

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>AIRPORT</u> BOLTON FIELD	<u>AIRPORT ID</u> KTZR	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> COLUMBUS	<u>STATE</u> OH
<u>AIRPORT ELEVATION</u> 904	<u>TDZE</u> 904	<u>SUPERSEDED</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 03/07/2013	<u>MAG VAR</u> 5W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 13 SEPTEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>	<u>EPOCH YEAR</u> 1985

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>
MECAN		WATIG		TF	FO	2.00	158.97	24.07	2700
SHIRT	IAF	WATIG	NOPT	TF	FB	1.00	072.61	14.57	2700
WATIG	IF/IAF	JOXOK		TF	FB	1.00	037.06	6.56	2700
JOXOK	FAF	RW04	MAP	TF	FO	0.30	037.11	5.44	
RW04	MAP	1163 MSL		CA			037.11		
1163 MSL		OYILU		DF	FO	1.00			
OYILU		MECAN		TF	FO	1.00	294.40	20.92	3000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW04

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT OYILU AND LEFT TURN ON TRACK 294.40 TO MECAN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW WATIG, LT, 037.06 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 037.11PFAF: JOXOKDIST PFAF TO MAP: 5.44DIST PFAF TO THLD: 5.44

4. MIN ALT: WATIG 2700, JOXOK 2700

5. DIST TO THLD FROM OM:MM:IM:150 HAT:259 HAT: 0.70GS ANT:

6. MIN GP INCPT: 2700GP ALT AT PFAF : JOXOK 2700OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 39.3

8. MSA FROM: RW04 3100

PBN REQUIREMENTS NOTES:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SHIRT ON V5 SOUTHWEST BOUND.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/4 SM AND LNAV CATS C/D VISIBILITY TO 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.36 NM TO RW04*
*LNAV ONLY
WAAS CHANNEL #90505
REFERENCE PATH ID: W04A
CHART FAS OBST: 1044 TOWER 395228N/0830903W.
HOLD W, LT, 088.88 INBOUND
LTP HAE: 241.5 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
LPV DA	1163	1/2	259	1163	1/2	259	1163	1/2	259	1163	1/2	259			
LNAV/VNAV DA	1325	1	421	1325	1	421	1325	1	421	1325	1	421			
LNAV MDA	1360	1/2	456	1360	1/2	456	1360	7/8	456	1360	1	456			
CIRCLING	1360	1	456	1380	1	476	1380	1 1/2	476	1500	2	596			



<u>AIRPORT</u> BOLTON FIELD	<u>AIRPORT ID</u> KTZR	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 4	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> COLUMBUS	<u>STATE</u> OH
--------------------------------	---------------------------	---	-------------------------------------	-------------------------	--------------------

CHANGES - REASONS

- 1. AMENDED TDZE AND APT ELEV FROM 905 TO 904 - MATCH CURRENT AIRNAV VALUES.
- 2. DELETED NOTE: DME/DME RNP-0.3 NA - REPLACED BY EQUIPMENT REQUIREMENT NOTE.
- 3. ADDED PBN REQUIREMENTS NOTE: RNP APCH - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-8.
- 4. DELETED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED USE PORT COLUMBUS ALTIMETER SETTING AND INCREASE ALL DA 42 FEET AND ALL MDA 60 FEET. INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE AND LNAV CAT C/D VISIBILITY 1/4 MILE - KTZR AWOS ON WMSCR, BACK-UP ALTIMETER ADJUSTMENTS MOVED TO FORM 8260-9 FOR CONTINGENCY USE.
- 5. DELETED NOTE: BARO-VNAV AND VDP NA WHEN USING PORT COLUMBUS ALTIMETER SETTING - KTZR AWOS ON WMSCR, BACK-UP ALTIMETER ADJUSTMENTS MOVED TO FORM 8260-9 FOR CONTINGENCY USE.
- 6. AMENDED THE WORD "VIA" TO READ "ON" IN MISSED APPROACH INSTRUCTIONS - IN ACCORDANCE WITH CURRENT DOCUMENTATION POLICY.
- 7. ADDED A CA LEG TO MISSED APPROACH SEGMENT - IN ACCORDANCE WITH CURRENT DOCUMENTATION POLICY.
- 8. AMENDED LPV DA FROM 1164 TO 1163 - COMPUTED USING UPDATED TDZE.
- 9. AMENDED LNAV/VNAV DA FROM 1326 TO 1325 - COMPUTED USING UPDATED TDZE.
- 10. AMENDED LNAV HAT FROM 455 TO 456 - COMPUTED USING UPDATED TDZE.
- 11. AMENDED LNAV CAT C VISIBILITY FROM 3/4 TO 7/8 - COMPUTED IN ACCORDANCE WITH FAAO 8260.3C, TABLE 3-1-1.
- 12. ADDED CHART CIRCLING ICON IN ADDITIONAL FLIGHT DATA - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-10T.
- 13. DELETED CHART FAS OBST 945 TREE 395334N/0830848W IN ADDITIONAL FLIGHT DATA - LNAV/VNAV CONTROLLING OBSTACLES NO LONGER CHARTED.
- 14. AMENDED DISTANCE TO THLD FROM 200 HAT: 0.51 NM TO DISTANCE TO THLD FROM 259 HAT: 0.70 NM - COMPUTED USING PUBLISHED HAT.
- 15. AMENDED CAT A CIRCLING MDA/HAA FROM 1420/515 TO 1360/456, CATS B/C FROM 1420/515 TO 1380/576, AND CAT D FROM 1460/555 TO 1500/596 - MATCH RNAV (GPS) RWY 22 PUBLISHED CMDA(S)/HAT(S) AND STANDARDIZES CIRCLING MINIMUMS AT AIRPORT.
- 16. DELETED ALTERNATE MINIMUMS RESTRICTION NA WHEN LOCAL WEATHER NOT AVAILABLE - NO LONGER REQUIRED, KTZR AWOS IS ON WMSCR.
- 17. ADDED 20:1 IS CLEAR - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-7G(3).
- 18. ADDED NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 1/4 SM AND LNAV CATS C/D VISIBILITY TO 1 3/8 SM - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-11O(3)(D).
- 19. FAS DATA: AMENDED LTP LAT/LONG FROM 395341.2000N/0830831.6400W TO 395341.1940N/0830831.6440W - MATCH CURRENT AIRNAV VALUE FOR RWY THRESHOLD.
- 20. FAS DATA: AMENDED LTP ELLIPSOIDAL HEIGHT FROM +02417 TO +02415 - MATCH CURRENT AIRNAV VALUE.
- 21. FAS DATA: AMENDED FPAP LAT/LONG FROM 395427.2400N/0830754.0600W TO 395456.6780N/0830730.0055W - COMPUTED IN ACCORDANCE WITH AFS FPAP CALCULATOR.
- 22. FAS DATA: AMENDED COURSE WIDTH AT THRESHOLD FROM 104.00 TO 106.75 - COMPUTED IN ACCORDANCE WITH AFS FPAP CALCULATOR.
- 23. FAS DATA: AMENDED LENGTH OFFSET FROM 0000 TO 1072 - COMPUTED IN ACCORDANCE WITH AFS FPAP CALCULATOR.
- 25. FAS DATA: AMENDED VERTICAL ALARM LIMIT (VAL) FROM 35.0 TO 50.0 - IN ACCORDANCE WITH FAAO 8260.19H, APPENDIX K. HAT EXCEEDS 250 FEET.
- 26. FAS DATA: AMENDED CRC REMAINDER FROM 9B55DAD4 TO 5EF74327 - COMPUTED USING UPDATED FAS DATA PARAMETERS.
- 27. ADDITIONAL PATH POINT RECORD INFORMATION: AMENDED LTP ORTHOMETRIC HEIGHT AND FPAF ORTHOMETRIC HEIGHT FROM +02751 TO +02748 - MATCH CURRENT AIRNAV VALUE.
- 28. INCORPORATED CHANGES FROM ORIG-A (P-NOTAM 3/1519) - IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-3-4C(2).
- 29. REMOVED FAHRENHEIT VALUES FROM UNCOMPENSATED BARO-VNAV NOTE - FORMATTED IN ACCORDANCE WITH FAAO 8260.19H, PARA 8-6-9S.



COORDINATED WITH:

A4A

☐

ALPA

☒

AOPA

☒

APA

☐

HAI

☐

NBAA

☒

OTHER:

ZID, CMH APP CON, TZR ATCT, AMGR

FLIGHT CHECKED BY

MARC WEBBER

DEVELOPED BY

PETER R. GUIMOND

APPROVED BY

JULIE MORGAN

Digitally signed by

ROBERT G HAMILTON

Jul 16, 2018

Digitally signed by

PETER R GUIMOND

May 03, 2018

Digitally signed by

ROBERT G HAMILTON

Jul 16, 2018

OFFICE

FICO

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

7/13/18

DATE

05/03/2018

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KTZR
RUNWAY	RW04
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W04A
LTP/FTP LATITUDE	395341.1940N
LTP/FTP LONGITUDE	0830831.6440W
LTP/FTP ELLIPSOIDAL HEIGHT	+02415
FPAP LATITUDE	395456.6780N
FPAP LONGITUDE	0830730.0055W
THRESHOLD CROSSING HEIGHT (TCH)	00039.3
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	5EF74327
ADDITIONAL PATH POINT RECORD INFORMATION	
ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02748
FPAP ORTHOMETRIC HEIGHT	+02748

