US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
TDG VOR/DME	EZRUB (FB)	287.99 / 19.93	3300
VUZ VORTAC	LEPHO (FB)	070.72 / 15.62	3300
EZRUB (IAF)	SPATT (NOPT) (FB)	287.77 / 6.00	3300
LEPHO (IAF)	SPATT (NOPT) (FB)	148.54 / 6.00	3300
SPATT (IF/IAF)	HUKEV (FB)	238.58 / 4.26	2700
HUKEV	LOWGA (FB)	238.54 / 3.12	2200
LOWGA (FAF)	CUXOB/3.20 NM TO RW24 (FB)	238.51 / 1.54	
(SEE FORM 8260-10)			

MISSED APPROACH

LPV: DA
LNAV: RW24

CLIMB TO 3000 DIRECT CASPO AND ON TRACK 307.46 TO HUVUP AND ON TRACK 011.54 TO VUZ VORTAC AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD NE SPATT, RT, 238.58 INBOUND, 3300 FT. IN LIEU OF PT (IAF)
3. FAC: 238.51 FAF: LOWGA DIST FAF TO MAP: 4.74 THLD: 4.74
4. MIN. ALT: SPATT 3300, HUKEV 2700, LOWGA 2200, CUXOB/3.20 NM TO RW24 1700*
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2200 GS ALT AT: LOWGA 2200 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 51.2 34:1 IS NOT CLEAR
8. MSA FROM: RW24 3100

ADDITIONAL FLIGHT DATA:
HOLD NE, RT, 229.00 INBOUND.
CHART FAS OBST: 1299 TREE 333407N/0864148W
CHART 1397 TOWER 333638N/0863920W.
DISTANCE TO THLD FROM 321 HATH: 0.85 NM.
CHART VDP AT 1.92 MILES TO RW24*
*LNAV ONLY.
WAAS CHANNEL # 53605
REFERENCE PATH ID: W24A
LTP HAE: 166.3 M

MAG VAR: 3W EPOCH YEAR: 2010

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT | ALTERNATE: N A | STANDARD

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	962	4000	321	962	4000	321	962	4000	321	962	4000	321	962	4000	321
LNAV MDA	1320	4000	679	1320	4000	679	1320	1 1/2	679	1320	1 1/2	679	1320	1 1/2	679

NOTES:
CHART NOTE: DME/DME RNP-0.3 NA.
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT SPATT ON V209 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON VUZ VORTAC AIRWAY RADIALS 046 CW 111.
(SEE FORM 8260-10)

CITY AND STATE	ELEVATION: 650 THRE: 641 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
BIRMINGHAM, AL	BIRMINGHAM-SHUTTLESWORTH INTL	RNAV	RNAV (GPS) Y RWY 24, AMDT 2B	AMDT: 2A
				DATED 09/23/2010

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[ ]	[X]	[X]	[X] **ZTL, BHM APCH, BHM ATCT, AMGR**

FLIGHT CHECKED BY

NAME:	FIFO	DATE:
RUSSELL PRICE ELLIOTT	**FIOG**	**07/03/2009**

DEVELOPED BY

NAME:	FIFO	DATE:
MARLON J. ROBINSON	**AJV-352**	**07/06/2011**

APPROVED BY

NAME:		FIFO	DATE:
DARRYEL ADAMS	**MANAGER**	**AJV-352**	

CHANGES:

1. CHANGED TERMINAL ROUTE HUKEV TO LOWGA FROM 238.58/3.18 TO 238.54/3.12.
2. ADDED TERMINAL ROUTE LOWGA TO CUXOB/3.20 NM TO RW24, CUXOB TO RW24, RW24 TO 962 MSL, 962 MSL TO CASPO, CASPO TO HUVUP, AND HUVUP TO VUZ VORTAC.
3. CHANGED LINE 3 DIST FAF TO MAP AND THLD FROM 4.68 TO 4.74.
4. CHANGED LPV DA FROM 971 TO 962 ALL CATS.
5. CHANGED LNAV HAT FROM 670 TO 679 ALL CATS. CAT C VISIBILITY FROM 6000 TO 1 1/2, CAT E FROM 1 3/4 TO 1 1/2.
6. CHANGED MISSED WORDING FROM VIA TO ON.
7. CHANGED DISTANCE TO THLD FROM 321 HAT: FROM 0.88 TO 0.85.
8. CHANGED INOPERATIVE NOTE VISIBILITY INCREASES FROM LPV ALL CATS 1 1/4 TO RVR 5000, LNAV CAT A/B FROM 1 TO RVR 5000, CAT E FROM 2 1/4 TO CATS C/D/E TO 1 7/8.
9. CHANGED LINE 4 MIN ALT AT CUXOB FROM 1720 TO 1700.

REASONS:

1, 2, 3, 7. LOWGA FIX MOVED TO L-V PFAF LOCATION.
4, 6. IAW 8260.19 CHAPTER 8, PARA 853, 854, AND 856.
5, 8. IAW 8260.3 CHAPTER 3 AND 8260.19 CHAPTER 8, PARA 853, 854, AND 855.
9. IAW WITH OPTIMUM DESCENT. ACTUAL FIX LOCATION ALTITUDE WAS BELOW 1720.

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV - STANDARD
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
CUXOB/3.20 NM TO RW24	RW24 (MAP) (FO)	238.51 / 3.20	
RW24 (MAP)	962 MSL	238.51	
962 MSL	CASPO (FB)		
CASPO	HUVUP (FB)	307.46 / 6.00	
HUVUP	VUZ VORTAC (FO)	011.54 / 5.12	3000

NOTES, (CONT.):
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
*LNAV ONLY
CHART NOTE: FOR INOPERATIVE MALSR INCREASE LPV ALL CATS VISIBILITY TO RVR 5000, LNAV CAT A/B VISIBILITY TO RVR 5000 AND CAT C/D/E VISIBILITY TO 1 7/8.

CITY AND STATE	ELEVATION: 650 THRE: 641 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BIRMINGHAM, AL	BIRMINGHAM-SHUTTLESWORTH INTL	RNAV	RNAV (GPS) Y RWY 24, AMDT 2B	AMDT: 2A
				DATED: 09/23/2010

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

Bearings, headings, courses, 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 aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBHM
RUNWAY	RW24
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	333417.8100N
LTP/FTP LONGITUDE	0864432.5200W
LTP/FTP ELLIPSOIDAL HEIGHT	+01663
FPAP LATITUDE	333317.2200N
FPAP LONGITUDE	0864617.6700W
THRESHOLD CROSSING HEIGHT (TCH)	00051.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	0DDE12B0

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01952
FPAP ORTHOMETRIC HEIGHT	+01952

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

ARINC PACKET - 424-18 - RNAV (GPS)

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                1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ----------------------------------------------------------------------------------------------------------------------------
        SUSAD        TDG   K7010880VDL  N33343055W086023367    N33343055W086023367E0020005311     NARTALLADEGA
        SUSAD        VUZ   K7011440VTHA N33401267W086535928    N33401267W086535928E0020007502     NARVULCAN

                1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ----------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   CASPO K70    W     N33314440W086485860                    W0029     NAR           CASPO
        SUSAEAENRT   CUXOB K70    C     N33360680W086412315                    W0030     NAR           CUXOB
        SUSAEAENRT   EZRUB K70    W     N33393830W086253761                    W0032     NAR           EZRUB
        SUSAEAENRT   HUKEV K70    C     N33384538W086364713                    W0030     NAR           HUKEV
        SUSAEAENRT   HUVUP K70    W     N33350834W086545391                    W0028     NAR           HUVUP
        SUSAEAENRT   LEPHO K70    W     N33460753W086363887                    W0031     NAR           LEPHO
        SUSAEAENRT   LOWGA K70    C     N33365910W086395219                    W0030     NAR           LOWGA
        SUSAEAENRT   SPATT K70    C   L N33411008W086323477                    W0031     NAR           SPATT

                1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ----------------------------------------------------------------------------------------------------------------------------
        SUSAP KBHMK7ABHM     0     120YHN33335000W086450830W003000650         1800018000C    MNAR    BIRMINGHAM-SHUTTLESWORTH INTL

                1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ----------------------------------------------------------------------------------------------------------------------------
        SUSAP KBHMK7FR24-Y ASPATT 010SPATTK7EA0EE AR   HF                    23860060    + 03300     18000                A JS
        SUSAP KBHMK7FR24-Y ATDG   010TDG  K7D 0V       IF                                            18000                A JS
        SUSAP KBHMK7FR24-Y ATDG   020EZRUBK7EA0E  A 020TF                    28800199    + 03300                          A JS
        SUSAP KBHMK7FR24-Y ATDG   030SPATTK7EA0EE B 010TF                    28780060    + 03300                          A JS
        SUSAP KBHMK7FR24-Y AVUZ   010VUZ  K7D 0V       IF                                            18000                A JS
        SUSAP KBHMK7FR24-Y AVUZ   020LEPHOK7EA0E  A 020TF                    07070156    + 03300                          A JS
        SUSAP KBHMK7FR24-Y AVUZ   030SPATTK7EA0EE B 010TF                    14850060    + 03300                          A JS
        SUSAP KBHMK7FR24-Y R      010SPATTK7EA0E  I    IF                                 + 03300     18000                A JS
        SUSAP KBHMK7FR24-Y R      011HUKEVK7EA0E S  051TF                    23860043    + 02700                          A JS
        SUSAP KBHMK7FR24-Y R      020LOWGAK7EA1E  F 051TF                    23850031    + 02200                RW24 AK7PGA JS
        SUSAP KBHMK7FR24-Y R      020LOWGAK7EA2WALPV       N          ALNAV                                                JS
        SUSAP KBHMK7FR24-Y R      021CUXOBK7EA0E S  031TF                    23850015    V 0170001711        -300             A JS
        SUSAP KBHMK7FR24-Y R      030RW24 K7PG0GY M 031TF                    23850032      00692             -300             A JS
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QUALITY CHECKED

CITY AND STATE	ELEVATION: 650 THRE: 641	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BIRMINGHAM, AL	AIRPORT NAME: BIRMINGHAM-SHUTTLESWORTH INTL	RNAV	RNAV (GPS) Y RWY 24, AMDT 2B	AMDT: 2A
				DATED: 09/23/2010

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

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          1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------
        SUSAP KBHMK7FR24-Y R      040         0  M     CA                    2385        + 00962                        A JS
        SUSAP KBHMK7FR24-Y R      050CASPOK7EA0E        DF                                                               A JS
        SUSAP KBHMK7FR24-Y R      060HUVUPK7EA0E    010TF                     3075                                       A JS
        SUSAP KBHMK7FR24-Y R      070VUZ  K7D 0VY   010TF                     0115        + 03000                        A JS
        SUSAP KBHMK7FR24-Y R      080VUZ  K7D 0VE  R   HM                     22900070    + 03000                        A JS

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------
        SUSAP KBHMK7GRW24    0120022385 N33341781W086443252-0400    +0166300641120051150I

          1         2         3         4         5         6         7         8         9         0         1         2         3
PP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------
        SUSAP KBHMK7PR24-Y RW24 001Y0000W24A0N3334178100W08644325200+016630300N3333172200W086461767001067500000000512F4005000DDE12B0
        SUSAP KBHMK7PR24-Y RW24 002E      +01952+01952LPV       53605

          1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------
        SUSAP KBHMK7SRW24 K7PGA              0   18018003125                                                              M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 650 THRE: 641	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BIRMINGHAM, AL	AIRPORT NAME: BIRMINGHAM-SHUTTLESWORTH INTL	RNAV	RNAV (GPS) Y RWY 24, AMDT 2B	AMDT: 2A
				DATED: 09/23/2010

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33

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ARINC FLIGHT INSPECTION SUMMARY - VERSION 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
	SPATT	SPATT	010	IAF	HF	R	FO		238.6(235.6T)	006.0	03300
	TDG	TDG	010		IF						
	TDG	EZRUB	020	IAF	TF		FB	2.0	288.0(285.0T)	019.9	03300
	TDG	SPATT	030	IF	TF		FB	1.0	287.8(284.8T)	006.0	03300
	VUZ	VUZ	010		IF						
	VUZ	LEPHO	020	IAF	TF		FB	2.0	070.7(067.7T)	015.6	03300
	VUZ	SPATT	030	IF	TF		FB	1.0	148.5(145.5T)	006.0	03300
		SPATT	010	FACF	IF						03300
		HUKEV	011	SDF	TF		FB	0.5	238.6(235.6T)	004.3	02700
		LOWGA	020	FAF	TF		FB	0.5	238.5(235.5T)	003.1	02200
		CUXOB	021	SDF	TF		FB	0.3	238.5(235.5T)	001.5	0170001711
		RW24	030	MAP	TF		FO	0.3	238.5(235.5T)	003.2	00692

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
		040		CA				238.5(235.5T)		00962
	CASPO	050		DF		FB				
	HUVUP	060		TF		FB	1.0	307.5(304.5T)		
	VUZ	070		TF		FO	1.0	011.5(008.5T)		03000
	VUZ	080		HM	R	FO		229.0(226.0T)	007.0	03000

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	TDG	N333430.55	W0860233.67	N3334.509	W08602.561
	VUZ	N334012.67	W0865359.28	N3340.211	W08653.988
	CASPO	N333144.40	W0864858.60	N3331.740	W08648.977
	CUXOB	N333606.80	W0864123.15	N3336.113	W08641.386
	EZRUB	N333938.30	W0862537.61	N3339.638	W08625.627
	HUKEV	N333845.38	W0863647.13	N3338.756	W08636.786
	HUVUP	N333508.34	W0865453.91	N3335.139	W08654.899
	LEPHO	N334607.53	W0863638.87	N3346.126	W08636.648
	LOWGA	N333659.10	W0863952.19	N3336.985	W08639.870
	SPATT	N334110.08	W0863234.77	N3341.168	W08632.580
	RW24	N333417.81	W0864432.52	N3334.297	W08644.542

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW24	00641	51

CITY AND STATE	ELEVATION: 650 THRE: 641 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BIRMINGHAM, AL	BIRMINGHAM-SHUTTLESWORTH INTL	RNAV	RNAV (GPS) Y RWY 24, AMDT 2B	AMDT: 2A
				DATED: 09/23/2010

ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	TDG VOR/DME	EZRUB	1. TWR (01-001814)	333624.00N/0862503.00W	2048 (5E)	1000	AT252	3300
			2. TERRAIN	333615.25N/0862518.00W	1594 (1600)		AS1500	3100
FEEDER	VUZ VORTAC	LEPHO	3. TWR (01-000990)	334352.00N/0863757.00W	2049 (5E)	1000	AT251	3300
			4. TERRAIN	334313.06N/0863604.42W	1459 (1500)		AS1500	3000
INITIAL	EZRUB	SPATT	5. TWR (01-001721)	334138.38N/0863106.33W	1324 (1A)	1000	AT976	3300
			6. TERRAIN	334143.53N/0863102.65W	1059 (1100)		AS1500	2600
INITIAL	LEPHO	SPATT	3. TWR (01-000990)	334352.00N/0863757.00W	2049 (5E)	1000	AT251	3300
			4. TERRAIN	334313.06N/0863604.42W	1459 (1500)		AS1500	3000
INTERMEDIATE: LPV	SPATT (IF/IAF)	HUKEV	7. AAO	334313.06N/0863604.42W	1659 (2C)	500	DG541	2700
			4. TERRAIN	334313.06N/0863604.42W	1459 (1500)		AS1000	2500
INTERMEDIATE: LNAV	SPATT (IF/IAF)	HUKEV	3. TWR (01-000990)	334352.00N/0863757.00W	2049 (5E)	500	SA-357 DG508	2700
			4. TERRAIN	334313.06N/0863604.42W	1459 (1500)		AS1000	2500
INTERMEDIATE:	HUKEV	LOWGA	8. AAO	334005.26N/0863702.13W	1575 (2C)	500		2100
STEPDOWN			9. TERRAIN	333700.34N/0863908.01W	1245 (1200)		AS1000	2200
2. HOLD-IN-LIEU-OF-PT	SPATT	P-7	13. TWR (01-000992)	334853.00N/0862650.00W	2065 (5E)	1000	AT235	3300
			14. TERRAIN	334749.00N/0863133.23W	1514 (1500)		AS1500	3000
3. MISSED APPROACH MAP:	DA / RW24	VUZ VORTAC				ASC		3000
			15. BLDG (01-000936)	333104.00N/0864830.00W	1049 (5E)	1000		2100
ELEV:	743/1220		16. TERRAIN	332951.00N/0864706.00W	1059 (1100)		AS1500	2600

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **RW24**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (01-000992)	048/ 20.7	2065 (5E)	3100					

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
BIRMINGHAM, AL	ELEVATION: 650 AIRPORT NAME: BIRMINGHAM-SHUTTLESWORTH INTL	RNAV	RNAV (GPS) Y RWY 24, AMDT 2B	ASO

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
BHM APP CON ZTL ARTCC BHM TOWER	N W S	OTHER: ASOS	SOURCE: KBHM
	F A A		DISTANCE:
SATISFACTORY ON:	A / C		HOURS REMOTE OPERATION:
X V H F X U H F H F	LOCATION: KBHM		ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	

5. APPROACH & RUNWAY LIGHTING	
X	ALSF-2 06
	(S) SALS
X	MALSR 24
X	HIRL 24, 06
X	MIRL 18, 36
X	REIL 18, 36
X	TDZ 06
X	C/L 24, 06
X	OTHER (SPECIFY) PAPI-4R 18 PAPI-4L 24, 06

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	PIR-G 24, 06
	INSTRUMENT	NPI-G 18, 36
7. RUNWAY VISUAL RANGE	APPROACH	24, 06
	MIDFIELD	24, 06
	ROLL OUT	24, 06

8. GLIDE PATH		
GP ANGLE: 3.00		ELEV RWY THRESHOLD: 640.5
DISTANCE FROM RWY:		ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 51.2

9. FINAL APPROACH COURSE AIMING			
	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: **NONE**

PART D - PREPARED BY:	DATE:
MARLON J. ROBINSON	07/06/2011
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-352

PART C - REMARKS:

THRESHOLD DISPLACED 1200 FT.

PARA 251, 34:1 PENETRATION.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

2. HRS OPTN: 24/7/365.
3. SOURCE: KBHM. DISTANCE: 0. ADJUSTMENT: 0. BHM ATC IS 24/7/365. NO BACKUP ALTIMETER SETTING REQUIRED.
6. VGSI DATA: RWY 6: 3.00/68.3. RWY 24: 3.00/67.3. RWY 18: 3.20/47.7. RWY 36: NA.

SEE ATTACHED AIRSPACE LETTER.

LPV: SLOPE: 34:1

PARA 251, 34:1 PENETRATIONS:
KBHMT022 722 GRD 333434.40N/0864403.71W (0.39')
KBHM0046 897 TREE 333515.42N/0864321.21W

20:1 PENETRATIONS ARE FOR ALL OTHER RWYS AND NOT LISTED. CIRCLING NA. EST FPO AND ATC ADVISED.

LNAV/VNAV MINIMUMS NOT PUBLISHED. OBSTACLES 01-000837, 01-001065 FORCE DA TO WITHIN ONE MILE OF RNP PFAF. EST FPO ADVISED AND CONCURS, ATC ADVISED.

PROCEDURE DESIGNED TO MATCH ILS OR LOC/DME RWY 24. MISSED APPROACH REQUIRED CASPO (FB) WP AND HUVUP (FB) WP TO AVOID TOWER 01-000079 (2049 MSL), TOWER 01-000051 (2049 MSL), AND TOWER 01-002832 (2049 MSL) ON RED MOUNTAIN 4.86 NM SSW OF KBHM AND TO COMPLY WITH CRITERIA.

EXCEPT FOR SURVEYED VEGETATION, ALL TREES ARE 100 FEET, STANDING EST FPO POLICY.

TERPS PARA 1720 (B) (2) APPLIED TO OBSTACLES #1 AND #3 IN LIEU OF:

#1: TDG VOR/DME FEEDER ROUTE: 1594 TERRAIN/1794 AAO AT 333615.25N-0862518.00W

#3: VUZ VORTAC FEEDER ROUTE: 1459 TERRAIN/1659 AAO AT 334313.06N-0863604.42W.

OBSTACLE #3 IS 8083 FEET INTO INTERMEDIATE SECONDARY AREA. TERPS PARA 1720 (B) (2) APPLIED

OBSTACLE #11 4D AC CONFIRMED WITH FLIGHT CHECK FLYBY ON AMDT 1.

OBSTACLE #13 IS 4383 FEET INTO SECONDARY.

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FINAL: LPV	**LOWGA**	**RW24**	**10. GRD (KBHMT022)**	**333434.40N/0864403.71W**	**722 (2C)**	**34:1**	**AC20**	**962/321**
FINAL: LNAV	**LOWGA**	**CUXOB/3.20 NM TO**	**11. TWR (01-000137)**	**333638.00N/0863920.00W**	**1397 (4D)**	**250**	**AC50 DG3**	**1700**
		RW24						
FINAL: LNAV STEPDOWN	**CUXOB/3.20 NM TO**	**RW24**	**12. TREE**	**333407.42N/0864147.69W**	**1299 (2C)**	**250**	**SA-248**	**1320**
	RW24							

3. MISSED APPROACH	
MAP:	
ELEV:	

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
BIRMINGHAM, AL	**ELEVATION: 650** AIRPORT NAME: **BIRMINGHAM-SHUTTLESWORTH INTL**	**RNAV**	**RNAV (GPS) Y RWY 24, AMDT 2B**	**ASO**

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	☐ N W S ☐ F A A ☐ A / C OTHER:	SOURCE: DISTANCE: HOURS REMOTE OPERATION:
☐ V H F ☐ U H F ☐ H F	LOCATION:	ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3

5. APPROACH & RUNWAY LIGHTING	☐	**ALS**
	☐	**(S) SALS**
	☐	**MALS**
	☐	**HIRL**
	☐	**MIRL**
	☐	**REIL**
	☐	**TDZ**
	☐	**C/LINE**
	☐	**OTHER (SPECIFY)**

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING	☐	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	☐	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

RADIO FIX AND HOLDING DATA RECORD

NAME: LOWGA **STATE:** AL **COUNTRY:** US

LATITUDE/LONGITUDE: 333659.10N/0863952.19W **TYPE:** WP, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	BIRMINGHAM	I-ROE	LOC/DME		058.47	055.47	6.68	6.69	40655	2200	5100

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
I-ROE DME COORDINATES: 333313.89N-0864629.29W.
KBHM R24 DISPLACED THRESHOLD COORDINATES: 333417.81N-0864432.52W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC/DME RWY 24	1		KBHM	BIRMINGHAM	AL (US)
IAP	RNAV (GPS) Y RWY 24			KBHM	BIRMINGHAM	AL (US)
IAP	RNAV (RNP) Z RWY 24			KBHM	BIRMINGHAM	AL (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 12/15/2011

REASON FOR REVISION:
CHANGED FAC 1 TYPE FROM LOC TO LOC/DME, DME FROM 6.62 TO 6.68, DIST FROM FAC NM FROM 6.63 TO 6.69, FEET FROM 40286 TO 40655.
FIX MOVED 368.16 FT NE TO NEW L-V PFAF LOCATION.

DEVELOPED BY: **DATE:** 07/02/2011 **OFFICE:** AJV-352 **NAME:** MARLON ROBINSON

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY: BHM APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: SPATT **STATE:** AL **COUNTRY:** US

LATITUDE/LONGITUDE: 334110.08N/0863234.77W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BIRMINGHAM	I-ROE	LOC		058.47	055.47	14.06	14.07		3300	5100
2	TALLADEGA	TDG	VOR/DME	L	282.99	284.99	25.93	25.93		3300	17500
3	GADSDEN	GAD	VOR/DME	L	231.00	233.00	28.80	28.80		3300	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-ROE	LOC	BRG-058	20	3300	5100

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NE	GAD	VOR/DME	231.00	231.00	R	1		3300	10000	7	10
2	NE		WP	058.58	238.58	R		6	3300	10000	7	10
3	NE	I-ROE	LOC	058.47	238.47	R	1		3300	5100	7	8

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (01-000992)	334853.00N/0862650.00W	2065	5E
2	230	TOWER (01-000992)	334853.00N/0862650.00W	2065	5E
3	230	TOWER (01-000992)	334853.00N/0862650.00W	2065	5E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
I-ROE DME COORDINATES: 333313.89N-0864629.29W
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PATTERN 1 USED FOR BHM ATC HOLDING, ATC REQUEST.
KBHM R24 DISPLACED THRESHOLD COORDINATES: 333417.81N-0864432.52W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V209	2, 3				(US)
IAP	ILS OR LOC RWY 6	1, 2, 3	3	KBHM	BIRMINGHAM	AL (US)
IAP	ILS OR LOC/DME RWY 24	1, 2, 3	3	KBHM	BIRMINGHAM	AL (US)
IAP	ILS RWY 6 (CAT II)	1, 2, 3	3	KBHM	BIRMINGHAM	AL (US)
IAP	LOC RWY 18	2, 3	1	KBHM	BIRMINGHAM	AL (US)
IAP	RNAV (GPS) Y RWY 24		2	KBHM	BIRMINGHAM	AL (US)
IAP	RNAV (RNP) Z RWY 24			KBHM	BIRMINGHAM	AL (US)
STAR	WENDO (RNAV)			KBHM	BIRMINGHAM	AL (US)

REQUIRED CHARTING: STAR, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 12/15/2011

REASON FOR REVISION:
UPDATED FIX USE.
ADDED STAR TO REQUIRED CHARTING.

DEVELOPED BY: **DATE:** 07/20/2011 **OFFICE:** AJV-352 **NAME:** MARLON ROBINSON

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY: BHM APP CON
OTHER:

QUALITY CHECKED