

NFDD No. 194

10/07/2024

16

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DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
ELMAA	FIVE	ELMAA5.ELMAA	FOUR	07/14/2022	26 DEC 2024

TYPE:	OBSTACLE	COPTER	SID	SPECIAL	RNAV
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DP ROUTE DESCRIPTION:

TAKEOFF RWY 16L: CLIMB ON HEADING 165.00 AND SEA R-161 THENCE...  
TAKEOFF RWY 16C: CLIMB ON HEADING 161.00 AND SEA R-161 THENCE...  
TAKEOFF RWY 16R: CLIMB ON HEADING 161.00 AND SEA R-161 THENCE...  
  
...TO CROSS PEAKK/5.00 DME/RADAR AT OR ABOVE 3000, THEN RIGHT TURN ON HEADING 251 TO INTERCEPT SEA VORTAC R-230 TO ELMAA/HQM 32.66 DME, THEN ON COURSE 229.05 TO CROSS HQM VORTAC R-049 AT OR ABOVE MEA FOR ROUTE OF FLIGHT. MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT REQUESTED ALTITUDE 15 NM FROM SEA.

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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PBN REQUIREMENT NOTES:

EQUIPMENT REQUIREMENT NOTES:  
RADAR AND DME REQUIRED.

PROCEDURAL DATA NOTES:

TAKEOFF MINIMUMS:

RWY 16L: STANDARD WITH MINIMUM CLIMB OF 560 FT/NM TO 3000.  
RWY 16C: STANDARD WITH MINIMUM CLIMB OF 515 FT/NM TO 3000.  
RWY 16R: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 3000.

TAKEOFF OBSTACLES NOTES:  
SEE FORM 8260.15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

CONTROLLING OBSTACLES:  
RWY 16L: 499 FT MSL TREE 472523.86N/1221847.29W.  
RWY 16R: 509 FT MSL TREE 472529.01N/1221856.84W.

MSA:  
MSA FROM SEA VORTAC: 360-160 6400, 160-250 2200, 250-360 3400

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
AIRPORT MV: SEA 19E/2000

QUALITY  
23  
CHECKED

FAA Form 8260-15B (03/23) Supersedes Previous Edition

Electronic Version

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<div>DP NAME</div> <div>ELMAA</div>	<div>NUMBER</div> <div>FIVE</div>	<div>DP COMPUTER CODE</div> <div>ELMAA5.ELMAA</div>	<div>SUPERSEDED NUMBER</div> <div>FOUR</div>	<div>DATED</div> <div>07/14/2022</div>	<div>ACTUAL EFFECTIVE DATE</div> <div>26 DEC 2024</div>
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AIRPORTS SERVED:

<div>AIRPORT ID</div> <div>KSEA</div>	<div>CITY</div> <div>SEATTLE</div>	<div>STATE</div> <div>WA</div>
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COMMUNICATIONS:

CHART: SEA ATIS, SEA CLNC DEL.

FIXES AND/OR NAVAIDS:

REMARKS:

ABBREVIATED AMENDMENT TO REMOVE CORVALLIS TRANSITION DUE TO YYJ DECOM.  
APPROVAL LETTER ON FILE FOR CLIMB GRADIENTS GREATER THAN 500 FT/NM FOR RWY 16L/C FOR NOISE ABATEMENT.  
MSA DATA DERIVED FROM KSEA ILS PROCEDURES.

FLIGHT INSPECTED BY

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021,  
SUBJECT: GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

SIGNATURE

Digitally signed by

ROBERT G HAMILTON

Aug 02, 2024

OFFICE

DATE

DEVELOPED BY

RICHARD E. CHRISTENSEN

SIGNATURE

Digitally signed by

RICHARD E. CHRISTENSEN

Jul 30, 2024

OFFICE

AJV-A431

DATE

06/13/2024

APPROVED BY

ERIC N. SUSKI

SIGNATURE

Digitally signed by

ROBERT G HAMILTON

Aug 02, 2024

OFFICE

AJV-A431

DATE

TITLE

MANAGER

REQUIRED EFFECTIVE DATE

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

OTHER: ZSE, SEA APCH CON, SEA ATCT, AMGR, WA AERO

CHANGES - REASONS:

1. DP ROUTE DESCRIPTION: ADDED "TAKEOFF" BEFORE RWY NUMBERS, CHANGED DESCRIPTION FROM "TO CROSS PEAKK/5.00 DME/RADAR AT OR ABOVE 3000, THEN RIGHT TURN HEADING 251 TO INTERCEPT SEA R-230 TO ELMAA/HQM 32.66 DME, THEN ON (TRANSITION/ASSIGNED ROUTE), EXPECT REQUESTED ALTITUDE/FLIGHT LEVEL 15 NM FROM SEA" TO "TO CROSS PEAKK/5.00 DME/RADAR AT OR ABOVE 3000, THEN RIGHT TURN ON HEADING 251 TO INTERCEPT SEA VORTAC R-230 TO ELMAA/HQM 32.66 DME, THEN ON COURSE 229.05 TO CROSS HQM VORTAC R-049 AT OR ABOVE MEA FOR ROUTE OF FLIGHT. MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT REQUESTED ALTITUDE 15 NM FROM SEA" - "TAKEOFF" IAW 8260.46J EXAMPLES, CVO TRANSITION REMOVED FROM PROCEDURE SO INCLUDED HQM ROUTE IN DESCRIPTION.  
2. TRANSITION ROUTES: REMOVED TRANSITIONS FORM FORM - CVO TRANSITION REMOVED FROM PROCEDURE DUE TO YYJ DECOM, ONLY HQM ROUTE REMAINS ON PROCEDURE AND ADDED TO DP ROUTE DESCRIPTION.  
3. TAKEOFF MINIMUMS: REMOVED RWY 34L/C/R: NA - NOISE ABATEMENT - NOT REQUIRED ON 15B DOCUMENTATION ONLY 15A.  
4. TAKEOFF OBSTACLES NOTES: ADDED SEE FORM 8260.15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP) - IAW 8260.46J APPENDIX D, SECTION 2, PARA 2I.  
5. MSA: ADDED MSA FROM SEA VORTAC: 360-160 6400, 160-250 2200, 250-360 3400 - IAW 8260.46J APPENDIX D, SECTION 2, PARA 2K.  
6. ADDITIONAL FLIGHT DATA: REMOVED CHART: COP ON CVO TRANSITION YYJ 154/CVO 100 - CVO TRANSITION REMOVED FROM PROCEDURE.  
7. ADDITIONAL FLIGHT DATA: ADDED AIRPORT MV: SEA 19E/2000 - IAW MEMO 283 DATED 7/15/2022.  
8. REMARKS: REMOVED "RADAR REQUIRED FOR POTENTIAL YYJ SIGNAL RECEPTION ISSUES", ADDED "ABBREVIATED AMENDMENT TO REMOVE CORVALLIS TRANSITION DUE TO YYJ DECOM", "MSA DATA DERIVED FROM KSEA ILS PROCEDURES", AND "APPROVAL LETTER ON FILE FOR CLIMB GRADIENTS GREATER THAN 500 FT/NM FOR RWY 16L/C FOR NOISE ABATEMENT" - CVO TRANSITION REMOVED FROM PROCEDURE, IAW 8260.46J APPENDIX D, SECTION 2, PARA 2Q(3), AND FOR FUTURE SPECIALISTS REFERENCE.

QUALITY

23

CHECKED

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