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
DUDDS (IF)	ORIOL (FB)	335.33 / 6.27	2000
ORIOL (FAF)	EXEVE/2.50 NM TO RW33R (FB)	335.28 / 3.26	
EXEVE/2.50 NM TO RW33R	RW33R (MAP) (FO)	335.28 / 2.50	
RW33R (MAP)	327 MSL	335.28	
327 MSL	KRENE (FO)		3000

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW33R

CLIMB TO 3000 DIRECT KRENE AND HOLD.

ADDITIONAL FLIGHT DATA:
HOLD NW, RT, 155.23 INBOUND.
CHART FAS OBST: 189 TREE 391051N/0763915W
DISTANCE TO THLD FROM 213 HATH: 0.50 NM.
CHART VDP AT 1.13 MILES TO RW33R*
*LNAV ONLY.
WAAS CHANNEL # 69208
REFERENCE PATH ID: W33B
LTP HAE: 2.1 M

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT DUDDS
3. FAC: 335.28 FAF: ORIOL DIST FAF TO MAP: 5.76 THLD: 5.76
4. MIN. ALT: DUDDS 3000, ORIOL 2000, EXEVE/2.50 NM TO RW33R 960*
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2000 GS ALT AT: ORIOL 2000 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 53.1 34:1 IS CLEAR
8. MSA FROM: RW33R 2600

MAG VAR: 11W EPOCH YEAR: 2000

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	327	2400	213	327	2400	213	327	2400	213	327	2400	213			
LNAV/VNAV DA	430	2400	316	430	2400	316	430	2400	316	430	2400	316			
LNAV MDA	520	2400	406	520	2400	406	520	4000	406	520	4000	406			
CIRCLING	640	1	494	640	1	494	640	1 1/2	494	740	2	594			

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -30C (-22F) OR ABOVE 54C (130F).
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV CAT C AND D VISIBILITY TO RVR 6000.
CHART NOTE: DME/DME RNP-0.3 NA.
(SEE FORM 8260-10)

QUALITY CHECKED

CITY AND STATE	ELEVATION: 146 THRE: 114 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
BALTIMORE, MD	BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL	RNAV	RNAV (GPS) RWY 33R, AMDT 3	AMDT: 2
				DATED 12/16/2010

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]	[X] **ZDC, PCT TRACON, BWI TOWER, AIRPORT MANAGER.**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME:	FIFO	DATE:
FRANK JACKSON JR	**AJV-352**	**05/08/2012**

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

CHANGES:

1. DUDDS TO ORIOL DISTANCE CHANGED FROM 6.37 TO 6.27 NM.
2. STEPDOWN FIX NAME CHANGED FROM ZOXAM TO EXEVE AND RELOCATED.
3. LNAV/VNAV FAS OBSTACLE CHANGED FROM 185 OL VORTAC TO ASC.
4. VDP CHANGED FROM VDP AT 1.29 MILES TO RW33R TO VDP AT 1.13 MILES TO RW33R.
5. FINAL APPROACH COURSE CHANGED FROM 335.27 TO 335.28.
6. DISTANCE FROM FAF TO MAP AND FAF TO THLD CHANGED FROM 5.66 TO 5.76.
7. TCH CHANGED FROM 56.3 TO 53.1.
8. LPV MINIMUMS CHANGED FROM DA 331/HAT 207 ALL CATS TO DA 327/HAT 213 ALL CATS, LNAV/VNAV DA 518/HAT 394 VISIBILITY RVR 5000 ALL CATS TO DA 430/HAT 316 VISIBILITY RVR 2400 ALL CATS AND LNAV MDA 580/HAT 456 ALL CATS TO MDA 520/HAT 406 ALL CATS AND VISIBILITY CAT D FROM RVR 5000 TO RVR 4000.
9. UPDATED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F) TO CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -30C (-22F) OR ABOVE 42C (107F).
10. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
11. ADDED CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV CAT C AND D VISIBILITY TO RVR 6000.
12. STEPDOWN FIX ALTITUDE INCREASED FROM 940 TO 960.

REASONS:

1,5,6. RELOCATED ORIOL .10NM SOUTHEAST.
2. COINCIDE WITH ILS OR LOC RWY 33R APPROACH.
3. UPDATED SURVEY DATA.
4. IAW 8260.3 PARA 253.
7,10. UPDATED ILS DATA AND RDH VALUE.
8. UPDATED OBSTACLES DATA AND IAW 8260.54A CHAPTER 4.
9. IAW 8260.19E PARA 4-97.
11. IAW 8260.19E PARA 8-54 (M) (3D)
12. FIX RELOCATED 0.10NM SOUTHEAST AND OPTIMUM DESCENT ANGLE.

QUALITY CHECKED

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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

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NOTES, (CONT.):
CHART PLANVIEW NOTE: RADAR REQUIRED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 146 THRE: 114 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BALTIMORE, MD	BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL	RNAV	RNAV (GPS) RWY 33R, AMDT 3	AMDT: 2
				DATED: 12/16/2010

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	KBWI
RUNWAY	RW33R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33B
LTP/FTP LATITUDE	391034.4480N
LTP/FTP LONGITUDE	0763911.6300W
LTP/FTP ELLIPSOIDAL HEIGHT	+00021
FPAP LATITUDE	391146.8000N
FPAP LONGITUDE	0764018.6200W
THRESHOLD CROSSING HEIGHT (TCH)	00053.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	0B4EC636

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00348
FPAP ORTHOMETRIC HEIGHT	+00348

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 146 THRE: 114	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
BALTIMORE, MD	AIRPORT NAME: BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL	RNAV	RNAV (GPS) RWY 33R, AMDT 3	AMDT: 2
				DATED: 12/16/2010

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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ARINC PACKET - 424-18 - RNAV (GPS)

```
          1         2         3         4         5         6         7         8         9         0         1         2         3
WP        12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAEAENRT   DUDDS K60    C     N39004821W076301061                    W0112     NAR           DUDDS
          SUSAEAENRT   EXEVE K60    C     N39083262W076371893                    W0111     NAR           EXEVE
          SUSAEAENRT   KRENE K60    C     N39205890W076485128                    W0111     NAR           KRENE
          SUSAEAENRT   ORIOL K60    C     N39055393W076345235                    W0111     NAR           ORIOL

          1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT   12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KBWIK6ABWI     0     105YHN39103130W076400600W011000146          1800018000C    MNAR    BALTIMORE/WASHINGTON INTL THUR

          1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT   12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KBWIK6FR33R  R      010DUDDSK6EA0E  I    IF                                + 03000     18000              A JS
          SUSAP KBWIK6FR33R  R      020ORIOLK6EA1E  F 051TF                    33530063    + 02000                RW33R K6PGA JS
          SUSAP KBWIK6FR33R  R      020ORIOLK6EA2WALPV       ALNAV/VNAV ALNAV                                             JS
          SUSAP KBWIK6FR33R  R      021EXEVEK6EA0E S  031TF                    33530033    V 0096000963        -300       A JS
          SUSAP KBWIK6FR33R  R      030RW33RK6PG0GY M 031TF                    33530025      00167             -300       A JS
          SUSAP KBWIK6FR33R  R      040          0  M     CA                   3353        + 00327                      A JS
          SUSAP KBWIK6FR33R  R      050KRENEK6EA0EY       DF                              + 03000                      A JS
          SUSAP KBWIK6FR33R  R      060KRENEK6EA0EE  R    HM                   15520040    + 03000                      A JS

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KBWIK6GRW33R   0050003352 N39103445W076391163+0500     +00021001140000531001

          1         2         3         4         5         6         7         8         9         0         1         2         3
PP        12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KBWIK6PR33R  RW33R001 0000W33B0N3910344480W07639116300+000210300N3911468000W076401862001067512240005 31F4003500B4EC636
          SUSAP KBWIK6PR33R  RW33R002E      +00348+00348LPV       69208

          1         2         3         4         5         6         7         8         9         0         1         2         3
MSA       12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
          SUSAP KBWIK6SRW33RK6PG              0   18018002625                                                              M
```

CITY AND STATE	ELEVATION: 146 THRE: 114	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
BALTIMORE, MD	AIRPORT NAME: **BALTIMORE/WASHINGTON INTL** THURGOOD MARSHALL	**RNAV**	**RNAV (GPS) RWY 33R, AMDT 3**	AMDT: **2**
				DATED: **12/16/2010**

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

08/31/2012: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 08/27/2012.
1. CORRECTED AIRPORT NAME ON PAGE 4 AND 5.

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		DUDDS	010	FACF	IF		FB				AA 03000	
		ORIOL	020	FAF	TF		FB	0.5	335.3(324.3T)	006.3	AA 02000	
		EXEVE	021	SDF	TF		FB	0.3	335.3(324.3T)	003.3	AA 00960	GS 00963
		RW33R	030	MAP	TF		FO	0.3	335.3(324.3T)	002.5	AT 00167	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		335.3(324.3T)		AA 00327	
	KRENE	050		DF		FO				AA 03000	
	KRENE	060		HM	R	FO		155.2(144.2T)	004.0	AA 03000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	DUDDS	N390048.21	W0763010.61	N3900.804	W07630.177
	EXEVE	N390832.62	W0763718.93	N3908.544	W07637.316
	KRENE	N392058.90	W0764851.28	N3920.982	W07648.855
	ORIOL	N390553.93	W0763452.35	N3905.899	W07634.873
	RW33R	N391034.45	W0763911.63	N3910.574	W07639.194

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW33R	00114	53

CITY AND STATE	ELEVATION: 146 THRE: 114	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
BALTIMORE, MD	AIRPORT NAME: **BALTIMORE/WASHINGTON INTL** THURGOOD MARSHALL	**RNAV**	**RNAV (GPS) RWY 33R, AMDT 3**	AMDT: **2**
				DATED: **12/16/2010**

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:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	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.
INTERMEDIATE	DUDDS	ORIOL	1. TOWER (24-000033)	385903.00N/0763122.00W	450 (4D)	500	AT1050	2000
			2. TERRAIN	390248.00N/0763509.00W	145 (100)		AS1500	1600
FINAL: LPV	ORIOL	RW33R				ASC	MA13	327/213
FINAL: LNAV/VNAV	ORIOL	RW33R				ASC	MA66	430/316
FINAL: LNAV	ORIOL	EXEVE/2.50 NM TO	3. AAO	390652.78N/0763634.66W	360 (2C)	250	DG350	960
		RW33R						
FINAL: LNAV STEPDOWN	EXEVE/2.50 NM TO	RW33R	4. TREE (KBWI0136)	391051.32N/0763914.96W	189 (1A)	250	MA76	520
	RW33R							
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA / DA / RW33R	KRENE	5. TOWER (24-000916)	391641.69N/0764502.70W	1437 (1A)	ASC		3000
			6. TOWER (24-000450)	391716.23N/0764537.03W	1504 (1A)	1000		2600
ELEV:	154/269/420		7. TERRAIN	392224.00N/0764833.00W	601 (600)		AS1500	2100

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL							
CATEGORY A	1.3 NM	350	494	8. TREE	391156.50N/0764054.48W	339 (2C)	300		640
CATEGORY B	1.5 NM	450	494	8. TREE	391156.50N/0764054.48W	339 (2C)	300		640
CATEGORY C	1.7 NM	450	494	9. TOWER (24-001051)	391231.26N/0763827.59W	340 (1A)	300		640
CATEGORY D	2.3 NM	550	594	10. TOWER (24-000110)	390750.00N/0764052.00W	372 (1D)	300	AC50	740
CATEGORY E	4.5 NM	550							

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW33R

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (24-000503)	351/ 28.1	1599 (5E)	2600					

CITY AND STATE	ELEVATION: 146 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
BALTIMORE, MD	BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL	RNAV	RNAV (GPS) RWY 33R, AMDT 3	AEA

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
ZDC ARTCC PCT TRACON BWI TOWER	X NWS OTHER: ASOS FAA A/C	SOURCE: KBWI DISTANCE: HOURS REMOTE OPERATION:
SATISFACTORY ON:		
X VHF X UHF HF	LOCATION: KBWI	ADJUSTMENT: 0

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

5. APPROACH & RUNWAY LIGHTING		
	X	ALSF-2 10
		(S) SALS
	X	MALSR 15R, 33L, 28, 33R
	X	HIRL 15R, 33L, 10, 28, 22, 04, 15L, 33R
		MIRL
	X	REIL 22, 15L, 33R
	X	TDZ 33L, 10
	X	C/L 15R, 33L, 10, 28
	X	OTHER (SPECIFY) PAPI-4L 15L, 33R VASI-4L 33L, 28, 22, 04

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	PIR-G 15R, 33L, 10, 28, 15L, 33R
	INSTRUMENT	NPI-G 22, 04
7. RUNWAY VISUAL RANGE	APPROACH	15R, 33L, 10, 28, 15L, 33R
	MIDFIELD	33L, 10, 28
	ROLL OUT	15R, 33L, 10, 28

8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 114.1
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 53.1

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

10. WAIVERS: NONE

PART D - PREPARED BY: FRANK JACKSON JR	DATE: 05/08/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-352

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

SEE ATTACHED AIRSPACE LETTER.

SECONDARY WEATHER SOURCE NOT REQUIRED DUE TO 24 HOUR TOWER WITH ALTIMETER READING EQUIPMENT AND NATIONAL WEATHER SERVICE (24HRS).

VGSI DATA: 3.00/47.3.

AVERAGE COLD TEMPERATURE BASED ON STANDARD -30C ISA DEVIATION. HISTORICAL TEMPERATURE NOT AVAILABLE.

LPV
SURFACE - 34:1

LNAV/VNAV
INNER SURFACE - 23.4:1
OUTER - 34:1

TAA NA, PER FPO/ATC REQUEST.

100' TREE HEIGHT APPLIED PER FPO.

OBSTACLES 3 AND 8 VERIFIED ON QUAD CHART (2C ACCURACY CODE APPLIED).

PROCEDURE DESIGNED PER ATC REQUEST, WITHOUT IAF DUE TO AIRSPACE CONSTRAINTS/CLASS B AIRSPACE.

RADIO FIX AND HOLDING DATA RECORD

NAME: DUDDS **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 390048.21N/0763010.61W **TYPE:** WP, RADAR, INT, 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	DIST FROM FAC FEET	MRA	MAA
1	BALTIMORE	I-BWI	LOC		155.23	144.23		12.90		3000	4600
2	BALTIMORE	BAL	VORTAC	L	152.91	141.91	12.00	12.00		2500	17500
3	ANDREWS	ADW	VORTAC	L	063.89	053.89		21.03		2500	17500

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	SE	BAL	VORTAC	152.91	332.91	L	1		2500	6000	5	6
2	SE		WP	155.32	335.32	L		4	2500	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (24-000913)	390036.77N/0763631.88W	1049	1A
2	200	TOWER (24-000913)	390036.77N/0763631.88W	1049	1A

REASON FOR NONSTANDARD HOLDING:
PAT 1 ATC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
BALTIMORE (I-BWI) AND (BAL) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15L	2	1	KBWI	BALTIMORE	MD (US)
IAP	ILS OR LOC RWY 33R	1, 2		KBWI	BALTIMORE	MD (US)
IAP	RNAV (GPS) RWY 15L		2	KBWI	BALTIMORE	MD (US)
IAP	RNAV (GPS) RWY 33R			KBWI	BALTIMORE	MD (US)
IAP	VOR/DME RWY 15L	2, 3	1	KBWI	BALTIMORE	MD (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
DELETED DME FROM FIX MAKE-UP FACILITY 1 AND INCREASED MRA ALTITUDE FROM 2000 TO 3000.
UPDATED FIX USE.
ADDED REMARK BALTIMORE (I-BWI) AND (BAL) USED TO ESTABLISH FIX COORDINATES.
INCREASED HOLDING PATTERN 1 TEMPLATE SIZE FROM MIN 4 MAX 5 TO MIN 5 AND MAX 6.
UPDATED HOLDING PATTERN 1 CONTROLLING OBSTACLE FROM 706' TOWER TO 1049' TOWER.

DEVELOPED BY: **DATE:** 05/03/2012 **OFFICE:** AJV-352 **NAME:** FRANK JACKSON

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: PCT TRACON, BWI TWR
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: EXEVE **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 390832.62N/0763718.93W **TYPE:** WP, DME

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

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	BALTIMORE	I-BWI	LOC		155.23	144.23		3.37		860	4600
2	BALTIMORE	BAL	VORTAC	L			2.51	2.51		860	17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 33R	1, 2		KBWI	BALTIMORE	MD (US)
IAP	RNAV (GPS) RWY 33R			KBWI	BALTIMORE	MD (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 05/04/2012 **OFFICE:** AJV-352 **NAME:** FRANK JACKSON

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: PCT TRACON
OTHER: BWI ATCT

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: KRENE **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 392058.90N/0764851.28W **TYPE:** WP, RADAR, 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	DIST FROM FAC FEET	MRA	MAA
1	BALTIMORE	I-UQC	LOC		335.23	324.23		12.89		3000	4600
2	BALTIMORE	BAL	VORTAC	L	337.39	326.39	12.86	12.86		3000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

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	NW	BAL	VORTAC	337.39	157.39	R	1		3000	6000	4	5
2	NW		WP	335.23	155.23	R		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (24-000339)	392224.00N/0765356.00W	1041	5E
2	200	TOWER (24-000450)	391716.23N/0764537.03W	1504	1A

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15L	1, 2		KBWI	BALTIMORE	MD (US)
IAP	ILS OR LOC RWY 33R	1, 2	1	KBWI	BALTIMORE	MD (US)
IAP	RNAV (GPS) RWY 15L			KBWI	BALTIMORE	MD (US)
IAP	RNAV (GPS) RWY 33R		2	KBWI	BALTIMORE	MD (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 12/16/2010

REASON FOR REVISION:
DELETED FAC 3 (KBWI R15L) FROM FIX MAKE-UP FACILITY.
UPDATED HOLDING PATTERN 2 CONTROLLING OBSTACLE.
UPDATED REMARKS AND HOLDING RESTRICTION.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 06/09/2010 **OFFICE:** AVN-110 **NAME:** FRANK JACKSON

APPROVED BY: **DATE:** 10/22/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: PCT TRACON, BWI TWR
OTHER:

QUALITY 4 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ORIOL **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 390553.93N/0763452.35W **TYPE:** WP, RADAR, 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	DIST FROM FAC FEET	MRA	MAA
1	BALTIMORE	I-BWI	LOC		155.23	144.23		6.63	40272	2000	4600
2	BALTIMORE	BAL	VORTAC	L			5.74	5.74		2000	4600

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 33R	1, 2		KBWI	BALTIMORE	MD (US)
IAP	RNAV (GPS) RWY 33R			KBWI	BALTIMORE	MD (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FIX LAT/LONGS. FIX MOVED 0.10NM SOUTHEAST TO PFAF LOCATION.
UPDATED FIX MAKE-UP FACILITY 1 FROM LOC/DME TO LOC AND UPDATE DISTANCE FROM FACILITY FROM 6.53NM TO 6.63NM.
UPDATED FIX MAKE-UP FACILITY 2 DME CHANGED FROM 5.64 TO 5.74.
ADDED REMARK BALTIMORE (I-BWI) USED TO ESTABLISH FIX COORDINATES.

DEVELOPED BY: **DATE:** 05/04/2012 **OFFICE:** AJV-352 **NAME:** FRANK JACKSON

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: PCT TRACON BWI TWR
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ZOXAM **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 390837.49N/0763723.44W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 33R			KBWI	BALTIMORE	MD (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 12/16/2010

REASON FOR REVISION:
DELETED FACILITY 1 (KBWI R33R) FROM FIX MAKE-UP FACILITIES.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 07/09/2010 **OFFICE:** AVN-110 **NAME:** FRANK JACKSON

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: PCT TRACON
OTHER:

Concurrent with
CANCELLED RNAV(GPS) RWY 33R, AMDT 3
BY Frank Jackson
DATE 4 MAY 2012

QUALITY 4 CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **BALTIMORE** STATE: **MD**

AIRPORT NAME: **BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL** ID: **KBWI**

PROCEDURE: **RNAV (GPS) RWY 33R** AMDT: **3**

DOCKET#: **NOT REQUIRED**
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **3.24**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment, final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **324.28**
4. High Terrain in **FINAL** segment containing 1000' point **179**
5. Distance from **THLD** to 1500' point **5.16**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.57**
7. True Course of **FINAL** segment containing 1500' point **324.28**
8. High Terrain in **FINAL** segment containing 1500' point **179**
9. Threshold Coordinates (if straight-in) ... **391034.45N** / **0763911.63W**
10. ARP Coordinates ..... **391031.30N** / **0764006.00W**
11. Runway Approach End and distance furthest from ARP ..... RWY **10**
    Distance **0.99** NM
12. FAF Coordinates ..... **390553.93N** / **0763452.35W**

REMARKS: Approach/Drawing attached.