

**RUNWAY ROTATION TEST
JULY 6, 2016 TO DECEMBER 25, 2016**



July 6th - 10th

Overall Fly Quiet				Runway Rotation Test				
Start	Stop	Duration (hrs: mins)	Percentage of Nighttime ¹	Start	Stop	Duration ² (hrs: mins)	Primary ³	Secondary ³
7/6/16 - 10:30 PM	7/7/16 - 05:50 AM	7:20	81%	7/6/16 - 11:42 PM	7/7/16 - 05:31 AM	4:18	75%	0%
7/7/16 - 11:18 PM	7/8/16 - 05:44 AM	6:26	71%	7/7/16 - 11:50 PM	7/8/16 - 05:44 AM	3:05	83%	0%
7/8/16 - 10:47 PM	7/9/16 - 05:39 AM	6:52	76%	7/8/16 - 11:50 PM	7/9/16 - 05:42 AM	4:46	75%	3%
7/9/16 - 10:28 PM	7/10/16 - 05:43 AM	7:15	81%	7/9/16 - 10:28 PM	7/10/16 - 05:43 AM	6:29	99%	0%
Average				Average				
10:45 PM	5:44 AM	6:58	77%	11:27 PM	5:40 AM	4:39	82%	1%

Notes:

- 1: FAR Part 150 considers nighttime hours 10:00 PM - 07:00 AM.
- 2: Duration was not continuous because FAR Part 139 necessitates nightly runway closures for safety inspections.
- 3: Percentage of operations on designated runways for rotation within the overall Fly Quiet Time.

Comments:

- a: There were 0 requests granted for alternative runways during the rotation period.
- b: Periods of demand during overall Fly Quiet did not allow for mixed-use runway operations.
- c: Start of Fly Quiet delayed and duration of Rotation Test limited on 7/7/16 due to weather conditions in Chicago.
- d: Winds were less than 5 knots 46% of the time (potential for east or west flow).
- e: Winds were greater than 5 knots and from the west 46% of the time (potential for west flow).
- f: Winds were greater than 5 knots and from the east 4% of the time (potential for east flow).
- g: Winds were greater than 5 knots and from the south 4% of the time.

**RUNWAY ROTATION TEST
JULY 6, 2016 TO DECEMBER 25, 2016**



Week of July 10th								
Overall Fly Quiet				Runway Rotation Test				
Start	Stop	Duration (hrs: mins)	Percentage of Nighttime ¹	Start	Stop	Duration ² (hrs: mins)	Primary ³	Secondary ³
7/10/16 - 11:00 PM	7/11/16 - 05:40 AM	6:40	74%	7/10/16 - 11:40 PM	7/11/16 - 05:40 AM	5:02	57%	0%
7/11/16 - 10:28 PM	7/12/16 - 05:32 AM	7:04	79%	7/12/16 - 12:56 AM	7/12/16 - 05:32 AM	3:54	27%	0%
7/12/16 - 11:02 PM	7/13/16 - 05:35 AM	6:33	73%	7/12/16 - 11:50 PM	7/13/16 - 05:32 AM	4:50	33%	38%
7/14/16 - 12:25 AM	7/14/16 - 05:30 AM	5:05	56%	7/14/16 - 12:38 AM	7/14/16 - 05:30 AM	3:57	0%	77%
7/14/16 - 10:46 PM	7/15/16 - 05:47 AM	7:01	78%	7/15/16 - 12:22 AM	7/15/16 - 05:35 AM	3:53	1%	66%
7/15/16 - 10:52 PM	7/16/16 - 05:48 AM	6:56	77%	7/15/16 - 11:50 PM	7/16/16 - 05:27 AM	4:34	46%	0%
7/16/16 - 10:02 PM	7/17/16 - 05:37 AM	7:35	84%	7/16/16 - 11:32 PM	7/17/16 - 05:37 AM	5:40	83%	0%
Average				Average				
10:56 PM	5:38 AM	6:42	74%	12:07 AM	5:33 AM	4:32	37%	24%

Notes:

- 1: FAR Part 150 considers nighttime hours 10:00 PM - 07:00 AM.
- 2: Duration was not continuous because FAR Part 139 necessitates nightly runway closures for safety inspections.
- 3: Percentage of operations on designated runways for rotation within the overall Fly Quiet Time.

Comments:

- a: There were 10 requests granted for alternative runways during the rotation period.
- b: Periods of demand during overall Fly Quiet did not allow for mixed-use runway operations.
- c: On the nights of 7/10, 7/11, and 7/12 the start of the Rotation Test was delayed due to FAA flight check on runways for equipment maintenance and/or testing.
- d: On the night of 7/13, the start of Fly Quiet was delayed and duration of the Rotation Test was limited due to weather conditions in Chicago.
- e: Winds were less than 5 knots 16% of the time (potential for east or west flow).
- f: Winds were greater than 5 knots and from the west 45% of the time (potential for west flow).
- g: Winds were greater than 5 knots and from the east 8% of the time (potential for east flow).
- h: Winds were greater than 5 knots and from the south 31% of the time.

**RUNWAY ROTATION TEST
JULY 6, 2016 TO DECEMBER 25, 2016**



Week of July 17th								
Overall Fly Quiet				Runway Rotation Test				
Start	Stop	Duration (hrs: mins)	Percentage of Nighttime ¹	Start	Stop	Duration ² (hrs: mins)	Primary ³	Secondary ³
7/17/16 - 11:30 PM	7/18/16 - 06:07 AM	6:37	74%	7/17/16 - 11:30 PM	7/18/16 - 05:50 AM	4:29	77%	0%
7/18/16 - 11:12 PM	7/19/16 - 05:29 AM	6:17	70%	7/19/16 - 02:00 AM	7/19/16 - 05:04 AM	1:51	0%	43%
7/19/16 - 10:34 PM	7/20/16 - 05:38 AM	7:04	79%	7/20/16 - 02:27 AM	7/20/16 - 05:33 AM	1:31	17%	33%
7/20/16 - 10:30 PM	7/21/16 - 05:25 AM	6:55	77%	7/21/16 - 01:53 AM	7/21/16 - 05:25 AM	1:25	56%	0%
7/22/16 - 2:12 AM	7/22/16 - 05:59 AM	3:47	42%	7/22/16 - 03:08 AM	7/22/16 - 05:54 AM	2:46	58%	0%
7/22/16 - 10:58 PM	7/23/16 - 05:41 AM	6:43	75%	7/22/16 - 11:25 PM	7/23/16 - 05:41 AM	4:21	71%	0%
7/24/16 - 2:07 AM	7/24/16 - 05:53 AM	3:46	42%	7/24/16 - 02:48 AM	7/24/16 - 05:53 AM	1:15	70%	13%
Average (Week of July 17th)				Average (Week of July 17th)				
11:52 PM	5:44 AM	5:52	65%	1:36 AM	5:37 AM	2:31	49%	12%
Cumulative Week 1 - 3 (July 6 - July 24)				Cumulative Week 1 - 3 (July 6 - July 24)				
11:39 PM	5:42 AM	6:24	72%	12:33 AM	5:36 AM	3:43	51%	15%

Notes:

- 1: FAR Part 150 considers nighttime hours 10:00 PM - 07:00 AM.
- 2: Duration was not continuous because FAR Part 139 necessitates nightly runway closures for safety inspections.
- 3: Percentage of operations on designated runways for rotation within the overall Fly Quiet Time.

Summary:

The average time in Fly Quiet was 5 hours and 52 minutes per night.
 The percentage of operations on the rotation runways in the primary or secondary configuration was 61%.
 Fly Quiet experienced delays due to thunderstorms on 3 nights and flight checks on 3 nights.

Comments:

- a: There were 13 requests granted for alternative runways during the rotation period.
- b: On the nights of 7/18, 7/19, and 7/20, the start of the Rotation Test was delayed due to FAA flight check on runways for equipment maintenance and/or testing.
- c: On the nights of 7/17, 7/21, and 7/23, the start of Fly Quiet was delayed and duration of the Rotation Test was limited due to weather conditions in Chicago.
- d: Winds were less than 5 knots 31% of the time (potential for east or west flow).
- e: Winds were greater than 5 knots and from the west 27% of the time (potential for west flow).
- f: Winds were greater than 5 knots and from the east 16% of the time (potential for east flow).
- g: Winds were greater than 5 knots and from the south 22% of the time.

**RUNWAY ROTATION TEST
JULY 6, 2016 TO DECEMBER 25, 2016**



Week of July 24th (Week 4)								
Overall Fly Quiet				Runway Rotation Test				
Start	Stop	Duration (hrs: mins)	Percentage of Nighttime ¹	Start	Stop	Duration ² (hrs: mins)	Primary ³	Secondary ³
7/25/16 - 12:05 AM	7/25/16 - 05:56 AM	5:51	65%	7/25/16 - 01:12 AM	7/25/16 - 05:38 AM	3:44	11%	40%
7/25/16 - 10:50 PM	7/26/16 - 05:38 AM	6:48	76%	7/25/16 - 11:21 PM	7/26/16 - 05:38 AM	5:56	80%	0%
7/26/16 - 11:01 PM	7/27/16 - 05:32 AM	6:31	72%	7/26/16 - 11:01 PM	7/27/16 - 05:25 AM	4:44	88%	0%
7/27/16 - 11:00 PM	7/28/16 - 05:40 AM	6:40	74%	7/27/16 - 11:00 PM	7/28/16 - 05:22 AM	4:43	71%	7%
7/29/16 - 12:20 AM	7/29/16 - 05:42 AM	5:22	60%	7/29/16 - 12:25 AM	7/29/16 - 05:42 AM	3:57	81%	0%
7/29/16 - 11:38 PM	7/30/16 - 06:00 AM	6:22	71%	7/29/16 - 11:38 PM	7/30/16 - 05:35 AM	4:35	69%	0%
7/30/16 - 10:28 PM	7/31/16 - 06:00 AM	7:32	84%	7/30/16 - 10:28 PM	7/31/16 - 04:55 AM	5:17	65%	0%
Average (Week of July 24th)				Average (Week of July 24th)				
11:20 PM	5:46 AM	6:26	72%	11:35 PM	5:27 AM	4:42	64%	8%
Cumulative Week 1 - 4 (July 6 - July 31)				Cumulative Week 1 - 4 (July 6 - July 31)				
11:15 PM	5:43 AM	6:27	72%	12:17 AM	5:34 AM	4:02	56%	13%

Notes:

- 1: FAR Part 150 considers nighttime hours 10:00 PM - 07:00 AM.
- 2: Duration was not continuous because FAR Part 139 necessitates nightly runway closures for safety inspections.
- 3: Percentage of operations on designated runways for rotation within the overall Fly Quiet Time.

Summary:

The average time in Fly Quiet was 6 hours and 26 minutes per night.
The percentage of operations on the rotation runways in the primary or secondary configuration was 72%.

Comments:

- a: There were 15 requests granted for alternative runways during the rotation period.
- b: On the nights of 7/24, 7/28, and 7/29, the start of Fly Quiet was delayed and duration of the Rotation Test was limited due to weather conditions in Chicago.
- c: Winds were less than 5 knots 43% of the time (potential for east or west flow).
- d: Winds were greater than 5 knots and from the west 19% of the time (potential for west flow).
- e: Winds were greater than 5 knots and from the east 12% of the time (potential for east flow).
- f: Winds were greater than 5 knots and from the south 0% of the time.
- g: Winds were greater than 5 knots and from the north 16% of the time.
- h: Winds were greater than 5 knots and variable 10% of the time.

**RUNWAY ROTATION TEST
JULY 6, 2016 TO DECEMBER 25, 2016**



Week of July 31st (Week 5)								
Overall Fly Quiet				Runway Rotation Test				
Start	Stop	Duration (hrs: mins)	Percentage of Nighttime ¹	Start	Stop	Duration ² (hrs: mins)	Primary ³	Secondary ³
7/31/16 - 10:30 PM	8/1/16 - 05:39 AM	7:09	79%	7/31/16 - 10:58 PM	8/1/16 - 05:39 AM	5:26	74%	0%
8/1/16 - 11:10 PM	8/2/16 - 05:49 AM	6:39	74%	8/1/16 - 11:10 PM	8/2/16 - 05:49 AM	4:46	0%	95%
8/2/16 - 11:05 PM	8/3/16 - 05:41 AM	6:36	73%	8/2/16 - 11:30 PM	8/3/16 - 05:41 AM	4:58	55%	6%
8/3/16 - 10:35 PM	8/4/16 - 05:40 AM	7:05	79%	8/3/16 - 11:38 PM	8/4/16 - 05:40 AM	5:16	75%	0%
8/4/16 - 11:30 PM	8/5/16 - 05:38 AM	6:08	68%	8/4/16 - 11:30 PM	8/5/16 - 05:38 AM	5:18	95%	0%
8/5/16 - 10:32 PM	8/6/16 - 05:36 AM	7:04	79%	8/5/16 - 11:12 PM	8/6/16 - 05:36 AM	5:06	67%	2%
8/6/16 - 10:33 PM	8/7/16 - 05:45 AM	7:12	80%	8/6/16 - 10:48 PM	8/7/16 - 05:45 AM	5:55	90%	0%
Average (Week of July 31st)				Average (Week of July 31st)				
10:50 PM	5:41 AM	6:50	76%	11:15 PM	5:41 AM	5:15	65%	14%
Cumulative Week 1 - 5 (July 6 - August 7)				Cumulative Week 1 - 5 (July 6 - August 7)				
11:11 PM	5:42 AM	6:31	73%	12:16 AM	5:35 AM	4:18	58%	13%

Notes:

- 1: FAR Part 150 considers nighttime hours 10:00 PM - 07:00 AM.
- 2: Duration was not continuous because FAR Part 139 necessitates nightly runway closures for safety inspections.
- 3: Percentage of operations on designated runways for rotation within the overall Fly Quiet Time.

Summary:

The average time in Fly Quiet was 6 hours and 50 minutes per night.
The percentage of operations on the rotation runways in the primary or secondary configuration was 79%.

Comments:

- a: There were 3 requests granted for alternative runways during the rotation period.
- b: On the night of 8/4, the start of Fly Quiet was delayed and duration of the Rotation Test was limited due to weather conditions in Chicago.
- c: Winds were less than 5 knots 57% of the time (potential for east or west flow).
- d: Winds were greater than 5 knots and from the west 27% of the time (potential for west flow).
- e: Winds were greater than 5 knots and from the east 14% of the time (potential for east flow).
- f: Winds were greater than 5 knots and from the south 0% of the time.
- g: Winds were greater than 5 knots and from the north 0% of the time.
- h: Winds were greater than 5 knots and variable 2% of the time.