

FEDERAL AVIATION ADMINISTRATION

FLIGHT STANDARDS SERVICE

GRAPHIC DEPARTURE PROCEDURES (DP)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

DP NAME						NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	EFFECTIVE DATE
LEINY						SIX	LEINY6.LEINY	FIVE	05/02/2013	17 AUG 2017
TYPE:	OBSTACLE	COPTER	SID	SPECIAL	RNAV					
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					

DP ROUTE DESCRIPTION:

TAKEOFF RWY 4: CLIMB HEADING 045.00 TO 2100 THENCE...

TAKEOFF RWY 12L/R: FOR ASSIGNED HEADINGS FROM 060 CW TO 100, CROSS MSP VOR/DME 7.00 DME ARC AT OR ABOVE 3500, MAINTAIN ASSIGNED ALTITUDE. IF UNABLE TO COMPLY, ADVISE ATC AS SOON AS POSSIBLE PRIOR TO DEPARTURE THENCE...

TAKEOFF RWY 17: FOR ASSIGNED HEADINGS FROM 230 CW TO 285, CROSS MSP VOR/DME 7.00 DME ARC AT OR ABOVE 3500, MAINTAIN ASSIGNED ALTITUDE. IF UNABLE TO COMPLY, ADVISE ATC AS SOON AS POSSIBLE PRIOR TO DEPARTURE THENCE...

TAKEOFF RWY 22, 35: CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS THENCE...

TAKEOFF RWY 30L/R: FOR ASSIGNED HEADINGS FROM 220 CW TO 360, CROSS MSP VOR/DME 7.00 DME ARC AT OR ABOVE 3500, MAINTAIN ASSIGNED ALTITUDE. IF UNABLE TO COMPLY, ADVISE ATC AS SOON AS POSSIBLE PRIOR TO DEPARTURE THENCE...

... EXPECT RADAR VECTORS TO TONCA, THEN ON TRACK 273.88 TO BOTNE, THEN ON TRACK 273.60 TO CROSS KUUGL AT OR ABOVE 6000, THEN ON TRACK 273.37 TO LEINY. TURBOJET AIRCRAFT MAINTAIN 7000 OR LOWER ASSIGNED ALTITUDE, ALL OTHER AIRCRAFT MAINTAIN 5000 OR LOWER ASSIGNED ALTITUDE UNTIL BOTNE. EXPECT FILED ALTITUDE/FLIGHT LEVEL TEN MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

TRANSITION NAME	TRANSITION COMPUTER CODE	FROM FIX/NAVAID	TO FIX/NAVAID	COURSE	DISTANCE	MEA	MOCA	CROSSING ALTITUDE/FIXES
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PROCEDURAL DATA NOTES:
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT, GEP, RWF, FSD, ATY, AND HON MUST BE OPERATIONAL.

TAKEOFF MINIMUMS:
RWY 4, 12R, 17, 22, 30L, 30R: STANDARD.
RWY 12L: 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 207 FT PER NM TO 1100, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1300 FT PRIOR TO DER.
RWY 35: STANDARD WITH MINIMUM CLIMB OF 219 FT PER NM TO 2100.

TAKEOFF OBSTACLES NOTES:
NOTE: RWY 4: TREES BEGINNING 800 FT FROM DER, 301 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/925 FT MSL. ROD ON BUILDING 2528 FT FROM DER, 1174 FT LEFT OF CENTERLINE, 78 FT AGL/922 FT MSL. FENCE BEGINNING 13 FT FROM DER, 486 FT LEFT OF CENTERLINE, UP TO 6 FT AGL/860 FT MSL. STACK 4535 FT FROM DER, 480 FT LEFT OF CENTERLINE, 139 FT AGL/949 FT MSL.
NOTE: RWY 12L: TREE 1.1 NM FROM DER, 1691 FT LEFT OF CENTERLINE, 92 FT AGL/991 FT MSL. LT POLE AND CAMERA ON WALL BEGINNING 398 FT FROM DER, 561 FT RIGHT OF CENTERLINE, UP TO 23 FT AGL/832 FT MSL.



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LEINY	SIX	LEINY6.LEINY	FIVE	05/02/2013	17 AUG 2017

NOTE: RWY 12R: TREE 1479 FT FROM DER, 561 FT LEFT OF CENTERLINE, 86 FT AGL/855 FT MSL. OL ON POLE 1002 FT FROM DER, 753 FT LEFT OF CENTERLINE, 53 FT AGL/852 FT MSL.
NOTE: RWY 17: POLE 409 FT FROM DER, 530 FT RIGHT OF CENTERLINE, 29 FT AGL/866 FT MSL. BUILDING 2619 FT FROM DER, 881 FT LEFT OF CENTERLINE, 97 FT AGL/918 FT MSL. BUILDING 1956 FT FROM DER, 904 FT LEFT OF CENTERLINE, 61 FT AGL/866 FT MSL. TREE 2619 FT FROM DER, ON CENTERLINE, 79 FT AGL/900 FT MSL.
NOTE: RWY 22: TREES BEGINNING 2659 FT FROM DER, 867 FT RIGHT OF CENTERLINE, 94 FT AGL/934 FT MSL.
NOTE: RWY 30L: ANTENNA ON TOWER 3550 FT FROM DER, 1333 FT LEFT OF CENTERLINE, 111 FT AGL/937 FT MSL.
NOTE: RWY 30R: BILLBOARD SIGN 1463 FT FROM DER, 848 FT RIGHT OF CENTERLINE, 31 FT AGL/880 FT MSL.
NOTE: RWY 35: TREES BEGINNING 2553 FT FROM DER, 770 FT RIGHT OF CENTERLINE, 100 FT AGL/919 FT MSL. TREES BEGINNING 1989 FT FROM DER, 194 FT LEFT OF CENTERLINE, UP TO 87 FT AGL/906 FT MSL. BUILDINGS BEGINNING 5.4 NM FROM DER, 1781 FT LEFT OF CENTERLINE, UP TO 889 FT AGL/1743 FT MSL.

CONTROLLING OBSTACLES:

RWY 12L: 991 FT MSL TREE 445233.26N/0931008.66W
RWY 35: 1743 FT MSL BLDG 445834.00N/0931621.00W

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KMSP 0E EPOCH YEAR: 2015
DME/DME ASSESSMENT: SAT (RNP 2.0)
CHART: TOP ALTITUDE: (JETS) 7000/(PROPS) 5000

AIRPORTS SERVED:

AIRPORT NAME	CITY	STATE
MINNEAPOLIS ST PAUL INTL/WOLD-CHAMBERLAIN	MINNEAPOLIS	MN

COMMUNICATIONS:

ATIS, CLEARANCE DELIVERY, DEPARTURE CONTROL SOUTH OR EAST, DEPARTURE CONTROL NORTH OR WEST, ATCT

FIXES AND/OR NAVAIDS:

REMARKS:

ABBREVIATED AMENDMENT.



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DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	EFFECTIVE DATE
LEINY	SIX	LEINY6.LEINY	FIVE	05/02/2013	17 AUG 2017

FLIGHT INSPECTED BY:

JAMES L REINEBOLD-JR

Digitally signed by

DONALD H LANIER

Jun 19, 2017

OFFICE SYMBOL:

FICO

DATE:

6/15/17

DEVELOPED BY:

KELLY DEAN

Digitally signed by KELLY D DEAN

Date: 2017.02.10 14:37:43 -06'00'

OFFICE SYMBOL:

AJV-5431

DATE:

02/10/2017

APPROVED BY:

PATRICK MULQUEEN, MANAGER

Digitally signed by

DONALD H LANIER

Jun 19, 2017

OFFICE SYMBOL:

AJV-5430

DATE:

REQUIRED EFFECTIVE DATE:
ROUTINE

COORDINATED WITH:

A4A	ALPA	AOPA	APA	HAI	NBAA
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OTHER:
MSP ATCT, ZMP, AMGR

CHANGES - REASONS:

1. CHARTED TOP ALTITUDE - ATC REQUIRED.
2. UPDATED RWY 30L TAKEOFF OBSTACLE NOTE - CURRENT NOTAM CHANGES OBSTACLE HEIGHT 2 FT FROM 935 TO 937 MSL FOLLOWING 1A SURVEY.
3. PROCEDURAL DATA NOTE CHANGED FROM "RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT" TO "RADAR REQUIRED" - PER 8260.46F DOCUMENTATION CRITERIA.
4. DELETED ATC DEPARTURE CROSSING RESTRICTIONS AND ATC CLIMB NOTES - PER 8260.46F PARA 2-1-1E(2) , ATC CLIMB GRADIENTS AND CROSSING ALTITUDES ARE NO LONGER CHARTED;
FIX COSSING RESTRICTION REMAINS CHARTED BY TAKEOFF DESCRIPTION.

05/08/2017 THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 02/10/2017
CHANGED KUUGL COORDINATES FROM 445854.26N/0942116.60W TO 445654.26N/0942116.60W ON 8260.15C.



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)

DP NAME		NUMBER		DP COMPUTER CODE		SUPERSEDED NUMBER		DATED	EFFECTIVE DATE
LEINY		SIX		LEINY6.LEINY		FIVE		05/02/2013	17 AUG 2017
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
TONCA	445457.58N/0933801.51W	Y	FB	IF	-	-			
BOTNE	445603.00N/0940131.00W	Y	FB	TF	273.88	16.73			
KUUGL	445654.26N/0942116.60W	Y	FB	TF	273.60	14.06	AT/ABOVE 6000		
LEINY	450216.00N/0973640.00W	Y	FB	TF	273.37	138.75			

