08/16/2017

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 statue miles or feet RVR unless otherwise indicated.

DP NAM CBAIN	<u>NE</u>					NUMBER ONE	DP COMPUTER CODE CBAIN1.CBAIN	SUPERSEDED NUMBER NONE	DATED	EFFECTIVE DATE 12 OCT 2017
TYPE:	OBSTACLE	<u>COPTER</u>	SID X	SPECIAL	<u>RNAV</u>					

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	<u>FROM</u> FIX/NAVAID	<u>TO</u> FIX/NAVAID	COURSE	DISTANCE MEA	MOCA	CROSSING ALTITUDE/FIXES
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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 129 FT MSL. TREES, TOWERS AND LT POLES BEGINNING 3080 FT FROM DER, 431 FT RIGHT OF CENTERLINE, UP TO 140 FT MSL. TREES 3316 FT FROM DER, 1366 FT



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CBAIN	ONE	CBAIN1.CBAIN	NONE		12 OCT 2017

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 157 FT MSL. TREES AND STACKS BEGINNING 3711 FT FROM DER, 543 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 180 FT MSL. BLDGS, TREES, POLES AND STACKS BEGINNING 3711 FT FROM DER, 543 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:

AIRPORT NAME	CITY	<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		12 OCT 2017

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 B	<u>Y:</u> Digitally signed by		OFFICE SYMBOL:	DATE:
CHARLES D CUNNIN			FICO	7/14/17
	Jul 25, 2017			
DEVELOPED BY:			OFFICE SYMBOL:	DATE:
ROBERT GRIM		ROBERT E GRIM II Digitally signed by ROBERT E GRIM II Date: 2017.03.14 14:53:09 -05'00'	AJV-5431	03/08/2017
APPROVED BY:	Digitally signed by		OFFICE SYMBOL:	DATE:
PAT MULQUEEN	DONALD H LANIER		AJV-5430	
	Jul 25, 2017			
DEALUDED EFFEATU				

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
\boxtimes	\boxtimes	\boxtimes			\times

OTHER:

WFPT, ARPT MGR, SEA ATCT, SEA ARTCC

CHANGES - REASONS:

ORIGINAL PROCEDURE PER FPT AND ATC REQUEST.

NFDD No. 158

08/16/2017

FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE DEPARTURE (DATA RECORD)

DP NAME CBAIN							NUMBER ONE	DP COMPUTER CODE CBAIN1.CBAIN	SUPERSEDED NUMBER NONE	DATED	EFFECTIVE DATE 12 OCT 2017
FIX/NAVAID	LAT/LONG	<u>c</u>	FO/FB	LEG TYPE	<u>TC</u>	<u>DIST</u> (NM)	<u>ALTITU</u>	DE <u>SPEED</u>		REMARKS	
RW32L (AER*)	473107.84N/1221734.84W*	Ν	-	-	-	-			*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	