

**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 ID</u> KRIC	<u>PROCEDURE NAME</u> ILS OR LOC RWY 34 ILS RWY 34 (SA CAT I), ILS RWY 34 (CAT II), ILS RWY 34 (CAT III)	<u>ORIGINAL/AMENDMENT</u> 15	<u>CITY</u> RICHMOND	<u>STATE</u> VA		
<u>AIRPORT ELEVATION</u> 168	<u>TDZE</u> 161	<u>SUPERSEDED</u> ILS OR LOC RWY 34 ILS RWY 34 (CAT II), ILS RWY 34 (CAT III)	<u>ORIGINAL/AMENDMENT</u> 14A	<u>DATED</u> 05/28/2015	<u>MAG VAR</u> 10W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> I-BNE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 3 NOVEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
JUVPO INT/RIC 14.28 DME	IF/IAF	JOMUS/RIC 5.35 DME					337.47	8.94 (I-BNE)	1700

MISSED APPROACH

MAP:

ILS: DA
LOC: 4.66 NM AFTER JOMUS/RIC 5.35 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 ON RIC VORTAC R-018 TO EPICS INT/RIC 17.27 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 DIRECT HPW VORTAC AND HOLD.

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)	
2. PROFILE STARTS AT JUVPO						
3. FAC:	337.47	FAF: JOMUS/RIC 5.35 DME	DIST FAF TO MAP: 4.66		DIST FAF TO THLD: 4.66	
4. MIN ALT:	JUVPO INT/RIC 14.28 DME 1700, JOMUS/RIC 5.35 DME 1700					
5. DIST TO THLD FROM OM:	MM:	IM: 778	100 HAT: 880	150 HAT: 1834	GS ANT: 1130	
6. MIN GS INCPT:	1700	GS ALT AT PFAF :	JOMUS/RIC 5.35 DME 1700	OM:	MM:	IM: 256
7. GS ANGLE:	3.00	34:1:	20:1:	TCH: 54.4		
8. MSA FROM:	RIC VORTAC 360-180 2000, 180-360 2600					

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED FOR LOC ONLY.



NOTES:

SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 34: CAT A, B, C, D, RA 156, RVR 1400, HAT 150, DA 311 MSL.
CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 34: CAT A, B, C, D, RA 101, RVR 1200, HAT 100, DA 261 MSL.
CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 34: CAT A, B, C, D, RVR 700
CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.
SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL.
CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-ILS 34 CAT E VISIBILITY TO RVR 4000 AND S-LOC 34 CAT E VISIBILITY TO 1 3/8 SM.
CHART NOTE: DME FROM RIC VORTAC. DME USE REQUIRES SIMULTANEOUS RECEPTION OF I-BNE AND RIC DME.

ADDITIONAL FLIGHT DATA:

HOLD S, RT, 018.29 INBOUND.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD NE HPW VORTAC, LT, 205.00 INBOUND.
FAS OBST: 360 AAO 372700N/0771557W.
CHART VDP AT 1.89 DME
DISTANCE VDP TO THLD 1.19 NM.
CHART IN PLANVIEW: HPW VORTAC.
CHART CIRCLING ICON.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 34	361	1800	200	361	1800	200	361	1800	200	361	1800	200	361	1800	200
S-LOC 34	620	2400	459	620	2400	459	620	4500	459	620	4500	459	620	4500	459
CIRCLING	660	1	492	660	1	492	700	1 1/2	532	720	2	552	740	2	572

CHANGES - REASONS

1. CHANGED FAF FROM KAFKA OM TO JOMUS/RIC 5.35 DME - FAA TO DECOMMISSION THE KAFKA OM AND INNER MARKER.
2. S-LOC 34 MDA CHANGED FROM 520 TO 620 - NEW SURVEY.
3. CIRCLING MINIMUMS FOR CATS A/B HAA CHANGED FROM 493 TO 492, CAT C MDA/HAA CHANGED FROM 660/493 TO 700/532, CAT D HAA FROM 553 TO 552 AND CAT E HAA FROM 573 TO 572- EXPANDED CIRCLING CRITERIA APPLIED AND AIRPORT ELEVATION CHANGE FROM 167 TO 168.
4. ADDED EQUIPMENT REQUIREMENTS NOTE DME REQUIRED FOR LOC ONLY - NEW FAF REQUIRES DME.
5. ADDED CHART CIRCLING ICON - APPLIED NEW CIRCLING.
6. CHANGED "SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF HUD TO DH" TO "SA CAT I CHART NOTE: REQUIRES SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL" - FORMAT UPDATED IAW 8-6-11.M.(1).NOTE.
7. LOC MISSED APPROACH CHANGED FROM "4.59 MILES AFTER KAFKA OM" TO "4.66 NM AFTER JOMUS/RIC 5.35 DME" - DIVERGENCE ANGLE EXCEEDS MAX 23 DEGREES, MAP DEFINED USING TIME/DISTANCE TABLE.
8. ADDED "CHART NOTE: DME FROM RIC VORTAC. DME USE REQUIRES SIMULTANEOUS RECEPTION OF I-BNE AND RIC DME" - NON-PAIRED DME USED IN CONJUNCTION WITH LOCALIZER.
9. ADDED CHART PLANVIEW NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}) - VGSI TCH 78.8'.
10. ADDED VDP - PROCEDURE NOW HAS DME.
11. CHANGED INOP ALS NOTE FROM "FOR INOPERATIVE ALSF-2, INCREASE S-ILS 34 CAT E VISIBILITY TO RVR 4000 AND S-LOC 34 CATS C, D, AND E VISIBILITY TO RVR 5500" TO "FOR INOPERATIVE ALS, INCREASE S-ILS 34 CAT E VISIBILITY TO RVR 4000 AND S-LOC 34 CAT E VISIBILITY TO 1 3/8 SM" - PER VISCHECK TOOL.
12. CHANGED FAS OBST FROM 259 TREE 372804N/0771704W TO 360 AAO 372700N/0771557W - UPDATED EVALUATION.
13. UPDATED EPOCH YEAR FROM 2000 TO 2020 - MAGNETIC VARIATION EPOCH YEAR UPDATED TO 2020.
14. CHANGED LINE 3 DIST FAF TO MAP/THLD FROM 4.59 TO 4.66 - REPLACED OM WITH FIX JOMUS AND RETAINED FAF TO MAP REFERENCE TIME/DISTANCE TABLE REQUIRED FOR DETERMINATION OF MAP.
15. CHANGED LINE 4 FROM JUVPO 1700, KAFKA OM 1700 TO JUVPO INT/RIC 14.28 1700, JOMUS/RIC 5.35 DME 1700 - ADDED RIC DME DISTANCES AND FAF REPLACED REFERENCE OM DECOMMISSIONING.
16. REMOVED MM: 0.42 FROM PROFILE LINE 5 - MM DECOMMISSIONED.
17. UPDATED PROFILE LINE 5 REMOVED DIST TO THLD FROM OM: 4.88, CHANGED 100 HAT FROM 878 TO 880 AND 150 HAT FROM 1832 TO 1834 AND GS ANT FROM 1129 TO 1130 - UPDATED EVALUATION AND FOR GS ANT CHANGE PER AIRNAV DATA.
18. ADDED GS ALT AT PFAF: JOMUS/RIC 5.35 DME 1700 AND REMOVED OM: 1694, MM: 348 TO PROFILE LINE 6 - PFAF CHANGED TO JOMUS.
19. CHANGED S-LOC 34 ALL CATS HAT FROM 359 TO 459, CATS C/D/E VIS INCREASED FROM RVR 3000 TO RVR 4500 - UPDATED OBSTACLE EVALUATION AND VISCHECK RESULTS.
20. UPDATED PRIMARY MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 VIA RIC VORTAC R-018 TO EPICS INT/RIC 17.27 DME AND HOLD, OR AS DIRECTED BY ATC" TO "CLIMB TO 800 THEN CLIMBING RIGHT TURN TO 2000 ON RIC VORTAC R-018 TO EPICS INT/RIC 17.27 DME AND HOLD." - UPDATED FORMAT AND REMOVED OR AS DIRECTED BY ATC.
21. UPDATED TERMINAL ROUTE FROM "JUVPO INT TO KAFKA OM" TO "JUVPO INT/RIC 14.28 DME TO JOMUS/RIC 5.35 DME" AND DISTANCE FROM 9.01 TO 8.94 - REPLACED KAFKA OM WITH JOMUS AND ADDED DME INFORMATION.
22. ADDED ILS RWY 34 (SA CAT I) TO PROCEDURE NAME - CORRECTING A DOCUMENTATION ERROR.
23. UPDATED NOTE FROM SA CATEGORY I ILS SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED: CAT A, B, C, D, RA 156, RVR 1400, HATH 150, DA 311 MSL TO SA CAT I ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 34: CAT A, B, C, D, RA 156, RVR 1400, HAT 150, DA 311 MSL - REPLACED HATH WITH HAT TO ALIGN WITH TDZE USE AND IAW 8260.19I, PARA 8-6-11.M(1).
24. UPDATED NOTE FROM CATEGORY II ILS SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED S-ILS 34: CAT A, B, C, D, RA 101, RVR 1200, HATH 100, DA 261 MSL TO CAT II ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 34: CAT A, B, C, D, RA 101, RVR 1200, HAT 100, DA 261 MSL - REPLACED HATH WITH HAT TO ALIGN WITH TDZE USE AND IAW 8260.19L, PARA 8-6-11.M(3).
25. UPDATED NOTE FROM CATEGORY III ILS SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED. S-ILS-34: CAT IIIA CAT A, B, C, D, RVR 700. CAT IIIB CAT A,B,C,D, RVR 600. CAT IIIC NA TO CAT III ILS - SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED; S-ILS 34: CAT A, B, C, D, RVR 700 - IAW 8260.19I, PARA 8-6-11.M(5).
26. ADDED ADDITIONAL FLIGHT DATA ENTRY CHART OM IN HALF-TONE - OM REMOVED FROM PROCEDURE AND HAS YET TO BE DECOMMISSIONED.
27. CHANGED APT ELEVATION FROM 167 TO 168 - REVISED AIRNAV DATA.

9/28/2022 THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 9/28/2022

DELETED ADDITIONAL NOTE TO CHART OM IN HALF TONE.

COORDINATED WITH:
A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZDC, PCT TRACON, RIC ATCT, AMGR

Digitally signed by

FLIGHT CHECKED BY**JOHNNIE BAKER**

STEPHEN BAUER

Digitally signed by Sep 26, 2022

OFFICE

FPO

DATE

09/16/2022

DEVELOPED BY**JOHNNIE BAKER**

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Sep 26, 2022

OFFICE

AJV-A433

DATE

05/10/2022

APPROVED BY

LONNIE EVERHART

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Sep 26, 2022

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TITLE
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