

**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 24	<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> 1139	<u><b>SUPERSEDED</b></u> RNAV (GPS) RWY 24	<u><b>ORIGINAL/AMENDMENT</b></u> ORIG-A	<u><b>DATED</b></u> 04/28/2016	<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. 148/30 CW 328/30	NOPT	148/15 CW 328/15		3100
1. 148/15 CW 328/15		PEWEZ	IF/IAF	2800
2. 328/30 CW 148/30		328/15 CW 148/15		3000
2. 328/15 CW 148/15		PEWEZ	IF/IAF	2800

**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>
PEWEZ	IF/IAF	JERMY		TF	FB	1.00	238.29	6.25	2700
JERMY	FAF	OTJIW/1.80 NM TO RW24		TF	FB	0.30	238.21	2.95	
OTJIW/1.80 NM TO RW24		RW24	MAP	TF	FO	0.30	238.21	1.80	
RW24	MAP	1339 MSL		CA			238.21		
1339 MSL		SNACK		DF	FO	1.00			2800

**MISSED APPROACH**

**MAP:**

LPV: DA  
LNAV/VNAV: DA  
LNAV: RW24

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2800 DIRECT SNACK AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

QUALITY  
24  
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NE PEWEZ, RT, 238.29 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 238.21      FAF: JERMY      DIST FAF TO MAP: 4.75      DIST FAF TO THLD: 4.75

4. MIN ALT: PEWEZ 2800, JERMY 2700, OTJIW/1.80 NM TO RW24 1740\*

5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      200 HAT: 0.48      GS ANT:

6. MIN GP INCPT: 2700      GP ALT AT FAF : JERMY 2700      OM:      MM:      IM:

7. GP ANGLE: 3.00      34:1: IS CLEAR      20:1: IS CLEAR      TCH: 47.7

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING RWY 15 NA AT NIGHT.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.  
CHART VDP AT 0.99 NM TO RW24\*  
\*LNAV ONLY  
WAAS CHANNEL #82112  
REFERENCE PATH ID: W24A  
CHART FAS OBST: 1241 TREE 394641N/0844849W.  
1418 AAO 394827N/0844451W.  
HOLD SW, RT, 058.03 INBOUND  
LTP HAE: 313.3 M

MINIMUMS:

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

ALTERNATE: NA ☒

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
LPV DA	1339	3/4	200	1339	3/4	200	1339	3/4	200	1339	3/4	200			
LNAV/VNAV DA	1409	7/8	270	1409	7/8	270	1409	7/8	270	1409	7/8	270			
LNAV MDA	1500	1	361	1500	1	361	1500	1	361	1500	1	361			
CIRCLING	1600	1	460	1600	1	460	1600	1 1/2	460	1700	2	560			



**CHANGES - REASONS**

1. DELETED TERMINAL ROUTES: FROM RID VORTAC TO PEWEZ COURSE/DISTANCE 057.48/11.35; FROM LEEDS TO QUIPP COURSE/DISTANCE 190.68/3.33; FROM QUIP TO PEWEZ COURSE/DISTANCE 148.24/5.00; FROM FRAAM TO PEWEZ COURSE/DISTANCE 328.33/6.64 - RID VORTAC DECOMMISSIONING. TO ACCOMMODATE TAA.
2. TAA ADDED: FROM 148/30 CW 328/30 (NOPT) TO 148/15 CW 328/15 3100; FROM 148/15 CW 328/15 TO PEWEZ (IF/IAF) (FB) 2800 - TO ALLOW THE ELIMINATION OF AIRWAY FIXES ASSOCIATED WITH RID VORTAC DECOMMISSIONING.
3. TAA ADDED: FROM 328/30 CW 148/30 TO 328/15 CW 148/15 3000; FROM 328/15 CW 148/15 TO PEWEZ (IAF) (FO) 2800 - TO ALLOW THE ELIMINATION OF AIRWAY FIXES ASSOCIATED WITH RID VORTAC DECOMMISSIONING.
4. TERMINAL ROUTES COURSE/DISTANCE FROM PEWEZ TO JERMY COURSE/DISTANCE CHANGED FROM 238.28/6.31 TO 238.29/6.25 - PEWEZ CHANGED FROM 395153.860N/0843819.160W TO 395153.738N/0843819.040W. FIX MOVED 15 FT SE.
5. ADDED STEPDOWN FIX TO TERMINAL ROUTES: FROM JEREMY TO OTJIW/1.80 NM TO RW24 COURSE/DISTANCE 238.21/2.95 AND FROM OTJIW/1.80 NM TO RW24 TO RW24 COURSE/DISTANCE 238.21/1.80 - TO LOWER LNAV MINIMUM, NEW OBSTACLE EVALUATION.
6. ADDED MISSED APPROACH CA LEG: FROM RW24 TO 1339 MSL COURSE 238.21 - IAW 8260.19H PARA 4-6-5(D).
7. PROFILE LINE 2: CHANGED FROM "HOLD NE PEWEZ, RT, 238.28 INBOUND, 2700 FT. IN LIEU OF PT (IAF)" TO "HOLD NE PEWEZ, RT, 238.29 INBOUND, 2800 FT. IN LIEU OF PT (IAF)" - PEWEZ CHANGED FROM 395153.860N/0843819.160W TO 395153.738N/0843819.040W. FIX MOVED 15 FT SE.
8. PROFILE LINE 3: FAC CHANGED FROM 238.20 TO 238.21 - FAC RECALCULATED. TCH CHANGED FROM 47.4 TO 47.7.
9. PROFILE LINE 4: CHANGED ALTITUDE AT PEWEZ FROM 2700 TO 2800 - NEW OBSTACLE EVALUATION.
10. PROFILE LINE 7: TCH CHANGED FROM 47.4 TO 47.7 - NEW SURVEYED DATA, MATCHED KRID ILS OR LOC RWY 24.
11. PROFILE LINE 7: CHANGED NOTE FROM "34:1 IS CLEAR" TO "34:1 IS CLEAR; 20:1 IS CLEAR" - IAW 8260.19H PARA 8-6-7G(3).
12. REMOVED "PROCEDURE NA FOR ARRIVALS AT FRAAM VIA V275 SOUTHWEST BOUND" AND "PROCEDURE NA FOR ARRIVALS AT RID VORTAC VIA AIRWAY RADIALS 031 CW 055" - TO ALLOW THE ELIMINATION OF AIRWAY FIXES ASSOCIATED WITH RID VORTAC DECOMMISSIONING. TO ACCOMMODATE TAA.
13. PROFILE LINE 8: REMOVED MSA DATA - TO ACCOMMODATE TAA.
14. NOTE DELETED: DME/DME RNP-0.3 NA - PER MEMO 257.
15. ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER MEMO 257.
16. CHANGED "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 46C (114F)" TO "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C OR ABOVE 54C" - IAW 8260.19H PARA 8-6-9(S), TEMPERATURE DATA RECALCULATED.
17. CHANGED CHART VDP FROM "1.11 MILES TO RW24\*" TO "0.99 MILES TO RW24\*" - VDP RECALCULATED. TCH CHANGED FROM 47.4 TO 47.7. LNAV MDA CHANGED FROM 1540 TO 1500.
18. REMOVED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE JAMES M COX DAYTON INTL ALTIMETER SETTING AND INCREASE ALL DA 88 FEET AND ALL MDA 100 FEET. INCREASE LPV AND LNAV/VNAV VISIBILITY 1/4 MILE ALL CATS. INCREASE LNAV VISIBILITY CAT C 1/2 MILE AND CAT D 1/4 MILE" - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
19. REMOVED "CHART NOTE: VDP AND BARO-VNAV NA WHEN USING JAMES M COX DAYTON INTL ALTIMETER SETTING" - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
20. LNAV/VNAV CAT A/B/C/D MDA/HAT/VIS CHANGED FROM "1549/412/ 1 1/2" TO "1409/270/ 7/8" - NEW OBSTACLE EVALUATION, VISIBILITY RECALCULATED.
21. LNAV CAT A/B/C/D MDA/HAA CHANGED FROM 1540/401 TO 1500/361. LNAV CAT C/D VIS CHANGED FROM 1 1/8 TO 1 - NEW OBSTACLE EVALUATION, VISIBILITY RECALCULATED.
22. ADDITIONAL FLIGHT DATA: CHANGED MA DATA FROM "HOLD SW, RT, 058.02 INBOUND" TO "HOLD SW, RT, 058.03 INBOUND" - MA COURSE RECALCULATED, FAC CHANGED FROM 238.20 TO 238.21.
23. DIST FAF TO MAP/THLD CHANGED FROM 4.69 TO 4.75 - TCH CHANGED FROM 47.4 TO 47.7.
24. CRC REMINDER CHANGED FROM EF03148C TO 2E743473 - LTP COORDINATE CHANGED FROM "394537.0100N/0845002.5800W" TO "394536.9780N/084002.5450W". FPAP COORDINATE CHANGED FROM "394505.9500N/0845100.3700W" TO "394446.0245N/0845137.3545W". COURSE WIDTH AT THRESHOLD CHANGED FROM 92.75 TO 106.75. TCH CHANGED FROM 47.4 TO 47.7. LENGTH OF OFFSET CHANGED FROM 0 TO 1080.
25. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - IAW 8260.19H PARA 8-6-10T & UPDATE TO NEW CIRCLING CRITERIA.
26. ADDITIONAL FLIGHT DATA: CHANGED FROM "1415 TOWER 394650N/084442W" TO "1418 AAO 394827N/0844451W" - 7:1 OBSTACLE, IAW 8260.19H PARA 8-6-10E(1) .
27. ADDITIONAL FLIGHT DATA: CHANGED "CHART FAS OBST: 1209 TREE 394601N/0844925W" TO "CHART FAS OBST: 1241 TREE 394641N/0844849W" - OBSTACLE EVALUATION UPDATE.
28. ADDED "CHART NOTE: CIRCLING RWY 15 NA AT NIGHT" - IAW 8260.19H PARA 8-6-11O(2)G..



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZID, DAY APP CON, AMGR

FLIGHT CHECKED BY

SCOTT WIEBE

*Digitally signed by*  
**DONALD H LANIER**  
Oct 01, 2018

OFFICE

FICO

DATE

9/16/18

DEVELOPED BY

DAVID TEFFETELLER (KWEKU DONKOR)

*Digitally signed by*  
**DONALD H LANIER**  
Oct 01, 2018

OFFICE

AJV-5433

DATE

06/01/2018

APPROVED BY

PATRICK MULQUEEN

*Digitally signed by*  
**DONALD H LANIER**  
Oct 01, 2018

OFFICE

AJV-5430

DATE

TITLE

MANAGER



**FAS DATA BLOCK INFORMATION**

<b><u>DATA FIELD</u></b>	<b><u>DATA</u></b>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRID
RUNWAY	RW24
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	394536.9780N
LTP/FTP LONGITUDE	0845002.5450W
LTP/FTP ELLIPSOIDAL HEIGHT	+03133
FPAP LATITUDE	394446.0245N
FPAP LONGITUDE	0845137.3545W
THRESHOLD CROSSING HEIGHT (TCH)	00047.7
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1080
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 CRC REMAINDER	 2E743473

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+03469
FPAP ORTHOMETRIC HEIGHT	+03469

