Silent Seven Departure Procedure

The Silent Seven departure is a Federal Aviation Administration instrument departure procedure at Oakland International Airport established to reduce noise on residential communities at nighttime. The Silent Seven departure procedure is described as a turbojet aircraft take-off from Runway 29 that turns left on a heading of 270 degrees to intercept and proceed via the SFO R-342 (the San Francisco International Airport radial heading of 342 degrees). When flying the Silent Seven departure, aircraft are further from residential areas and there is less aircraft noise impact on residences than there would be when departing aircraft fly straight out over the San Francisco Bay on a runway heading. The FAA air traffic controllers assign this departure procedure between 10:00 p.m. and 7:00 a.m. for turbojet aircraft departures.

Compliance Monitoring Procedure

This report identifies the turbojet aircraft that did not comply with the Silent Seven departure procedure. Noncompliance is reported to the Federal Aviation Administration to encourage communications that would help minimize the number of future noncompliance. Since the FAA is responsible for assigning the Silent Seven to a pilot, Noncompliance is not reported to the air carrier involved.

Noncompliant Departures

Noncompliance in the Silent Seven departure procedure occurs when a turbojet aircraft, departing from Runway 29, does not make the initial 270 degrees heading turn and/or passes over Alameda instead of following the Silent Seven departure pattern up the San Francisco Bay.

Although the Silent Seven departure procedure is assigned to turbojet aircraft that depart off Runway 29 between 10:00 p.m. and 7:00 a.m., a buffer zone of ten minutes is applied for monitoring performance. Turbojet aircraft departures between 10:00 p.m. and 10:10 p.m., as well as those between 6:50 a.m. and 7:00 a.m., are considered meeting the noise abatement departure procedure even if they do not fly the Silent Seven. These “buffer zone” departures will be identified and appear in the tables in this report in black text, while the aircraft that are identified as noncompliant will appear in red text.

The buffer zone needs to be applied since two different air traffic controllers are involved in directing a pilot on departure from the airport. The “clearance delivery” air traffic controller is the first controller who instructs the pilot prior to taxiing to the runway and assigns the departure procedure. The second air traffic controller is responsible for directing the aircraft onto taxiways and releasing the aircraft onto the runway for departure. Several minutes may pass between instructions from one controller to the next and aircraft normally scheduled to depart before 10:00 p.m. and that are not assigned the Silent Seven may be delayed a few minutes and depart shortly after 10:00 p.m.. In a similar situation, turbojet aircraft that are scheduled to depart after 7:00 a.m. may depart a few minutes earlier than the normally scheduled time.

This report includes:

- A summary table for nighttime Runway 29 turbojet aircraft departures and Silent Seven departure compliance performance;
- A list of all Silent Seven noncompliant departures including “buffer zone” departures; and
- Flight track maps displaying all Silent Seven noncompliant departures each month during the quarter.

SAMPLE REPORT

Silent 7 Night Departure Procedure Performance Summary Fourth Quarter 2006				
	October	**November**	**December**	**Quarter**
Runway 29 Nighttime Turbojet Departures	1,104	1,066	1,162	**3,332**
Buffer Zone Departures	21	15	8	**44**
Percentage	**1.9%**	**1.4%**	**0.7%**	**1.3%**
Silent 7 Deviations	**19**	**21**	**12**	**52**
Percentage	1.7%	2.0%	1.0%	**1.6%**
Silent 7 Departure Success Rate	**98.3%**	**98.0%**	**99.0%**	**98.4%**

Silent Seven Departure List

Date	Time	Airline	Flight#	Aircraft	Aircraft Code	Tail No.	Comments
10/3/2006	6:55:16	SWA	SWA1678	B733	C	N326SW	Buffer Zone
10/3/2006	6:56:25	FDX	FDX3103	MD10	C	N559FE	Buffer Zone
10/3/2006	6:59:35	TAG	TAG457	GLF5	J	N740SS	Buffer Zone
10/4/2006	6:32:28	SWA	SWA1328	B733	C	N631SW	
10/4/2006	6:59:10	SWA	SWA1678	B733	C	N302SW	Buffer Zone
10/5/2006	22:03:25	JBU	JBU110	A320	C	N582JB	Buffer Zone
10/7/2006	6:59:39	FDX	FDX3103	MD10	C		Buffer Zone
10/7/2006	6:59:46	FDX	FDX1867	B72Q	C		Buffer Zone
10/9/2006	6:56:46	SWA	SWA1264	B733	C	N675AA	Buffer Zone
10/9/2006	6:59:03	SWA	SWA959	B737	C	N246LV	Buffer Zone
10/10/2006	6:59:36	SWA	SWA1264	B733	C	N388SW	Buffer Zone
10/11/2006	6:59:23	SWA	SWA1678	B733	C	N612SW	Buffer Zone
10/12/2006	22:58:20	SWA	SWA1776	B733	C	N303SW	
10/13/2006	22:00:12	UPS	UPS961	B763	C	N303UP	Buffer Zone
10/15/2006	22:00:40	EJA	EJA332	C560	J		Buffer Zone
10/16/2006	6:59:55	SWA	SWA1678	B733	C	N343SW	Buffer Zone
10/16/2006	22:00:20	JBU	JBU110	A320	C	N599JB	Buffer Zone
10/17/2006	6:59:12	SWA	SWA959	B737	C	N725SW	Buffer Zone
10/18/2006	22:00:07			C750	J	N217AL	Buffer Zone
10/19/2006	6:35:17	EJM	EJM37	ASTR	J	N307JW	
10/19/2006	22:19:07	TAG	TN3AV	WW24	J		
10/19/2006	22:49:06			C500	J	N623PM	
10/21/2006	22:13:12	SWA	SWQ801	B734	C	N801TJ	
10/22/2006	6:49:12	SWA	SWA2655	B737	C	N442WN	
10/23/2006	6:08:13	SWA	SWA8700	B733	C	N699SW	
10/23/2006	6:46:12	SWA	SWA1449	B737	C	N447WN	
10/24/2006	1:31:27	MXA	MXA147	A320	C		
10/24/2006	1:31:27	MXA	MXA147	A320	C		
10/24/2006	22:02:23	JBU	JBU110	A320	C	N634JB	Buffer Zone
10/25/2006	6:59:07	ASA	ASA343	B734	C	N764AS	Buffer Zone
10/28/2006	6:57:48	ASA	ASA343	B734	C	N755AS	Buffer Zone
10/30/2006	6:36:18	SWA	SWA959	B737	C	N725SW	
10/30/2006	6:37:55	SWA	SWA1380	B733	C	N361SW	
10/30/2006	6:39:32	SWA	SWA1723	B733	C	N603SW	
10/30/2006	6:40:41	JBU	JBU241	A320	C	N613JB	
10/30/2006	6:41:55	SWA	SWA109	B733	C	N398SW	