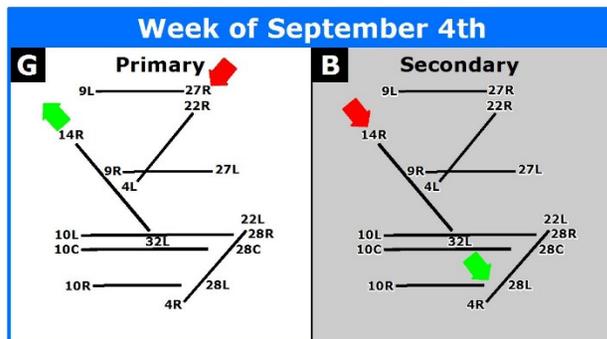
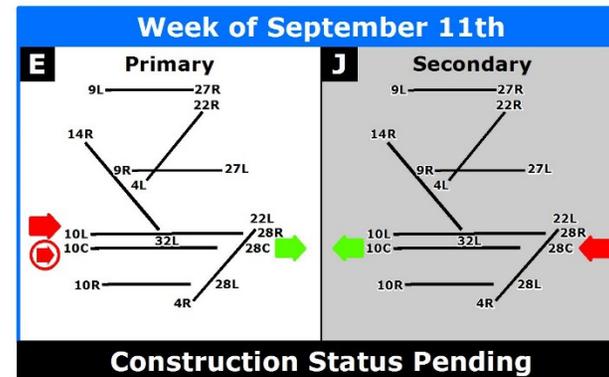
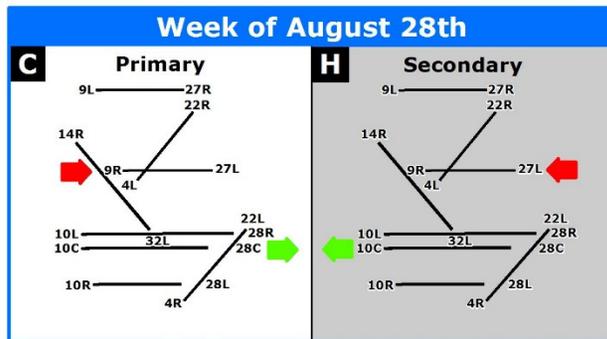
- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Weeks 9-12)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

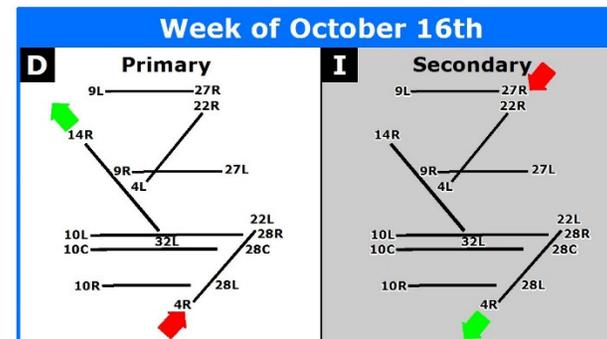
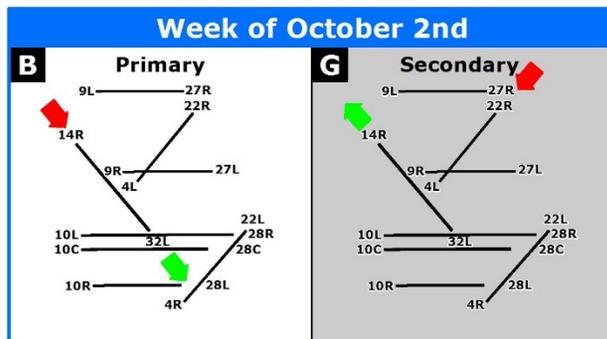
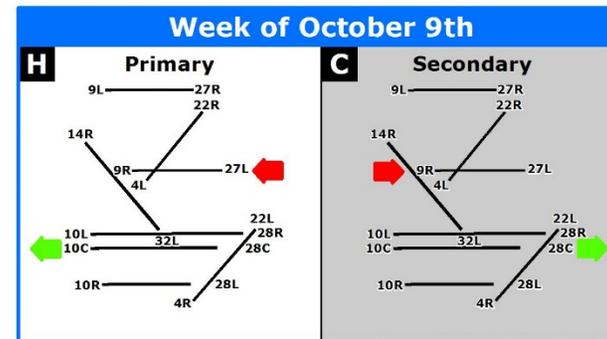
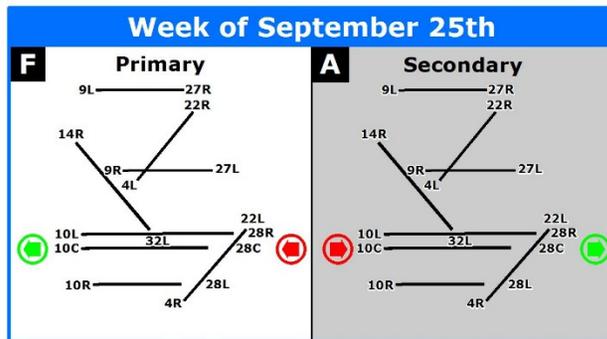
- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Weeks 13-16)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

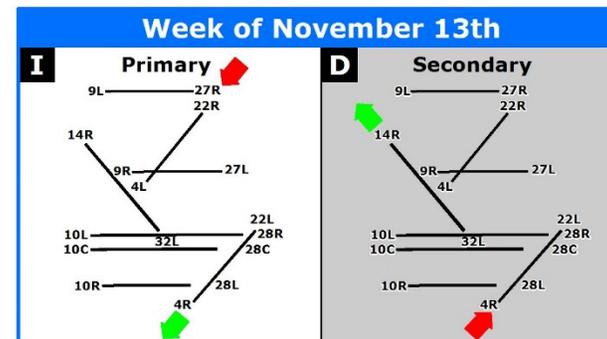
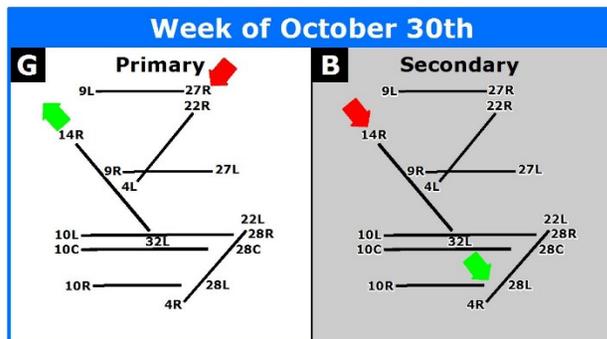
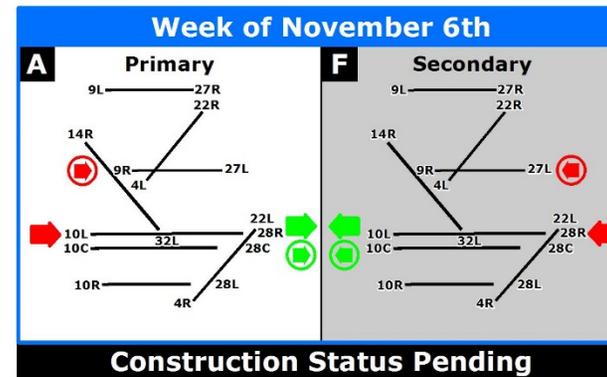
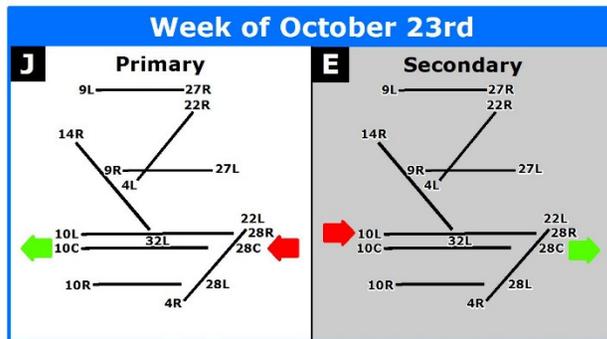
- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Weeks 17-20)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

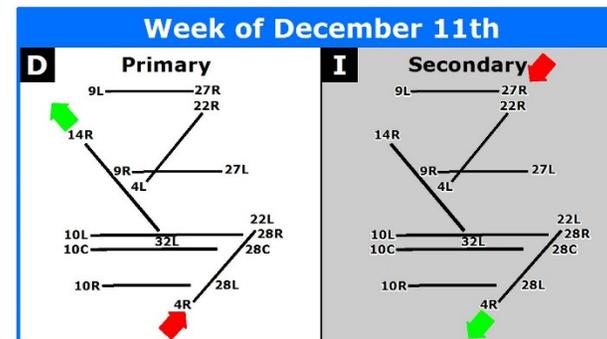
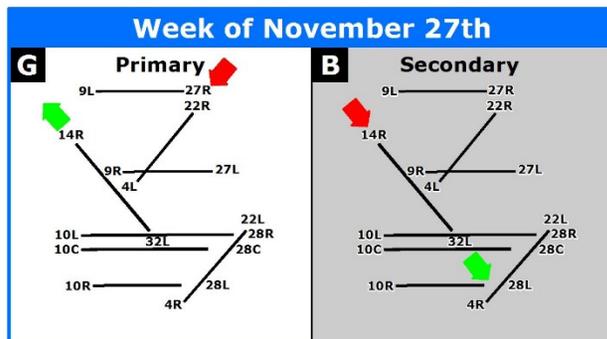
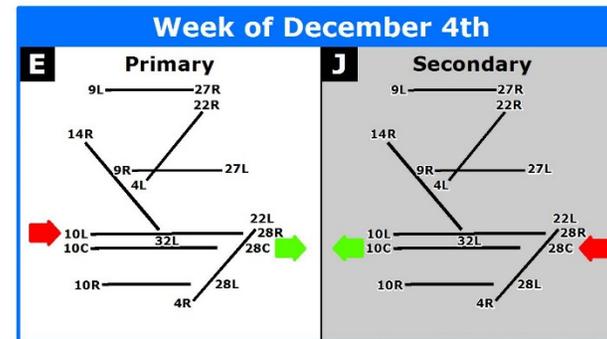
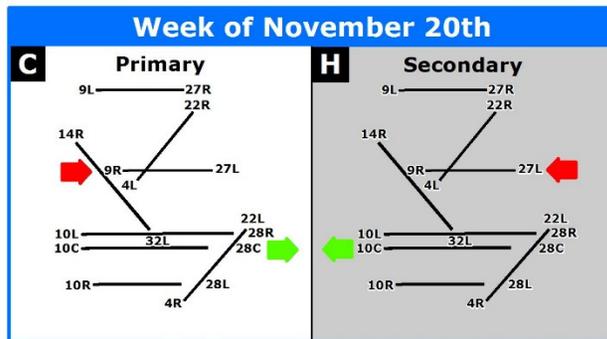
- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Weeks 21-24)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

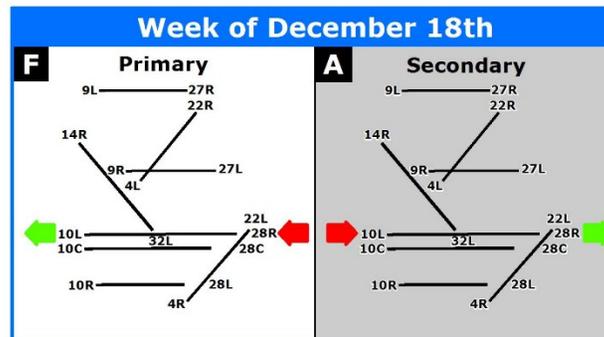
- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

Exhibit C FLY QUIET II RUNWAY ROTATION PLAN (Week 25)

This chart illustrates the proposed runway use configurations for the Fly Quiet II Runway Rotation Plan (out of a 12 week rotation schedule). For each week, a primary and secondary runway use configuration is provided to accommodate potential changes in wind direction. Historical wind data suggests that the primary runway use configuration can be used the majority of the time. The runway use configurations have been defined to balance noise exposure by community by complying with the criteria approved by the ONCC Fly Quiet Committee. The use of east flow, west flow, parallel, and diagonal runways is rotated on a weekly basis. Special procedures have been defined to accommodate additional aircraft that require added runway length.



Notes

- Use of these runways is voluntary, pilots are encouraged to use designated nighttime preferential runways.
- Runway 10L/28R, if closed for noise abatement, would be made available for flights that require additional runway length after operator coordination, at a minimum of 2 hours prior to arrival or departure, with Chicago Department of Aviation (CDA) Operations.
- This proposed plan has not been approved by the Federal Aviation Administration (FAA).
- Alternative runways may be used to allow for construction, snow removal, runway maintenance, runway inspection and specific aircraft operational needs. Available runways are determined by Chicago Department of Aviation (CDA) Operations, and prevailing winds. When Runway 10L/28R is closed for construction, Runway 10C/28C will be made available for flights that require additional runway length.



6/20/2016

4.0 CITIZEN FEEDBACK

In order to capture citizen feedback, the CDA will administer a Test website that includes the following:

- **Background Information** – Information on the Fly Quiet Program and the Test
- **Test Schedules** – Downloadable Test schedule in multiple formats
- **Weekly updates** – Adherence tracking of the Test
- **Survey** – Public survey



[Home](#) [About](#) [Schedule](#) [Survey](#) [O'Hare Noise Management](#) [O'Hare Noise Compatibility Commission](#)

