

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
ILS STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.29**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> FREDERICK MUNI	<u>AIRPORT ID</u> KFDK	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 6	<u>CITY</u> FREDERICK	<u>STATE</u> MD
<u>AIRPORT ELEVATION</u> 306	<u>TDZE</u> 297	<u>SUPERSEDED</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 5E	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 8W
<u>FACILITY</u> I-FDK	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 5 DECEMBER 2019	<u>REQUIRED EFFECTIVE DATE</u> 12/05/2019	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1980

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
FDK VOR		NUMBE INT					048.04	10.88	2800
EMI VORTAC	IAF	NUMBE INT	NOPT				294.52	11.89	2800
NUMBE INT	IF/IAF	FESAN INT					228.50	3.01 (I-FDK)	2200
FESAN INT		RICKE INT					228.50	3.01 (I-FDK)	1700

**MISSED APPROACH**

**MAP:**

ILS: DA  
LOC: 4.28 NM AFTER RICKE INT

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 2800 ON FDK VOR R-048 TO NUMBE INT AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):**

CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 DIRECT EMI VORTAC AND HOLD.

**PROFILE:**

1. PT      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF (IAF)**
2. HOLD NE NUMBE, LT, 228.50 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 4500.
3. **FAC:** 228.50      **FAF:** RICKE INT                      **DIST FAF TO MAP:** 4.28                      **DIST FAF TO THLD:** 4.28
4. **MIN ALT:** NUMBE INT 2800, FESAN INT 2200, RICKE INT 1700, ZIBAT INT 1080\*
5. **DIST TO THLD FROM OM:**                      **MM:**                      **IM:**                      **150 HAT:**                      **GS ANT:** 948
6. **MIN GS INCPT:** 1700                      **GS ALT AT FAF :** RICKE INT 1700                      **OM:**                      **MM:**                      **IM:**
7. **GP ANGLE:** 3.00                      **34:1:**                      **20:1:**                      **TCH:** 54.3
8. **MSA FROM:** FDK VOR 090-180 2600, 180-270 3000, 270-090 3400



**EQUIPMENT REQUIREMENTS NOTES:**

**NOTES:**

CHART NOTE: CIRCLING RWY 30 NA AT NIGHT.  
 CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 NOT AUTHORIZED.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON EMI VORTAC AIRWAY RADIALS 269 CW 295.  
 CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
 CHART PLANVIEW NOTE: WASHINGTON DC METROPOLITAN SFRA  
 CHART PLANVIEW NOTE: WARNING--WASHINGTON DC SFRA, CTC POTOMAC APP CON  
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 23 CAT A/B VISIBILITY TO 1 1/8 SM.  
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 23 CAT C/D VISIBILITY TO 2 1/2 SM.  
 CHART NOTE: ZIBAT FIX MINIMUMS: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC 23 CATS C/D.

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON.  
 ALTERNATE MISSED APPROACH: HOLD S, LT, 358.07 INBOUND.  
 \* LOC ONLY  
 CHART WASHINGTON DC METROPOLITAN ADIZ  
 CHART FAS OBST: 718 TOWER 392727N/0771926W.

**MINIMUMS:**

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

**ALTERNATE:** NA  ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE, NA WHEN TOWER CLOSED; LOC: STANDARD - CAT C 800-2 1/2, CAT D 900-3, NA WHEN LOCAL WEATHER NOT AVAILABLE, NA WHEN TOWER CLOSED.

CATEGORY:	A			B			C			D			E			
	FINAL TYPE	DA/MDA	VIS	HAT/HAA												
S-ILS 23	689	1	392	689	1	392	689	1	392	689	1	392				
S-LOC 23	1080	3/4	783	1080	1	783	1080	2	783	1080	2	783				
CIRCLING	1080	1	774	1080	1 1/4	774	1100	2 1/2	794	1140	2 3/4	834				
ZIBAT FIX MINIMUMS (DUAL VOR RECIEVERS REQUIRED)																
S-LOC 23	1020	3/4	723	1020	3/4	723	1020	2	723	1020	2	723				
CIRCLING	1020	1	714	1020	1	714	1100	2 1/4	794	1140	2 3/4	834				



**CHANGES - REASONS**

1. DELETED PROCEDURE TURN - ADDED HOLD-IN-LIEU AT INT NUMBE.
2. ADDED HOLD-IN-LIEU AT INTERSECTION NUMB - IAW 8260-3D, 2-4-5 (E).
3. CHANGED TCH FROM 55.6 TO 54.3 - IAW CRITERIA MEMO - 11/9/2018 - ILS TCH COMPUTATION AND USE IN PROCEDURE DEVELOPMENT.
4. CHANGED INTERSECTION RICKE DISTANCE FROM FEP FROM 4.22 NM TO 4.28 NM - INTERSECTION MOVED 343.65 FEET NE TO ESTABLISH PFAF WITH NEW DESIGN TCH.
5. CHANGED MISSED APPROACH CLEARANCE LIMIT FROM RICKE INT TO NUMBE INT - IAW 8260-3D 2-8-9 AND TO AVOID IMPLEMENTING A CLIMB IN HOLD AT INTERSECTION RICKE (FPT AND ATC APPROVED).
6. DELETED MISSED APPROACH HOLDING AT RICKE INT - PER FPT/ATC REQUEST.
7. CHANGED FEEDER FROM FREDERICK VOR TO RICKE INT TO FREDERICK VOR TO NUMBE INT - MOVED IAF TO NUMBE AS (IF) HOLD-IN-LIEU.
8. CHANGE AIRPORT FILED ELEVATION FROM 303 TO 306 - NEW VG SURVEY DATED 10/25/2018.
9. CHANGED TDZE FROM 296 TO 297 - NEW VG SURVEY DATED 10/25/2018.
10. ADDED INTERMEDIATE STEPDOWN FIX FESAN INT WITH MINIMUM ALTITUDE OF 2200 FEET - TO ALLOW DESCENT TO MINIMUM ALTITUDE FOR SEGMENT AND IAW 8260-3D, 2-5-3 (D).
11. ADDED FINAL STEPDOWN FIX ZIBAT INT AT 2.71 NM FROM THRESHOLD - IAW 8260-3D, 2-9-9 (C).
12. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 2800 VIA FDK R-047 TO RICKE INT AND HOLD" TO "CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 2800 ON FDK VOR R-048 TO NUMB INT" - MOVED MISSED APPROACH CLEARANCE LIMIT TO NUMBE INT AND NEW LAT/LONG (NEW SURVEY) FOR FREDERICK VOR.
13. CHANGED ALTERNATE MISSED APPROACH INSTRUCTIONS FROM "WHEN DIRECTED BY ATC, CLIMB TO 1300 THEN LEFT CLIMBING TURN TO 3000 DIRECT EMI VORTAC AND HOLDS, LT, 358.07 INBOUND" TO CLIMB TO 1300 THEN LEFT CLIMBING TURN TO 3000 DIRECT EMI VORTAC AND HOLDS, LT, 358.07 INBOUND - CHANGE FORMAT.
14. ADD CIRCLING ICON - IAW 8260.3D, SECTION 2-7.
15. ADDED ALTERNATE MINIMUMS - IAW 8260-19H, 8-6-9, E(7).
16. ADDED KJYO (LEESBURG EXECUTIVE AIRPORT) AS REMOTE CONTINGENCY ALTIMETER - IAW 8260-19H, 8-6-9, E(4).
17. CHANGED CROSSING RADIAL AT INTERSECTION RICKE FROM WESTMINSTER VORTAC FROM 273 TO 274 - RICKE INTERSECTION MOVED WITH TCH AMENDMENT.
18. ADDED CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - IAW 8260-19H, 8-6-11, K(3)
19. CHANGED CHART NOTE FROM NIGHT LANDING RWY 30 NA TO CIRCLING RWY 30 NA AT NIGHT - IAW 8260-19H, 8-6-11 (O).
20. CHANGED S-ILS 23 DA/HAT ALL CATS FROM 684/388 TO 689/392 - NEW VG SURVEY DATED 10/25/2018, MISSED APPROACH PENETRATING OBSTACLE (24-021162) AND APPLIED NEW VISIBILITY TABLE.
21. CHANGED S-ILS ALL CAT VIS FROM 1 1/2 SM TO 1 SM- APPLIED NEW VISIBILITY TABLE.
22. CHANGED S-LOC 23 ALL CATS HAT FROM 724 TO 783 - NEW VG SURVEY DATED 10/25/2018.
23. CHANGED S-LOC CAT B VIS FROM 3/4 SM TO 1 SM, CAT D VIS FROM 2 1/4 SM TO 2 SM- APPLIED NEW VISIBILITY TABLE.
24. CHANGED CAT A/B CIRCLING HAA FROM 717 TO 774 - AIRPORT ELEVATION CHANGE.
25. CHANGED CIRCLING VISIBILITY CAT A FROM 1 1/2 TO 1, CAT B FROM 1 1/4, AND CAT C FROM 2 1/4 TO 2 1/2 - APPLIED NEW VISIBILITY TABLE.
26. CHANGED CIRCLING CATS A/B 1020 CMDA/724 HAA TO 1080 CMDA/774 HAA, CAT C FROM 1080 CMDA/777 HAA TO 1100 CMDA/794 HAA AND CAT D FROM 1160 CMDA/857 HAA TO 1140 CMDA/834 HAA - APPLIED NEW CIRCLING CRITERIA, MAP STUDY AND DUAL MINIMUMS LINE.
27. DELETED NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC CATS C - NO LONGER APPLICABLE WITH NEW LINES OF MINIMUM.
28. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 23 CAT A/B VISIBILITY TO 1 1/8 SM - IAW VISCHECK AND NEW VISIBILITY TABLE.
29. CHART NOTE: ZIBAT FIX MINIMUMS: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC 23 CATS C/D - IAW VISCHECK AND NEW VISIBILITY TABLE.
30. CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 23 CAT C/D VISIBILITY TO 2 1/2 SM - IAW VISCHECK AND NEW VISIBILITY TABLE.
31. ADDED ZIBAT MINIMUMS (DUAL VOR RECEIVERS REQUIRED) S-LOC ALL CATS 1020 MDA/HAT 723 AND CATS A/B VISIBILITY 3/4 SM AND CATS C/D 2 SM - IAW 8260.19H, 8-6-11 3(F).
32. ADDED ZIBAT MINIMUMS (DUAL VOR RECEIVERS REQUIRED) CIRCLING CATS A/B 1020 MDA/714 HAA AND VISIBILITY 1 SM, CAT C 1100 MDA/794 HAA, VISIBILITY 2 1/4 SM AND CAT D 1140 MDA/834 HAA AND VISIBILITY 2 3/4 SM - IAW 8260.19H, 8-6-11 3(F).

**COORDINATED WITH:**

**A4A**  **ALPA**  **AOPA**  **APA**  **HAI**  **NBAA**  **OTHER:** ZDC, POTOMAC APP CON, FDK TOWER, ARPT MGR

**FLIGHT CHECKED BY**  
PENDING

*Digitally signed by*  
**DAVID DANNER**  
Sep 06, 2019

**OFFICE**

**DATE**

**DEVELOPED BY**  
DAVID DANNER (ANDRE MARSH)

*Digitally signed by*  
**DAVID DANNER**

**OFFICE**  
AJV-5421

**DATE**  
07/16/2019

**APPROVED BY**  
MARLON ROBINSON

*Digitally signed by*  
**DAVID DANNER**  
Sep 06, 2019

**OFFICE**  
AJV-A420

**DATE**

**TITLE**  
MANAGER

