

**FEDERAL AVIATION ADMINISTRATION**  
**FLIGHT STANDARDS SERVICE**  
**RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE**  
**TITLE 14 CFR PART 97.33**

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><b>AIRPORT</b></u> RICHMOND MUNI	<u><b>AIRPORT ID</b></u> KRID	<u><b>PROCEDURE NAME</b></u> RNAV (GPS) RWY 33	<u><b>ORIGINAL/AMENDMENT</b></u> 1	<u><b>CITY</b></u> RICHMOND	<u><b>STATE</b></u> IN
<u><b>AIRPORT ELEVATION</b></u> 1140	<u><b>TDZE</b></u> 1140	<u><b>SUPERSEDED</b></u> RNAV (GPS) RWY 33	<u><b>ORIGINAL/AMENDMENT</b></u> ORIG	<u><b>DATED</b></u> 07/02/2009	<u><b>MAG VAR</b></u> 3W
<u><b>FACILITY</b></u> RNAV	<u><b>COORDINATES OF FACILITIES</b></u>	<u><b>ACTUAL EFFECTIVE DATE</b></u> 8 NOVEMBER 2018	<u><b>REQUIRED EFFECTIVE DATE</b></u> ROUTINE	<u><b>CANCEL SUSPEND</b></u>	<u><b>EPOCH YEAR</b></u> 1985

**TAA**

<u><b>FROM</b></u>	<u><b>FIX TYPE</b></u>	<u><b>TO</b></u>	<u><b>FIX TYPE</b></u>	<u><b>ALTITUDE</b></u>
1. 238/30 CW 058/30	NOPT	238/15 CW 058/15		3100
1. 238/15 CW 058/15		SKYRA	IF/IAF	3000
2. 058/30 CW 238/30		SKYRA	IAF	3000

**TERMINAL ROUTES**

<u><b>FROM</b></u>	<u><b>FIX TYPE</b></u>	<u><b>TO</b></u>	<u><b>FIX TYPE</b></u>	<u><b>LEG TYPE</b></u>	<u><b>FO/FB</b></u>	<u><b>RNP</b></u>	<u><b>COURSE</b></u>	<u><b>DISTANCE</b></u>	<u><b>ALTITUDE</b></u>
SKYRA	IF/IAF	PIGTE		TF	FB	1.00	328.23	6.30	2700
PIGTE	FAF	RW33	MAP	TF	FO	0.30	328.18	4.70	
RW33	MAP	1540 MSL		CA			328.18		
1540 MSL		SKYRA		DF	FO	1.00			3000

**MISSED APPROACH**

**MAP:**

LP: RW33  
LNAV: RW33

**MISSED APPROACH INSTRUCTIONS:**

CLIMBING RIGHT TURN TO 3000 DIRECT SKYRA AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE SKYRA, RT, 328.23 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 328.18      FAF: PIGTE      DIST FAF TO MAP: 4.70      DIST FAF TO THLD: 4.70

4. MIN ALT: SKYRA 3000, PIGTE 2700

5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      GS ANT:      OM:      MM:      IM:

6. MIN GP INCPT:      GP ALT AT FAF :

7. GP ANGLE:      34:1: IS NOT CLEAR      20:1: IS CLEAR      TCH:

8. MSA FROM:

PBN REQUIREMENTS NOTES:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 15 NA AT NIGHT.  
CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.  
PIGTE TO RW33: 3.04/45.  
CHART VDP AT 1.16 NM TO RW33  
WAAS CHANNEL #78242  
REFERENCE PATH ID: W33A  
FAS OBST: 1300 AAO 394227N/0844730W.  
LTP HAE: 313.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ 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
LP MDA	1560	1	420	1560	1	420	1560	1 1/8	420	1560	1 1/8	420			
LNAV MDA	1560	1	420	1560	1	420	1560	1 1/8	420	1560	1 1/8	420			
CIRCLING	1600	1	460	1600	1	460	1600	1 1/2	460	1700	2	560			



**CHANGES - REASONS**

- 1. TERMINAL ROUTES DELETED: RID VORTAC TO SKYRA, BATHY TO WARNG, WARNG TO SKYRA, IZZOF TO SKYRA - RID VORTAC DECOMMISSIONING.
- 2. TERMINAL ROUTE, SKYRA TO PIGTE, RNP VALUE CHANGE 0.50 TO 1.00 - INTERMEDIATE RNP VALUE UPDATED TO NEW VALUE.
- 3. TERMINAL ROUTE ADDED: RW33 (MAP) TO 1540 MSL (CA) 328.18 - CA LEG ADDED TO MISSED APPROACH INSTRUCTIONS PER 8260.58A 3-5-2. CA ALTITUDE MUST BE THE LOWEST OF DA, MDA OR 400 ABOVE AIRPORT ELEVATION.
- 4. TERMINAL ROUTES, RW33 (MAP) TO SKYRA CHANGED TO 1540 MSL TO SKYRA - CA LEG ADDED TO MISSED APPROACH INSTRUCTIONS PER 8260.58A 3-5-2. CA ALTITUDE MUST BE THE LOWEST OF DA, MDA OR 400 ABOVE AIRPORT ELEVATION.
- 5. PROFILE LINE 7, 20:1 IS CLEAR ADDED - IAW 8260.19H PARA 8-6-7G(3).
- 6. PROFILE LINE 8, MSA DELETED - REPLACED WITH TAA - RID VORTAC DECOMMISSIONING.
- 7. LP MINIMA ADDED - LPV AND LNAV/VNAV GQS PENETRATED.
- 8. LNAV MINIMA CHANGED FROM '1540/400' TO '1560/420', CAT C VISIBILITY CHANGED FROM 1 TO 1 1/8 AND CAT D VISIBILITY CHANGED FROM 1 1/4 TO 1 1/8 - NEW CONTROLLING OBSTACLE AND VISCHECK EVALUATION.
- 9. ADDITIONAL FLIGHT DATA, FAS OBST CHANGED FROM '1226 TREE 394437N/0844958W' TO '1300 AAO 394227N/0844730W' - NEW CONTROLLING OBSTACLE.
- 10. ADDITIONAL FLIGHT DATA, NOTE CHANGED FROM 'VDP AT 1.10 NM TO RW33' TO 'VDP AT 1.16 NM TO RW33' - UPDATED EVALUATION.
- 11. ADDITIONAL FLIGHT DATA, NOTE ADDED: CHART CIRCLING ICON - NEW CIRCLING CRITERIA APPLIED.
- 12. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.
- 13. PBN REQUIREMENTS NOTE ADDED: RNP APCH - PER MEMO 257.
- 14. NOTE DELETED: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JAMES M COX DAYTON INTL ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET AND INCREASE VISIBILITY CAT C, D 1/4 MILE - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 15. NOTE DELETED: VDP NA WHEN USING JAMES M COX DAYTON INTL ALTIMETER SETTING - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
- 16. NOTE DELETED: PROCEDURE NA FOR ARRIVALS AT IZZOF VIA V275 NORTHBOUND - IZZOF TO SKYRA ROUTE DELETED PER FPT CHECKLIST.
- 17. NOTE DELETED: VISIBILITY REDUCTION BY HELICOPTERS NA - NOTE REPLACED WITH NEW HELICOPTER VISIBILITY NOTE.
- 18. NOTE ADDED: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - PUBLISHED IAW 8260.19H PARA 8-6-11K(3).
- 19. NOTE ADDED: CIRCLING RWY 15 NA AT NIGHT - PUBLISHED IAW 8260.19H PARA 8-6-11O(2)(G).
- 20. TAA ADDED: 1. 238/30 CW 058/30 (NOPT) 238/15 CW 058/15 3100, 238/15 CW 058/15 SKYRA (IF/IAF) (FB) 3000. 2. 058/30 CW 238/30 SKYRA (IAF) (FO) 3000 - RID VORTAC DECOMMISSIONING.
- 21. ALTERNATE MINIMUMS ADDED AS STANDARD - PRIMARY ALTIMETER SOURCE IS LOCAL AND ON SERVICE A.

7/3/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 5/11/18:

- 1. UPDATED FAS DATA BLOCK INFORMATION, CHANGED REFERENCE PATH IDENTIFIER (APPROACH ID) FROM W33 TO W33A.
- 2. UPDATED FAS DATA BLOCK INFORMATION, CHANGED CRC REMAINDER FROM D2D776E3 TO 7188D08C.
- 3. UPDATED AERONAUTICAL RADIO, INC (ARINC) CODING.



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<u>COORDINATED WITH:</u>					
A4A <input type="checkbox"/> ALPA <input checked="" type="checkbox"/> AOPA <input checked="" type="checkbox"/> APA <input type="checkbox"/> HAI <input type="checkbox"/> NBAA <input checked="" type="checkbox"/> OTHER: ZID, DAY APP CON, AMGR					
<u>FLIGHT CHECKED BY</u> JOHN R CLOUGH		Digitally signed by DAVID TEFFETELLER Aug 28, 2018	<u>OFFICE</u> FICO	<u>DATE</u> 07/18/2018	
<u>DEVELOPED BY</u> ANDREA CHANEY		Digitally signed by DAVID TEFFETELLER Aug 28, 2018	<u>OFFICE</u> AJV-5433	<u>DATE</u> 05/11/2018	
<u>APPROVED BY</u> PATRICK MULQUEEN		Digitally signed by DAVID TEFFETELLER Aug 28, 2018	<u>OFFICE</u> AJV-5430	<u>DATE</u>	<u>TITLE</u> MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRID
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	394502.2000N
LTP/FTP LONGITUDE	0845017.9840W
LTP/FTP ELLIPSOIDAL HEIGHT	+03138
FPAP LATITUDE	394615.3645N
FPAP LONGITUDE	0845124.0345W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.04
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1232
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	7188D08C
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03474
FPAP ORTHOMETRIC HEIGHT	+03474

