

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.
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DP NAME						NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	EFFECTIVE DATE
CBAIN						ONE	CBAIN1.CBAIN	NONE		
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 32L: CLIMB HEADING 315.21 TO 540, THEN DIRECT TO CROSS GNEXX AT OR BELOW 1600, THEN ON TRACK 314.55 TO KURRT, THEN ON TRACK 295.01 TO CBAIN, THEN ON TRACK 295.01 FOR VECTORS TO ASSIGNED ROUTE/FIX, MAINTAIN 2100 OR AS ASSIGNED BY ATC. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL WITHIN THREE 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

PROCEDURAL DATA NOTES:

NOTE: RNAV 1.
NOTE: RADAR REQUIRED.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: ALDER DEPARTURES EXPECT DIRECT/VECTORS TO ALDER/V495/J1-189
NOTE: ALPSE DEPARTURES EXPECT DIRECT/VECTORS TO ALPSE
NOTE: ARRIE DEPARTURES EXPECT DIRECT/VECTORS TO ARRIE/J523
NOTE: BANGR DEPARTURES EXPECT DIRECT/VECTORS TO BANGR
NOTE: BUWZO DEPARTURES EXPECT DIRECT/VECTORS TO BUWZO
NOTE: ELMAA DEPARTURES EXPECT DIRECT/VECTORS TO ELMAA/J70
NOTE: HAROB DEPARTURES EXPECT DIRECT/VECTORS TO HAROB/Q5
NOTE: LOFAL DEPARTURES EXPECT DIRECT/VECTORS TO LOFAL/V4-495
NOTE: NORMY DEPARTURES EXPECT DIRECT/VECTORS TO NORMY/V120/J12-70-90
NOTE: OLM DEPARTURES EXPECT DIRECT/VECTORS TO OLM
NOTE: PAE DEPARTURES EXPECT DIRECT/VECTORS TO PAE
NOTE: SUMMA DEPARTURES EXPECT DIRECT/VECTORS TO SUMMA/J5/J54/Q9
NOTE: VAMPS DEPARTURES EXPECT DIRECT/VECTORS TO VAMPS/V2-298
NOTE: ZADON DEPARTURES EXPECT DIRECT/VECTORS TO ZADON

TAKEOFF MINIMUMS:

RWYS 14L/R, 32R: NA-ATC
RWY 32L: STANDARD WITH MINIMUM CLIMB OF 425 FT PER NM TO 1400.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 32L, FENCE 249 FT FROM DER, 452 FT LEFT OF CENTERLINE, 26 FT MSL. BLDG 1022 FT FROM DER, 728 FT LEFT OF CENTERLINE, 50 FT MSL. LT POLE 1111 FT FROM DER, 683 FT RIGHT OF CENTERLINE, 50 FT MSL. TREES AND LT POLE BEGINNING 1166 FT FROM DER, 768 FT RIGHT OF CENTERLINE, UP TO 60 FT MSL. POLES, BLDGS AND TREES BEGINNING 1216 FT FROM DER, 571 FT LEFT OF CENTERLINE, UP TO 101 FT MSL. TRMSN TWRS BEGINNING 1598 FT FROM DER, 790 FT RIGHT OF CENTERLINE, UP TO 68 FT MSL. TREE 2192 FT FROM DER, 403 FT RIGHT OF CENTERLINE, 54 FT AGL/81 FT MSL. BLDG AND TREE BEGINNING 2286 FT FROM DER, 385 FT RIGHT OF CENTERLINE, UP TO 85 FT MSL. TREES BEGINNING 2407 FT FROM DER, 261 FT LEFT OF CENTERLINE, UP TO 91 FT AGL/113 FT MSL. TRMSN TWR AND TREE BEGINNING 2413 FT FROM DER, 350 FT RIGHT OF CENTERLINE, UP TO 97 FT MSL. TREES AND POLES BEGINNING 2468 FT FROM DER, 440 FT RIGHT OF CENTERLINE, UP TO 114 FT MSL. TREE 2640 FT FROM DER, 1143 FT RIGHT OF CENTERLINE, 127 FT MSL. TREES AND POLES BEGINNING 2717 FT FROM DER, 875 FT RIGHT OF CENTERLINE, UP TO 129 FT MSL. TREES, TOWERS AND LT POLES BEGINNING 3080 FT FROM DER, 431 FT RIGHT OF CENTERLINE, UP TO 140 FT MSL. TREE 3316 FT FROM DER, 1366 FT



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CBAIN	ONE	CBAIN1.CBAIN	NONE		

RIGHT OF CENTERLINE, 148 FT MSL. TREES BEGINNING 3358 FT FROM DER, 821 FT RIGHT OF CENTERLINE, UP TO 157 FT MSL. TREES AND POLES BEGINNING 3449 FT FROM DER, 894 FT RIGHT OF CENTERLINE, UP TO 158 FT MSL. TREES BEGINNING 3606 FT FROM DER, 787 FT RIGHT OF CENTERLINE, UP TO 180 FT MSL. BLDGS, TREES, POLES AND STACKS BEGINNING 3711 FT FROM DER, 543 FT RIGHT OF CENTERLINE, UP TO 196 FT MSL. BLDGS, TREES AND LT POLE BEGINNING 3979 FT FROM DER, 883 FT RIGHT OF CENTERLINE, UP TO 216 FT MSL. TREES, BLDGS, LT POLES, TRMSN TWRS, ANTENNA, PARKING LOT AND GRD BEGINNING 4213 FT FROM DER, 706 FT RIGHT OF CENTERLINE, UP TO 241 FT MSL. TREES, BLDGS, TRMSN TWRS AND LT POLES BEGINNING 5403 FT FROM DER, 764 FT RIGHT OF CENTERLINE, UP TO 248 FT MSL. TREES, BLDGS, TRMSN TWRS, LT POLES AND GRD BEGINNING 1 NM FROM DER, 851 FT RIGHT OF CENTERLINE, UP TO 260 FT MSL. TREES, GRD, TRMSN TWR AND POLES BEGINNING 1.1 NM FROM DER, 1141 FT RIGHT OF CENTERLINE, UP TO 282 FT MSL. TREES, LT POLE, BLDGS, TRMSN TWRS, ELEC TRANSMISSION LINES AND RDS BEGINNING 1.2 NM FROM DER, 1307 FT RIGHT OF CENTERLINE, UP TO 345 FT MSL.

CONTROLLING OBSTACLES:

RWY 32L: 241 FT MSL TREE 473309.11N/1221853.17W (CLIMB GRADIENT).

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

CHART: TOP ALTITUDE: 2100.
REFERENCE MAGVAR: KBFI 15E EPOCH YR 2020.
DME/DME ASSESSMENT: SAT (RNP 2.0).

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
BOEING FIELD/KING COUNTY INTL	SEATTLE	WA

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, BOEING ATCT, SEATTLE DEP CON

FIXES AND/OR NAVAIDS:

ALDER, ALPSE, ARRIE, BANGR, BUWZO, ELMAA, HAROB, LOFAL, NORMY, OLM VORTAC, PAE VOR/DME, SUMMA, VAMPS, ZADON

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CBAIN	ONE	CBAIN1.CBAIN	NONE		

REMARKS:

RECOMMENDED NAVAID FOR FM LEG, EAT VOR/DME.

RWY14L: TAKE-OFF MINS OF STANDARD WITH 425 FT PER NM TO 1400 IS BASED ON OBSTACLE EVALUATION AND ATC REQUEST. TAKE-OFF MINS ARE 425 FT PER NM TO 400 BASED ON OBSTACLE EVALUATION ALONE.

FLIGHT INSPECTED BY:

OFFICE SYMBOL:

DATE:

DEVELOPED BY:

ROBERT GRIM

ROBERT E GRIM II Digitally signed by ROBERT E GRIM II
Date: 2017.03.14 14:53:09 -05'00'

OFFICE SYMBOL:

DATE:

AJV-5431

03/08/2017

APPROVED BY:

PAT MULQUEEN

OFFICE SYMBOL:

DATE:

AJV-5430

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

WFPT, ARPT MGR, SEA ATCT, SEA ARTCC

CHANGES - REASONS:

ORIGINAL PROCEDURE PER FPT AND ATC REQUEST.

QUALITY
3
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>							<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
CBAIN							ONE	CBAIN1.CBAIN	NONE		
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>		<u>REMARKS</u>	
RW32L (AER*)	473107.84N/1221734.84W*	N	-	-	-	-				*DISPL THLD (887.0 FT)	
540 MSL	-	-	-	VA	330.21	-				CG 425 FT/NM TO 1400	
GNEXX	473338.35N/1221942.37W	Y	FB	DF	-	-	AT/BELOW 1600				
KURRT	473528.05N/1222117.70W	Y	FB	TF	329.55	2.12					
CBAIN	473723.66N/1222441.51W	Y	FB	TF	310.01	3.00					
CBAIN	473723.66N/1222441.51W	-	-	FM	310.01	-				RECOMMENDED NAVAID: EAT VOR/DME	

QUALITY
3
CHECKED