

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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> BIRMINGHAM-SHUTTLESWORTH INTL	<u>AIRPORT ID</u> KBHM	<u>PROCEDURE NAME</u> RNAV (RNP) Z RWY 24	<u>ORIGINAL/AMENDMENT</u> 3	<u>CITY</u> BIRMINGHAM	<u>STATE</u> AL
<u>AIRPORT ELEVATION</u> 650	<u>TDZE</u> 641	<u>SUPERSEDED</u> RNAV (RNP) Z RWY 24	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 08/17/2017	<u>MAG VAR</u> 3W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 7 NOVEMBER 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CRMSN		JAVJA		TF	FB	1.00	060.83	7.00	9000
JAVJA	IAF	ISOJO		TF	FB	1.00	061.37	12.20	6000
ISOJO		HESGA		TF	FB	1.00	060.73	19.14	4000
HESGA		MOPVE		TF	FB	1.00	049.07	7.51	3000
WENDO		MREKK		TF	FB	1.00	235.89	10.10	6000
MREKK	IAF	SPATT		TF	FB	1.00	235.80	6.71	4000
KYLEE		WEDEB		TF	FB	1.00	337.46	12.09	6000
WEDEB	IAF	MOKEE		TF	FB	1.00	337.62	12.00	3600
VLKNN	IAF	MOPVE		TF	FB	1.00	084.48	6.00	3000
MOPVE	IF	ERIGE		TF	FB	0.30	084.62	4.04	2500
ERIGE		LOWGA	PFAF	RF	FB	0.30	(2.59 NM RADIUS CW (CFNXP))	6.95	2200
SPATT	IF	HUKEV		TF	FB	1.00	238.58	4.26	2700
HUKEV		LOWGA	PFAF	TF	FB	0.30	238.51	3.13	2200
MOKEE	IF	NOCIM		TF	FB	0.30	352.08	3.99	2400
NOCIM		LOWGA	PFAF	RF	FB	0.30	(2.50 NM RADIUS CCW (CFPVF))	4.95	2200
LOWGA	PFAF	RW24	MAP	TF	FO	0.30	238.52	4.73	
RW24	MAP	YACUR		TF	FB	1.00	238.48	8.00	
YACUR		WADEG		RF	FB	1.00	(5.00 NM RADIUS CW (CFLRS))	16.44	



FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
WADEG		VLKNN		TF	FO	1.00	066.77	4.17	3000

MISSED APPROACH

MAP:
RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 ON TRACK 238.48 TO YACUR THEN, RIGHT TURN TO WADEG, THEN TRACK 066.77 TO VLKNN AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. PROFILE STARTS AT LOWGA
3. FAC: 238.52 PFAF: LOWGA DIST PFAF TO MAP: DIST PFAF TO THLD:
4. MIN ALT: LOWGA 2200
5. DIST TO THLD FROM OM: 4.73 MM: IM: 150 HAT: 508 HAT: 1.43 GS ANT:
6. MIN GP INCPT: 2200 GP ALT AT PFAF : LOWGA 2200 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 51.9
8. MSA FROM: RW24 3100

PBN REQUIREMENTS NOTE:

RNP AR APCH.
RF REQUIRED.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -8°C OR ABOVE 54°C.
 CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT KYLEE ON V159-521 SOUTHEASTBOUND AND V66 EASTBOUND.
 CHART PLANVIEW NOTE AT VLKNN, WEDEB, JAVJA, MREKK: (RNP 0.30).
 CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE RNP 0.15 ALL CATS VISIBILITY TO 1 3/8 AND INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4 SM.
 CHART PLANVIEW NOTE AT ERIGE: MAX 180 KIAS UNTIL LOWGA.
 CHART PLANVIEW NOTE AT NOCIM: MAX 180 KIAS UNTIL LOWGA.
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WENDO ON V209 NORTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 229.00 INBOUND



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

ALTERNATE: NA STANDARD

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
AUTHORIZATION REQUIRED															
RNP 0.15 DA	1149	1	508	1149	1	508	1149	1	508	1149	1	508			
RNP 0.30 DA	1243	1 3/8	602	1243	1 3/8	602	1243	1 3/8	602	1243	1 3/8	602			

CHANGES - REASONS

1. REPLACED VUZ VORTAC WITH WAYPOINT VLKNN AND VUZ-LISRE SEGMENT CHANGED TO VLKNN-MOPVE, COURSE/DISTANCE CHANGED FROM 084.51/7.99 TO 084.48/6.00 - ATC REQUEST VUZ VORTAC REPLACED BY WAYPOINT AND FIX MOVED OVER 1 NM FOR SEGMENT CONSTRUCTION.
2. REPLACED LDK VORTAC WITH WAYPOINT CRMSN AND FEEDER COURSE CHANGED FROM 060.84 TO 060.83 - VOR MON DECOMMISSION AND REPLACED WITH WAYPOINT.
3. UPDATED CHART PLANVIEW NOTE AT VUZ VORTAC, LDK VORTAC, KYLEE: (RNP 0.30) TO CHART PLANVIEW NOTE AT VLKNN, WEDEB, JAVJA, MREKK: (RNP 0.30).- REPLACED VUZ VORTAC AND LDK VORTAC WITH VLKNN AND CRMSN WAYPOINTS.
4. CHANGED COURSE FROM WADEG TO VLKNN FROM 66.79 TO 66.77.- REPLACED VUZ VORTAC WITH VLKNN WAYPOINT.
5. REMOVED RF AND GPS REQUIRED CHART NOTE, ADDED AR RNP APCH AND RF REQUIRED TO PBN REQUIREMENT NOTES - IAW FAAO 8260.19H 8-6-8
6. CHANGED RNP VALUES ON FEEDERS FROM 2.00 TO 1.00 - IAW FAAO 8260.58A TABLE 1-2-1.
7. REMOVED CHART NOTE PROCEDURE NA FOR ARRIVALS ON VUZ RADIALS 046 CW 136 - VUZ REPLACED WITH VLKNN WAYPOINT.
8. REMOVED CHART NOTE PROCEDURE NA FOR ARRIVALS ON LDK RADIALS 049CW 092 - LDK REPLACED WITH CRMSN WAYPOINT.
9. HESGA-LISRE SEGMENT CHANGED TO HESGA-MOPVE, COURSE/DISTANCE CHANGED FROM 056.26/9.20 TO 049.07/7.51 - FIX MOVED OVER 1 NM FOR SEGMENT CONSTRUCTION.
10. LISRE-ERIGE SEGMENT CHANGED TO MOPVE-ERIGE, COURSE/DISTANCE CHANGED FROM 084.65/2.06 TO 084.62/4.04 - FIX MOVED OVER 1 NM FOR SEGMENT CONSTRUCTION.
11. MISSED APPROACH INSTRUCTION CHANGED FROM "CLIMB TO 3000 ON TRACK 238.49 TO YACUR, RIGHT TURN TO WADEG, THEN TRACK 066.79 TO VUZ VORTAC AND HOLD" TO "CLIMB TO 3000 ON TRACK 238.48 TO YACUR THEN, RIGHT TURN TO WADEG, THEN TRACK 066.77 TO VLKNN AND HOLD" - RELOCATED WADEG FOR SEGMENT CONSTRUCTION AND UPDATED MEASUREMENT.
12. CHANGED RW24 TO YACUR COURSE FROM 238.49 TO 238.48 - UPDATED MEASUREMENT.
13. CHANGED THE MISSED APPROACH HOLDING FROM VUZ VORTAC TO VLKNN-VUZ VORTAC REPLACED WITH VLKNN WAYPOINT.
14. UPDATED CHART NOTE: FOR INOP ALS, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 2 SM TO FOR INOPERATIVE ALS, INCREASE RNP 0.15 ALL CATS VISIBILITY TO 1 3/8 AND INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4 SM - IAW FAAO 8260.3D 3-3-2.
15. REMOVED FAHRENHEIT VALUES FROM CRITICAL TEMPERATURES CHART NOTE. - IAW FAAO 8260.58A 3-3-4 A(1)(B).
16. RNP 0.15 FINAL DA/HAT CHANGED FROM 1150/509 TO 1149/508 - NEW OBSTACLE EVALUATION.
17. RNP 0.30 FINAL DA/HAT CHANGED FROM 1244/603 TO 1243/602 - NEW OBSTACLE EVALUATION.
18. RNP 0.15 FINAL VISIBILITY CHANGED FROM 1 1/4 SM TO 1 SM - IAW FAAO 8260.3D TABLE 3-3-1.
19. RNP 0.30 FINAL VISIBILITY CHANGED FROM 1 5/8 SM TO 1 3/8 SM - IAW FAAO 8260.3D TABLE 3-3-1.



COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: BHM APP CON, ZTL, AMGR, BHM ATCT

FLIGHT CHECKED BY

KEVIN RIESE

Digitally signed by

DAVID DANNER

Sep 09, 2019

OFFICE

FICO

DATE

9/3/19

DEVELOPED BY

DAVID DANNER (BRANDON MAULDIN)

Digitally signed by

DAVID DANNER

Sep 09, 2019

OFFICE

AJV-A421

DATE

12/21/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DAVID DANNER

Sep 09, 2019

OFFICE

A42

DATE

TITLE

MANAGER

