Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 02/04/2009	Task #: 2007061510146001004	Request #: 20070615101460
Procedure: RNAV (RNP) RWY 1 AMDT 1		Airport ID: KDCA	Airport: RONALD REAGAN WASHINGTON NATL		Reimbursable #:
City: WASHINGTON	ST: DC	GPS #:		Estimated Chart Date: 04/05/2012	FICO #:
Fac ID:	Fac. Type: RNP	Specialist: FRANK JACKSON			

Procedure Review

P1

	Rec'd	Rel'd	Full Name	Comments
Lead:	10/05/2011	01/17/2012	DAVID PUGLISI	
QA:	01/17/2012	01/17/2012	DAVID PUGLISI	
Liaison:	01/17/2012		Terrell	APPROVAL REQUEST

Procedure Comments:

Remark Type: INFORMATION

pkg 1 of 4

WASHINGTON, D.C. RONALD REAGAN WASHINGTON NATL (KDCA) RNAV (RNP) RWY 1, AMDT 1 (RNP) ENROUTE-NO FC: 2.21.12 PUB: 4.5.12

ATTACHED FORMS: 8260-3; 8260-10; 8260-9; 8260-2(S): BADDN-INT, ORIG; CFBFK, ORIG; FIVUD, REV 1; GEORGETOWN (GTN) NDB, REV 11; HESLO, REV 1; JWASH, ORIG; MRION, REV 3; (INFO ONLY) IRONS-INT, REV 8.

CONTACT: DON SMITH, JILL OLSON, AJV-352 LEADS, 405.954.1036/0414:

NEW

RNAV (RNP) RWY 1

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

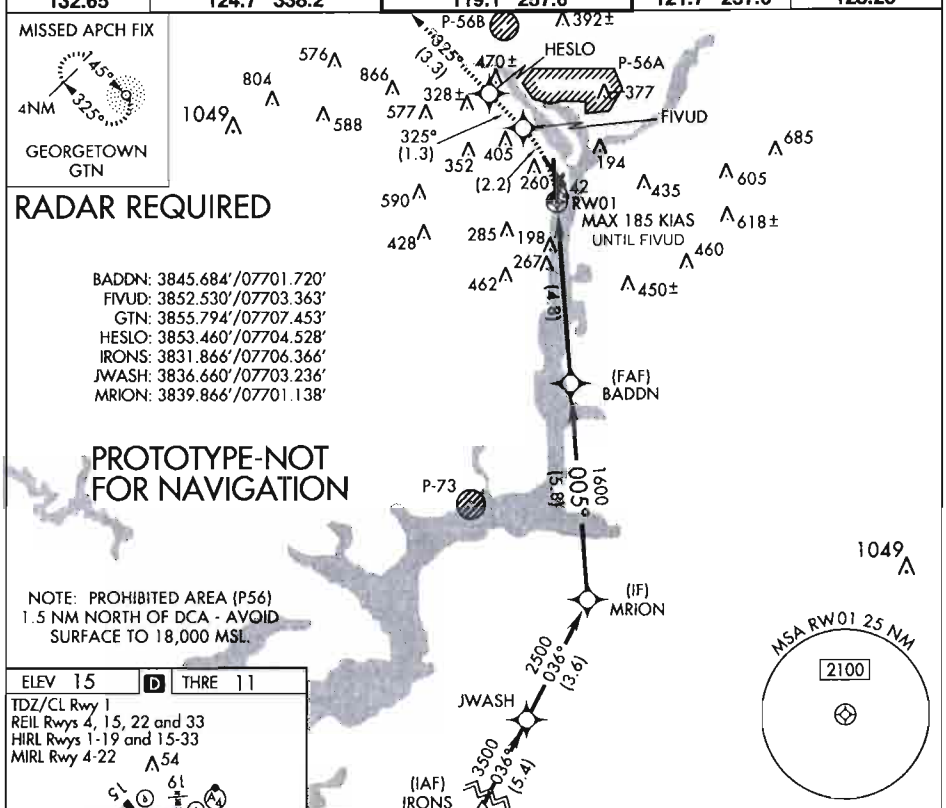
APP CRS	Rwy ldg	6869
005°	THRE	11
	Apt Elev	15

For uncompensated Baro-VNAV systems, procedure NA below -10°C (14°F) or above 48°C (120°F). For inoperative ALSF-2, increase RNP 0.30 all Cats visibility to 1¾ mile. RF Required. GPS Required. Missed approach requires RNP less than 1.0.

ALSF-2

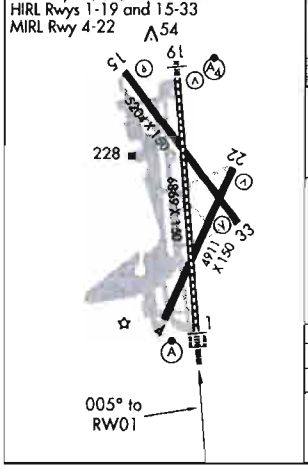
MISSED APPROACH: (Do not exceed 185 K until FIVUD) Climb to 2100 left turn to FIVUD, and on track 325° to HESLO and on track 325° to GTN NDB and hold.

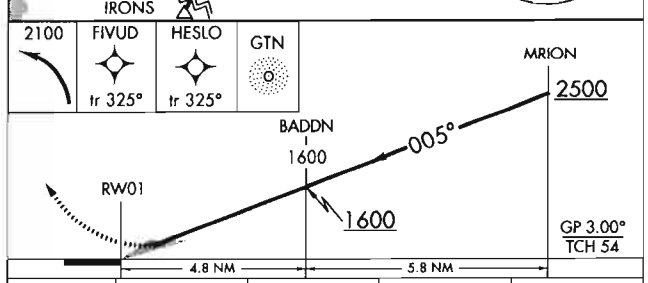
ATIS	POTOMAC APP CON	WASHINGTON TOWER	GND CON	CLNC DEL
132.65	124.7 338.2	119.1 257.6	121.7 257.6	128.25



ELEV 15 | D | THRE 11

TDZ/CL Rwy 1
REIL Rwys 4, 15, 22 and 33
HIRL Rwys 1-19 and 15-33
MIRL Rwy 4-22





CATEGORY	A	B	C	D
RNP 0.30 DA	536/60 525 (600-1¼)			

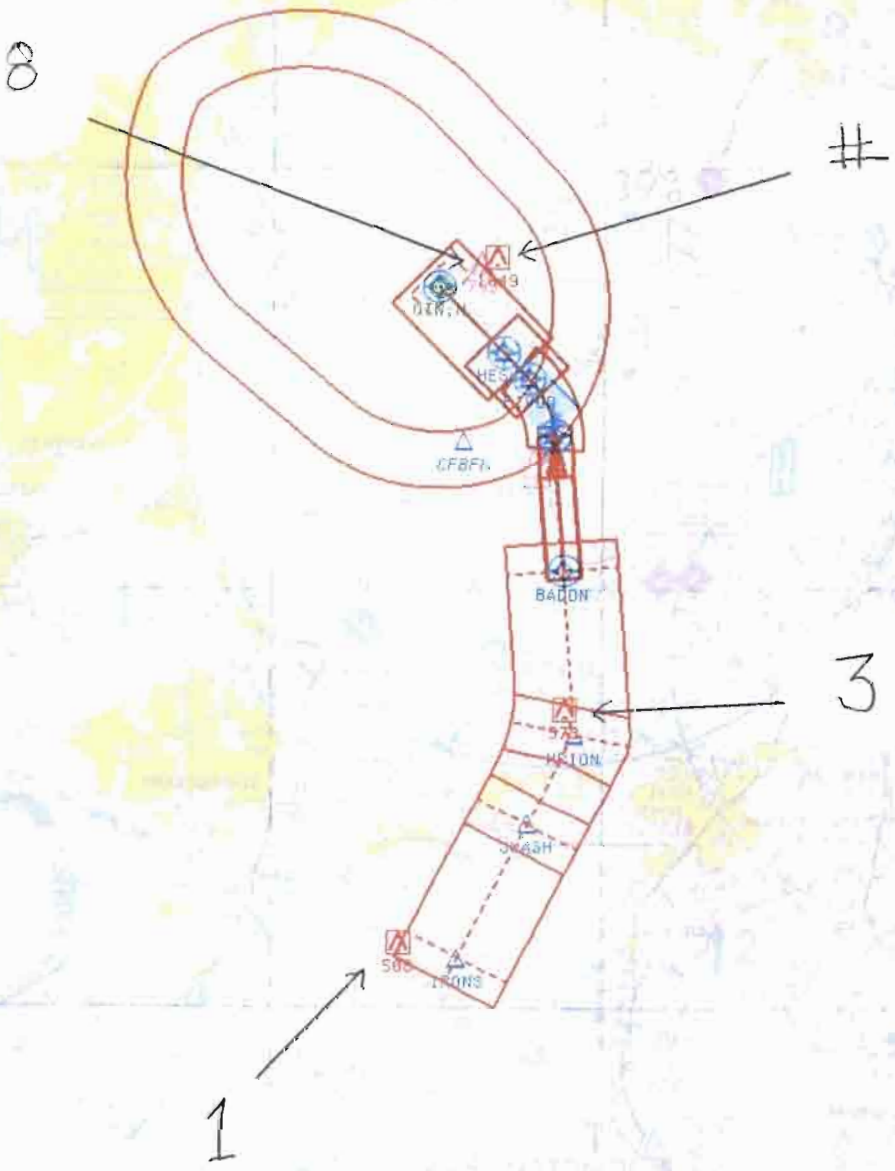
AUTHORIZATION REQUIRED

NM 14 21 28 35 42 49

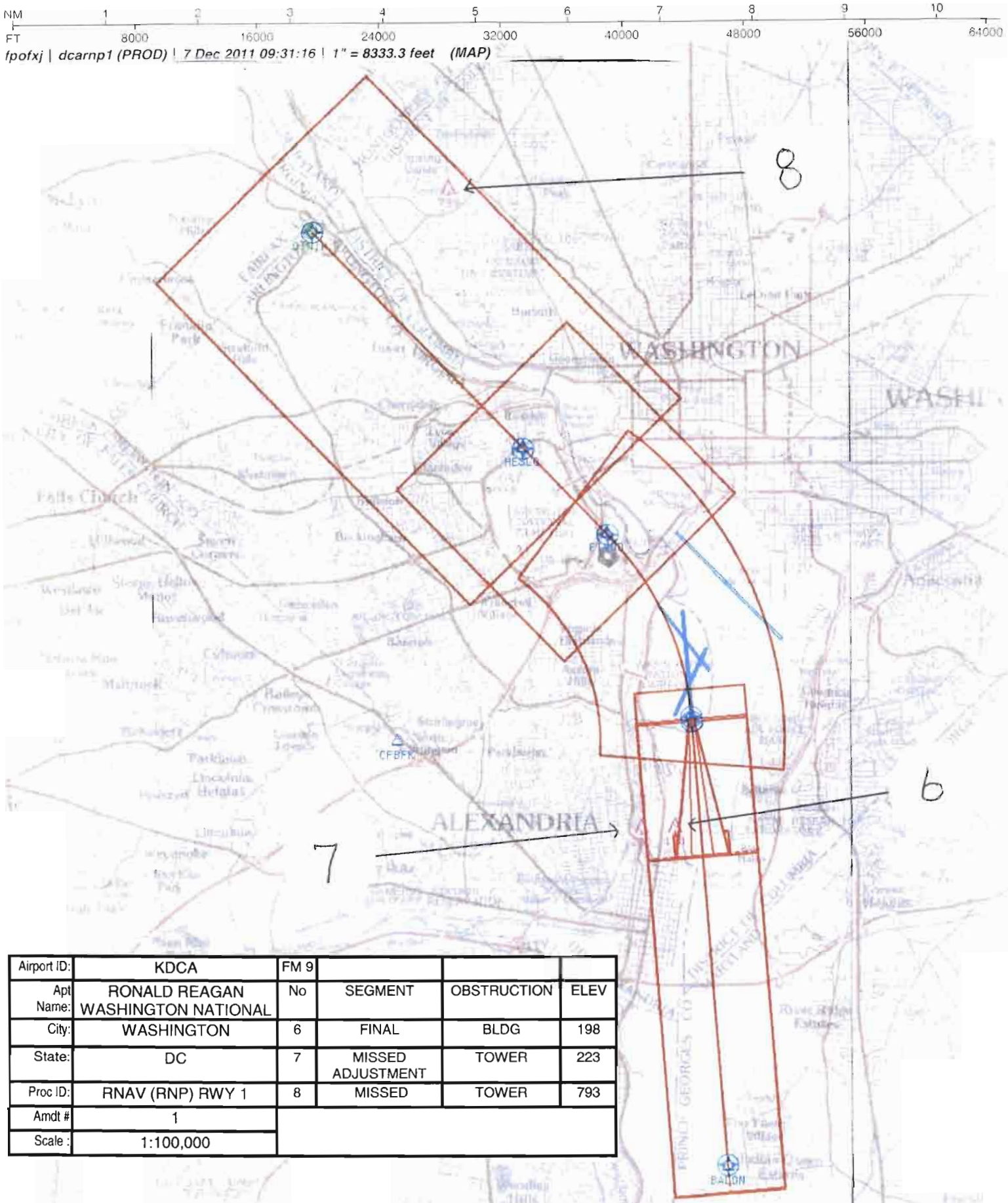
FT 84000 126000 168000 210000 252000 294000

fpofxj | dcarnp1 (PROD) | 7 Dec 2011 09:32:17 | 1" = 41666.7 feet (MAP)

Airport ID:	KDCA	FM 9			
Apt Name:	RONALD REAGAN WASHINGTON NATIONAL	No	SEGMENT	OBSTRUCTION	ELEV
City:	WASHINGTON	1	IRONS INITIAL	TOWER	488*
State:	DC	3	JWASH STEPDOWN	TOWER	448*
Proc ID:	RNAV (RNP) RWY 1	3	INTERMEDIATE	TOWER	448*
Amdt #	1	8	MISSED	TOWER	793
Scale:	1: 500,000	#	GTN HOLDING	TOWER	1049
* NOT INCLUDING AC ADJUSTMENT					

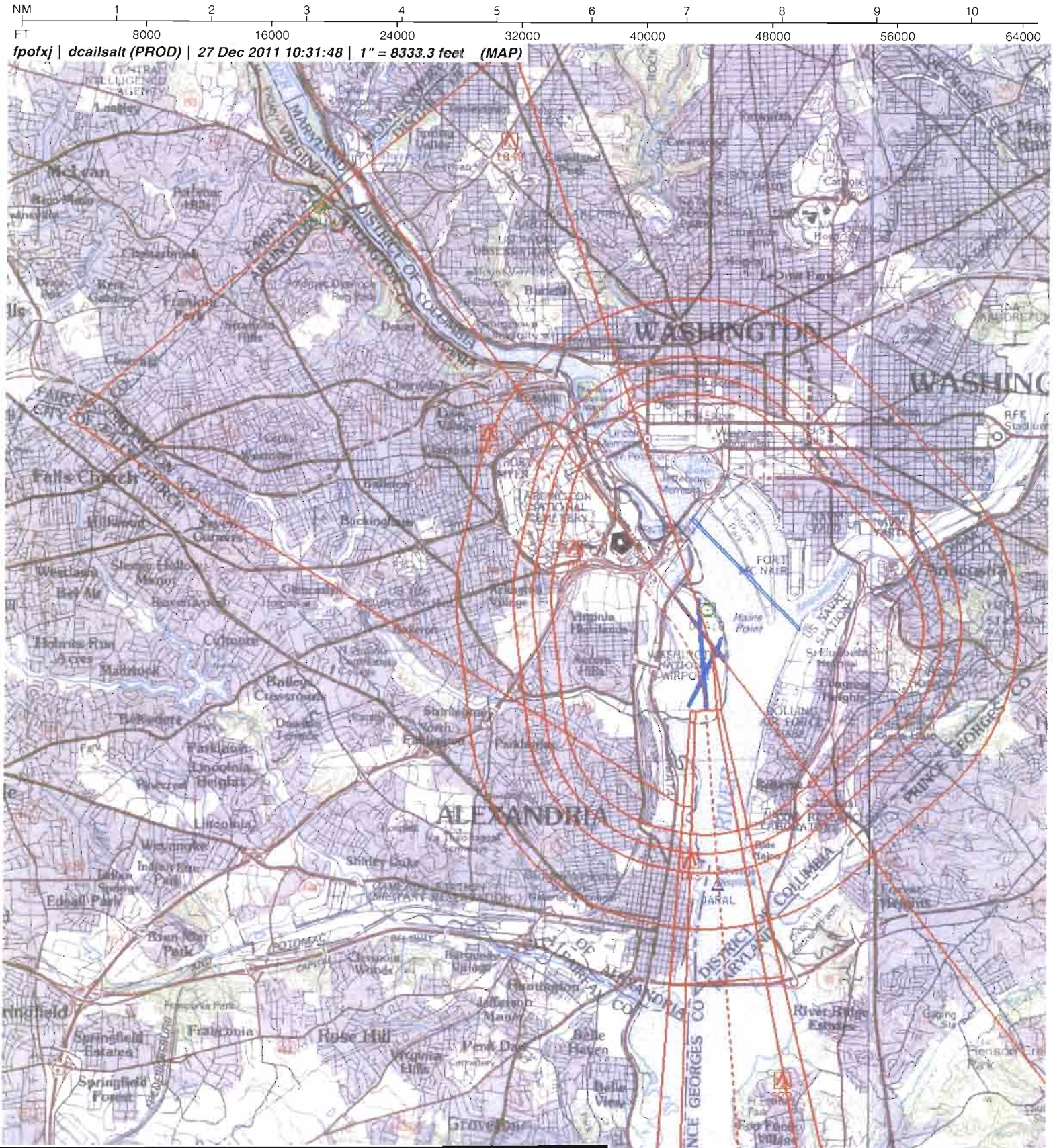


DCA - 40NM - 11182011
Transverse Mercator
Scale 1:500000



Airport ID:	KDCA	FM 9			
Apt Name:	RONALD REAGAN WASHINGTON NATIONAL	No	SEGMENT	OBSTRUCTION	ELEV
City:	WASHINGTON	6	FINAL	BLDG	198
State:	DC	7	MISSED ADJUSTMENT	TOWER	223
Proc ID:	RNAV (RNP) RWY 1	8	MISSED	TOWER	793
Amdt #	1				
Scale :	1:100,000				

DCA - 40NM - 11182011
Transverse Mercator
Scale 1:100000



Airport ID:	KATL	FM 9			
Apt Name:	RONALD READCN WASHINGTON NATIONAL	No	SEGMENT	OBSTRUCTION	ELEV
City:	WASHINGTON	6	LOC FINAL	200 AAO	370
State:	DC	7	LOC STEPDOWN	BLDG	183
Proc ID:	ILS OR LOC RWY 1	10	CIRCLING CATS A/B/C	MONUMENT	405
Amdt #	41	11	CIRCLING CAT D	BLDG	407
Scale:	1:100,000	8	MISSED	TOWER	1049
ALT MISSED APPROACH					

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - 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
IRONS (IAF)	JWASH (TF) (FB) (RNP 1.00)	036.12 / 5.38	3500
JWASH	MRION (TF) (FB) (RNP 1.00)	036.16 / 3.60	2500
MRION (IF)	BADDN (TF) (FB) (RNP 1.00)	004.52 / 5.83	1600
BADDN (FAF)	RW01 (MAP) (TF) (FB)	004.50 / 4.82	
RW01 (MAP)	FIVUD (RF) (FB) (RNP 0.50)	(3.19 NM RADIUS CCW CFBFK) / 2.22	
(SEE FORM 8260-10)			

MISSED APPROACH

MAP: DA

(DO NOT EXCEED 185 KIAS UNTIL FIVUD) CLIMB TO 2100 LEFT TURN TO FIVUD AND ON TRACK 324.63 TO HESLO AND ON TRACK 324.61 TO GTN NDB AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT MRION
3. FAC: 004.50 FAF: ____ DIST FAF TO MAP: ____ THLD: ____
4. MIN. ALT: MRION 2500, BADDN 1600
5. DIST TO THLD FROM OM: 4.82 MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 1600 GS ALT AT: BADDN 1600 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 53.6# 34:1 IS CLEAR
8. MSA FROM: RW01 2100

ADDITIONAL FLIGHT DATA:
HOLD NW, RT, 145.00 INBOUND.
CHART FAS OBST: 198 BUILDING 384915N/0770226W
CHART 194 STACK 384914N/0770227W.
CHART 194 STACK 384913N/0770227W.
CHART P-56.
CHART P-73.
DISTANCE TO THLD FROM 525 HATH: 1.48 NM.
ROUTE TYPE QUALIFIER 1:F
ROUTE TYPE QUALIFIER 2:S
ROUTE TYPE: A,H
#TCH 65 MSL (DO NOT CHART)

MAG VAR: 9W EPOCH YEAR: 1985

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
AUTHORIZATION REQUIRED															
RNP 0.30 DA	536	6000	525	536	6000	525	536	6000	525	536	6000	525			

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -10C (14F) OR ABOVE 48C (120F).
CHART NOTE: FOR INOPERATIVE ALSF-2, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4 MILE.
CHART NOTE: RF REQUIRED.
(SEE FORM 8260-10)

QUALITY CHECKED

CITY AND STATE	ELEVATION: 15 THRE: 11 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
WASHINGTON, DC	RONALD REAGAN WASHINGTON NATIONAL	RNAV	RNAV (RNP) RWY 1, AMDT 1	AMDT: ORIG-A
				DATED 07/28/2011

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, DCA APCH, DCA ATCT, ARPT MGR

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME:	FIFO	DATE:
FRANK JACKSON JR	AJV-352	11/18/2011

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

CHANGES:

1. LITNE FIX REPLACED WITH JWASH FIX (INITIAL STEPDOWN).
2. MIRON TO OXONN CHANGED TO MIRON TO BADDN AND COURSE/DISTANCE CHANGED FROM 004.51/6.10 TO 004.52/5.83.
3. FINAL APPROACH FIX CHANGED FROM OXONN TO BADDN.
4. FAS OBST CHANGED FROM 83' TREE TO 198' BUILDING.
5. ADDED CHART 194' STACKS TO ADDITIONAL FLIGHT DATA.
6. DISTANCE FROM THLD TO HAT CHANGED FROM 372 HAT: 0.96 NM TO 525 HATH: 1.48NM.
7. FINAL APPROACH COURSE CHANGED FROM 004.51 TO 004.50.
8. ADDED TO LINE 4 MINIMUM ALTITUDE AT BADDN 1600.
9. DISTANCE FROM THLD FROM OM CHANGED FROM 4.60 TO 4.82.
10. GLIDESLOPE ANGLE CHANGED FROM 3.09 TO 3.00 AND TCH CHANGED FROM 59.8 TO 53.6.
11. MSA ALTITUDE CHANGED FROM 2300 TO 2100.
12. MINIMUMS INCREASED FROM DA 386/HAT 372 RVR 4000 ALL CATS TO DA 536/HAT 525 RVR 6000 ALL CATS.
13. UPDATED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -5C (23F) OR ABOVE 40C (104F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -10C (14F) OR ABOVE 48C (120F).

SEE 8260-10

REASONS:

1. REQUESTED FROM ATC.
2,3. IAW 8260.52 PARA 3.2 AND 3.4 AND TO HAVE COMMON FINAL APPROACH FIX ON ALL APPROACH TO RUNWAY.
4. NEW SURVEY DATA.
5. IAW 8260.52 PARA 3.6.
6. RUNWAY EXTENDED AND INCREASED IN HAT VALUE.
7. RUNWAY TRUE BEARING CHANGED FROM 355.50 TO 355.49.
8. IAW 8260.19 PARA 852 (D).
9. RUNWAY EXTENDED FROM 6869 TO 7169 AND IAW 8260.51 PARA 3.4.
10. IAW 8260.52 PARA 3.2.
11. NEW CONTROLLING OBSTACLE.
12. NEW OBSTACLES IN FINAL AND MISSED AREA.
13. UPDATED AIRPORT DATA.
14. IAW 8260.3 CHANGE 20.
15. IAW 8260.19 PARA 856 (D).

SEE 8260-10

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
FIVUD	HESLO (TF) (FB) (RNP 0.65)	324.63 / 1.30	
HESLO	GTN NDB (TF) (FO) (RNP 0.80)	324.61 / 3.26	2100

NOTES, (CONT.):
CHART NOTE: GPS REQUIRED.
CHART PLANVIEW NOTE: RADAR REQUIRED.
CHART NOTE: MISSED APPROACH REQUIRES RNP LESS THAN 1.0.
CHART PLANVIEW NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18,000 MSL.
CHART PLANVIEW NOTE AT RW01: MAX 185 KIAS UNTIL FIVUD.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 15 THRE: 11 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
WASHINGTON, DC	RONALD REAGAN WASHINGTON NATIONAL	RNAV	RNAV (RNP) RWY 1, AMDT 1	AMDT: ORIG-A
				DATED: 07/28/2011

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

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:

CHANGES CONT.
14. UPDATED CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.30 VISIBILITY TO RVR 6000 TO FOR INOPERATIVE ALSF-2, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4 MILE. 15. MISSED APPROACH CHANGED FROM CLIMB TO 2100 VIA LEFT TURN TO FIVUD, AND 324.63 TRACK TO HESLO AND 324.61 TRACK TO GTN NDB AND HOLD TO CLIMB TO 2100 LEFT TURN TO FIVUD AND ON TRACK 324.63 TO HESLO AND ON TRACK 324.61 TO GTN NDB AND HOLD. 16. RW01 TO FIVUD RADIUS CHANGED FROM 3.20 TO 3.19 NM RADIUS. 17. CNF FIX OTIYU CHANGED TO CFBFK. 18. CHANGED CHART PLANVIEW NOTE AT FIVUD: MAX 185 KIAS TO CHART PLANVIEW NOTE AT RW01: MAX 185 KIAS UNTIL FIVUD. 19. ADDED ALTERNATE MINIMUMS.

REASONS:

REASONS CONT.
16. RELOCATED CENTER FIX AND MAP CHANGED.
17. IAW 8260.19E CHANGE 2.
18. IAW 8260.19E PARA 499 (J).
19. IAW 8260.19 PARA 853 (B) NOTE.

QUALITY CHECKED

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC PACKET - 424-18 - RNAV (RNP)

                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSADB       GTN   K6003230H MW N38554764W077072718                        W0090          NARGEORGETOWN

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BADDN K60    C     N38454105W077014322                        W0108     NAR          BADDN
        SUSAEAENRT   CFBFK K60    W     N38501763W077061714                        W0107     NAR          CNF(CFBFK)
        SUSAEAENRT   FIVUD K60    W     N38523181W077032179                        W0108     NAR          FIVUD
        SUSAEAENRT   HESLO K60    W     N38532762W077043165                        W0108     NAR          HESLO
        SUSAEAENRT   IRONS K60    C   L N38315196W077062194                        W0107     NAR          IRONS
        SUSAEAENRT   JWASH K60    W     N38363958W077031414                        W0107     NAR          JWASH
        SUSAEAENRT   MRION K60    W     N38395194W077010826                        W0108     NAR          MRION

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KDCAK6ADCA     0     071YHN38510750W077021580W009000015         1800018000C    MNAR    RONALD REAGAN WASHINGTON NATIO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KDCAK6FH01   AIRONS 010IRONSK6EA0E  A    IF                                                18000                  A FS
        SUSAP KDCAK6FH01   AIRONS 020JWASHK6EA0E    010TF                                    + 03500                            A FS
        SUSAP KDCAK6FH01   AIRONS 030MRIONK6EA0EE B 010TF                                    + 02500                            A FS
        SUSAP KDCAK6FH01   H      010MRIONK6EA0E  I    IF                                    + 02500     18000                  A FS
        SUSAP KDCAK6FH01   H      020BADDNK6EA1E  F 010TF                                    + 01600                  RW01  K6PGA FS
        SUSAP KDCAK6FH01   H      020BADDNK6EA2W                                                  A031                          FS
        SUSAP KDCAK6FH01   H      030RW01 K6PG0G  M 031TF                                      00065            -300            A FS
        SUSAP KDCAK6FH01   H      040FIVUDK6EA0E M L051RF       0031900045    32460022                      185    CFBFK K6EAA-FS
        SUSAP KDCAK6FH01   H      050HESLOK6EA0E    652TF                                                                      A FS
        SUSAP KDCAK6FH01   H      060GTN  K6DB0NY   081TF                                    + 02100                            A FS
        SUSAP KDCAK6FH01   H      070GTN  K6DB0NE  R   HM                      14500040     + 02100                            A FS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
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                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
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CITY AND STATE	ELEVATION: 15 THRE: 11	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
WASHINGTON, DC	AIRPORT NAME: **RONALD REAGAN WASHINGTON NATIONAL**	**RNAV**	**RNAV (RNP) RWY 1, AMDT 1**	AMDT: **ORIG-A**
				DATED: **07/28/2011**

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:

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SUSAP KDCAK6SRW01 K6PG          0   18018002125                                  M
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CITY AND STATE	ELEVATION: 15 THRE: 11	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
WASHINGTON, DC	AIRPORT NAME: RONALD REAGAN WASHINGTON NATIONAL	RNAV	RNAV (RNP) RWY 1, AMDT 1	AMDT: ORIG-A
				DATED: 07/28/2011

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:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (RNP)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	IRONS	IRONS	010	IAF	IF		FB					
	IRONS	JWASH	020		TF		FB	1.0			AA 03500	
	IRONS	MRION	030		TF		FB	1.0			AA 02500	
		MRION	010	FACF	IF		FB				AA 02500	
		BADDN	020	FAF	TF		FB	1.0			AA 01600	
		RW01	030	MAP	TF		FB	0.3			AT 00065	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	FIVUD	040		RF	L	FB	0.5		002.2		AB 185
	HESLO	050		TF		FB	0.65				
	GTN	060		TF		FO	0.8			AA 02100	
	GTN	070		HM	R	FO		145.0(136.0T)	004.0	AA 02100	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	GTN	N385547.64	W0770727.18	N3855.794	W07707.453
	BADDN	N384541.05	W0770143.22	N3845.684	W07701.720
	CFBFK	N385017.63	W0770617.14	N3850.294	W07706.286
	FIVUD	N385231.81	W0770321.79	N3852.530	W07703.363
	HESLO	N385327.62	W0770431.65	N3853.460	W07704.528
	IRONS	N383151.96	W0770621.94	N3831.866	W07706.366
	JWASH	N383639.58	W0770314.14	N3836.660	W07703.236
	MRION	N383951.94	W0770108.26	N3839.866	W07701.138
	RW01	N385029.65	W0770212.29	N3850.494	W07702.205

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW01	00011	54

CITY AND STATE	ELEVATION: 15 THRE: 11	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
WASHINGTON, DC	AIRPORT NAME: **RONALD REAGAN WASHINGTON NATIONAL**	**RNAV**	**RNAV (RNP) RWY 1, AMDT 1**	AMDT: **ORIG-A**
				DATED: **07/28/2011**

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.
INITIAL (RNP 1.00)	IRONS	JWASH	1. TOWER (24-000839)	383157.60N/0770859.50W	488 (2C)	1000	AC20 AT1992	3500
			2. TERRAIN	383524.00N/0770227.00W	201 (200)		AS1500	1700
INITIAL: STEPDOWN	JWASH	MRION	3. TOWER (24-020035)	384022.22N/0770134.43W	448 (5E)	1000	AC125 AT927	2500
(RNP 1.00)			4. TERRAIN	383809.00N/0770009.00W	220 (200)		AS1500	1700
INTERMEDIATE: (RNP 1.00)	MRION	BADDN	3. TOWER (24-020035)	384022.22N/0770134.43W	448 (5E)	500	AC125 DG467 VEB60	1600
			5. TERRAIN	384530.00N/0770409.00W	240 (200)		AS1000	1200
FINAL: (RNP 0.30)	BADDN	RW01	6. BUILDING	384915.48N/0770226.27W	198 (1B)	21.17:1	MA58 AC10	536/525
			(KDCAT0017)					
MISSED APPROACH	DA	RW01 (40:1)	7. TOWER (51-001096)	384915.00N/0770254.00W	223 (1B)	ASC	AC10	
(RNP 0.30)								
MISSED APPROACH	RW01	FIVUD (40:1)				ASC		
(RNP 0.50) (RF)								
MISSED APPROACH	FIVUD	HESLO (40:1)				ASC		
(RNP 0.65)								
MISSED APPROACH	HESLO	GTN NDB (40:1)				ASC		
(RNP 0.80)								
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:								
ELEV:								

4. CIRCLING AREA	DISTANCE		HT. ABV. ARPT.		
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	
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: RW01

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	AAO	353/ 29.1	1090 (4E)	2100					

CITY AND STATE	ELEVATION: 15 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
WASHINGTON, DC	RONALD REAGAN WASHINGTON NATIONAL	RNAV	RNAV (RNP) RWY 1, AMDT 1	AEA

PART B - SUPPLEMENTAL DATA

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

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

5. APPROACH & RUNWAY LIGHTING	
X	ALSF-2 01
	(S) SALS
X	MALSF 19
X	HIRL 33, 01, 15, 19
X	MIRL 22, 04
X	REIL 22, 33, 15, 04
X	TDZ 01
X	C/L 01, 19
X	OTHER (SPECIFY) VASI-12 19 LDIN 19 PAPI-4L 15 VASI-4L 22, 33

6. RUNWAY MARKINGS	
BASIC	
ALL WEATHER	PIR-G 01, 19
INSTRUMENT	NPI-G 22, 33, 15, 04

7. RUNWAY VISUAL RANGE	
APPROACH	01, 19
MIDFIELD	
ROLL OUT	01, 19

8. GLIDE PATH		
GP ANGLE: 3.00	ELEV RWY THRESHOLD: 11.4	
DISTANCE FROM RWY:	ELEV GP ANTENNA:	
	THRESHOLD CROSSING HEIGHT: 53.6	

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:
FRANK JACKSON JR	11/18/2011
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-352

PART C - REMARKS:

ISA DEVIATION USED: -25C (F)

VDP NOT ESTABLISHED - RNP PROCEDURE.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

SEE ATTACHED AIRSPACE LETTER.

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED (SAAAR) FAAO 8260.52 CRITERIA USED.

THE FOLLOWING OBSTACLES WERE AFFECTING THE PROCEDURE WITHOUT ACCURACY CODES.
ASSIGNED (1A) ACCURACY CODE FROM OE/AAA DATABASE
51-002181
51-002182
51-002184
51-002183
51-020173
51-020609
ASSIGNED (4D) ACCURACY CODE FROM OE/AAA DATABASE
51-002421
51-020346
51-020066
51-020353
11-000054
11-000053
11-000051
51-020257
ASSIGNED (5E) ACCURACY CODE.
24-020035
ALL OBSTACLES FORWARDED TO OBSTACLE AND TERRAIN TEAM FOR VERIFICATION.

AIRSPEED LIMITATION ON MISSED APPROACH DUE TO BANK ANGLE AND TO REMAIN CLEAR OF P-56A/B- 185 KIAS.

AVERAGE COLD TEMPERATURE BASED ON 5-YEAR HISTORY (2006-2010) ACT: -10C

RF TURN RADIUS/BANK ANGLE COMPUTATIONS:

RF SEGMENT	ALT	KIAS	KTAS	HAA	VKTW	TR	BA
RW01-FIVUD	*1676	185	191.20	1661.2	50.0	3.19	14.90

TF TURN FIX	ALT	KIAS	KTAS	HAA	VKTW	TR	BA
JWASH	2500	250	265.29	2485.2	50.0	4.48	18.00

*DISTANCE AB LINE TO RW01: 972.18 FT (0.16NM)
RF TRACK DIST RW01 - FIVUD: 2.22NM
0.16 + 2.22=2.38
2.38X500=1190 FEET
1190 + (DA 536-50) = 1676 MSL.

VISUAL SEGMENT PENETRATED BY 194' MSL STACK (51-002182) AND 194' MSL STACK (51-002183) BOTH WILL BE CHARTED.

FINAL DEVELOPED ONLY TO RNP 0.30 IAW 8260.52 PARA 4.0.

KDCA ASOS-3 IS ON SERVICE-A, SECONDARY WEATHER SOURCE NOT REQUIRED DUE TO 24 HOUR TOWER WITH DIGITAL ALTIMETER SETTING INDICATOR (DASI) AND NATIONAL WEATHER SERVICE (24HRS).

MISSED APPROACH REQUIRES RNP LESS THAN 1.0 TO AVOID OEA OVERLAP OF P-56. IAW 8260.52 PARA 4.2.1.

AIRSPEED LIMITATION FOR MISSED SEGMENT MAX SPEED RW01 TO FIVUD - 185 KIAS.

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
MISSED APPROACH	DA	GTN NDB (40:1)				ASC		2100
(RNP 0.30-0.80)		LEVEL SURFACE	8. TOWER (11-000012)	385610.00N/0770532.00W	793 (1D)	1000	AC50	1900
		AIRSPACE	9. TERRAIN	385418.00N/0770745.00W	463 (500)		AS1500	2000

3. MISSED APPROACH		
MAP:	DA (SEE ABOVE)	
ELEV:	215	

4. CIRCLING AREA	DISTANCE		HT. ABV. ARPT.		
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL	NA
CATEGORY B	1.5 NM		450		NA
CATEGORY C	1.7 NM		450		NA
CATEGORY D	2.3 NM		550		NA
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
									PAGE 2 OF 2

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
WASHINGTON, DC	ELEVATION: 15 AIRPORT NAME: RONALD REAGAN WASHINGTON NATIONAL	RNAV	RNAV (RNP) RWY 1, AMDT 1	AEA

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	☐ NWS ☐ FAA ☐ A/C OTHER:	SOURCE: DISTANCE: HOURS REMOTE OPERATION:
☐ VHF ☐ UHF ☐ HF	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:

ORIGINAL

RADIO FIX AND HOLDING DATA RECORD

NAME: BADDN **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 384541.05N/0770143.22W **TYPE:** WP, INT, 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	WASHINGTON	I-DCA	LOC		186.49	175.49	5.90	6.22	37797	1600	4500
2	WASHINGTON	DCA	VOR/DME	L	185.45	176.45	5.89	5.89		1600	17500
3	NOTTINGHAM	OTT	VORTAC	L	294.11	284.11		13.74		1600	17500

REMARKS:
WASHINGTON (FAC 1) USED TO ESTABLISH FIX COORDINATES
I-DCA DME COORDINATES 385134.93N/0770212.06W.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	COPTER ILS OR LOC RWY 1	1, 3		KDCA	WASHINGTON	DC (US)
IAP	ILS OR LOC RWY 1	1, 3		KDCA	WASHINGTON	DC (US)
IAP	ILS RWY 1 (CAT II)	1, 3		KDCA	WASHINGTON	DC (US)
IAP	ILS RWY 1 (SA CAT I)	1, 3		KDCA	WASHINGTON	DC (US)
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)
IAP	VOR RWY 1	2, 3		KDCA	WASHINGTON	DC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
02/01/12: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/04/11.
1. DELETED FACILITY 4 ANDREWS VORTAC FROM FIX MAKE-UP FACILITIES.
2. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 11/04/2011 **OFFICE:** AJV-352 **NAME:** FRANK JACKSON

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: DCA ATCT
OTHER:

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CFBFK **STATE:** VA **COUNTRY:** US

LATITUDE/LONGITUDE: 385017.63N/0770617.14W **TYPE:** CNF

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

FIX USE: USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 04/05/2012

DEVELOPED BY: **DATE:** 12/06/2011 **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/DCA
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: FIVUD **STATE:** VA **COUNTRY:** US

LATITUDE/LONGITUDE: 385231.81N/0770321.79W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

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

DEVELOPED BY: **DATE:** 12/06/2011 **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/DCA
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: GEORGETOWN NDB **STATE:** VA **COUNTRY:** US

LATITUDE/LONGITUDE: 385547.64N/0770727.18W **TYPE:** WP, 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
											17500
1	GEORGETOWN	GTN	NDB	MH						2100	17500
2	WASHINGTON	DCA	VOR/DME	L	324.79	315.79	5.89	5.89		2100	17500
3	BALTIMORE	BAL	VORTAC	L	247.40	236.40		26.02		2100	17500
4	ARMEL	AML	VORTAC	L	098.90	090.90	16.04	16.04		2100	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	GTN	NDB	325.00	145.00	R	1		2100	6000	4	5
2	NW		WP	325.00	145.00	R		4	2100	4000	5	5
3	NW	DCA	VOR/DME	324.79	144.79	R	1	4	2100	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (11-000010)	385624.20N/0770452.42W	1049	5D
2	200	TOWER (11-000010)	385624.20N/0770452.42W	1049	5D
3	200	TOWER (11-000010)	385624.20N/0770452.42W	1049	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
HOLDING PATTERNS 1, 2 AND 3 PENETRATES PROHIBITED AREA P-56 IN WHICH OVERFLIGHT IS PROHIBITED TO 18000 BY 67-WA-32 OF 10/27/67.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	COPTER ILS OR LOC RWY 1	1, 2, 3, 4	3	KDCA	WASHINGTON	DC (US)
IAP	COPTER ILS OR LOC RWY 1 (ALT MISS)	1	1	KDCA	WASHINGTON	DC (US)
IAP	ILS OR LOC RWY 1	1, 2, 3, 4	3	KDCA	WASHINGTON	DC (US)
IAP	ILS OR LOC RWY 1 (ALT MISS)	1	1	KDCA	WASHINGTON	DC (US)
IAP	ILS RWY 1 (CAT II)	1, 2, 3, 4	3	KDCA	WASHINGTON	DC (US)
IAP	ILS RWY 1 (CAT II) (ALT MISS)	1	1	KDCA	WASHINGTON	DC (US)
IAP	ILS RWY 1 (SA CAT I)	1, 2, 3	3	KDCA	WASHINGTON	DC (US)
IAP	ILS RWY 1 (SA CAT I) (ALT MISS)	1	1	KDCA	WASHINGTON	DC (US)
IAP	RNAV (GPS) RWY 33		2	KDCA	WASHINGTON	DC (US)
IAP	RNAV (RNP) RWY 1		2	KDCA	WASHINGTON	DC (US)
IAP	VOR RWY 1	1, 2, 3, 4	3	KDCA	WASHINGTON	DC (US)
IAP	VOR/DME OR GPS RWY 15	1, 2, 3, 4		KDCA	WASHINGTON	DC (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
ADDED DISTANCE FROM FACILITY TO FACILITIES 2,3 AND 4.
DELETED FACILITY 5 (LISIY) FROM FIX MAKE-UP FACILITIES.
UPDATED FIX USE.
ADDED PRECIPITOUS TERRAIN EVALUATION.
UPDATED REQUIRED CHARTING TO ADD EN ROUTE LOW.

DEVELOPED BY: **DATE:** 10/13/2011 **OFFICE:** AJV-352 **NAME:** FRANK JACKSON

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: HESLO **STATE:** VA **COUNTRY:** US

LATITUDE/LONGITUDE: 385327.62N/0770431.65W **TYPE:** WP

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

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 04/05/2012

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

DEVELOPED BY: **DATE:** 12/06/2011 **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/DCA
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: JWASH **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 383639.58N/0770314.14W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 04/05/2012

DEVELOPED BY: **DATE:** 11/18/2011 **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/DCA
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: MRION **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 383951.94N/0770108.26W **TYPE:** WP

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

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

REMARKS:
FIX NAME ASSIGNED TO COMMEMORATE RETIRING FAA ADMINISTRATOR.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 04/05/2012

REASON FOR REVISION:
DELETED FACILITY 1 (KDCA R01) FROM FIX MAKE-UP FACILITIES.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 11/18/2011 **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:

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: IRONS **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 383151.96N/0770621.94W **TYPE:** WP, 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	WASHINGTON	DCA	VOR/DME	L	198.46	189.46	19.95	19.95		2500	17500
2	NOTTINGHAM	OTT	VORTAC	L	248.46	238.46		19.96		2500	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	S	DCA	VOR/DME	198.46	018.46	R	1		2500	10000	4	10
2	S		WP	198.39	018.39	R		4	2500	10000	5	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	210	TOWER (24-000839)	383157.60N/0770859.50W	488	2C
2	210	TOWER (24-000984)	383129.51N/0765901.86W	520	1A

HOLDING RESTRICTIONS:
PAT 1 CHART 210K ICON
PAT 2 CHART 210K ICON
HOLDING LIMITED TO ESTABLISHED PATTERNS

REMARKS:
PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER R-6611A AT OR ABOVE 8000 FEET.
PRECIPITOUS TERRAIN EVALUATION COMPLETED

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V376	1, 2	1			(US)
IAP	RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)
IAP	RNAV (GPS) RWY 1L			KADW	CAMP SPRINGS	MD (US)
IAP	RNAV (GPS) RWY 5			KW32	CLINTON	MD (US)
IAP	RNAV (GPS) RWY 6			KVKX	FRIENDLY	MD (US)
IAP	ILS OR LOC RWY 32	1, 2		KDAA	FORT BELVOIR	VA (US)
IAP	NDB RWY 32	1, 2		KDAA	FORT BELVOIR	VA (US)
IAP	RNAV (GPS) RWY 32			KDAA	FORT BELVOIR	VA (US)
STAR	IRONS	1, 2	1	KDCA	WASHINGTON	DC (US)
STAR	OJAAY		2	KDCA	WASHINGTON	DC (US)
STAR	IRONS	1, 2	1	KW32	CLINTON	MD (US)
STAR	IRONS	1, 2	1	KVKX	FRIENDLY	MD (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 06/03/2010

REASON FOR REVISION:
DELETED FAC 3
ADDED DISTANCE FROM FAC FOR FAC 1/2
UPDATED HOLDING PATTERN OBSTRUCTION ID (ADMIN)
UPDATED FIX USE

DEVELOPED BY: **DATE:** 10/08/2009 **OFFICE:** AVN-110 **NAME:** BRIAN BERUBEE

APPROVED BY: **DATE:** 03/26/2010 **OFFICE:** AVN-110 **NAME:** GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZDC
ATC FACILITY: DCA/PCT/DAA ATCT
OTHER: USAASA

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **WASHINGTON** STATE: **DC**

AIRPORT NAME: **RONALD REAGAN WASHINGTON NATIONAL** ID: **KDCA**

PROCEDURE: **RNAV (RNP) RWY 1** AMDT: **1**

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	**3.56**
(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	**355.50**
4. High Terrain in	**FINAL**	segment containing 1000' point	**179**
5. Distance from	**THLD**	to 1500' point	**5.26**
(If 1500' point in PT maneuvering area or holding pattern note in remarks)			
6. Width of	**INTERMEDIATE**	segment at 1500' point	**4.00**
7. True Course of	**INTERMEDIATE**	segment containing 1500' point	**355.52**
8. High Terrain in	**INTERMEDIATE**	segment containing 1500' point	**240**

9. Threshold Coordinates (if straight-in) ... **385029.65N** / **0770212.29W**

10. ARP Coordinates ..... **385107.50N** / **0770215.80W**

11. Runway Approach End and distance furthest from ARP ..... RWY **15**

Distance **0.64** NM

12. FAF Coordinates ..... **384541.05N** / **0770143.22W**

REMARKS: Approach/Drawing attached.

Federal Aviation Administration

Memorandum

Date:

To: Manager, Flight Procedure Standards

From: Gregory Yamamoto
Manager, Terminal Products Group

Subject: **ACTION:** Approval Request

RNAV (RNP) Runway 1, Amdt 1. Washington/Ronald Reagan Washington National, Washington, DC.

Obstacle penetrate visual segment OIS, IAW FAAO 8260.52, paragraph 3.6.

Request approval for obstacles 51-002182/51-002183 194' MSL Stacks (1A), that penetrates the RNP final visual segment OIS area by 5.49'/2.06'. The obstacles are located 7,525.02'/7,597.66' from the approach end of runway 1.

The stacks will be charted on the procedure.

RADIO FIX AND HOLDING DATA RECORD

NAME: LITNE **STATE:** MD **COUNTRY:** US

LATITUDE/LONGITUDE: 383639.58N/0770314.14W **TYPE:** WP

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

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	MRION					207.18	3.60				17500

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RONALD REAGAN WASHINGTON NATL - RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 12/20/2007

DEVELOPED BY: **DATE:** 09/08/2007 **OFFICE:** AVN-101 **NAME:** JAMES CECIL

APPROVED BY: **DATE:** **OFFICE:** AVN-101 **NAME:** JOHN PANNELL

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: ATL
ARTCC: ZDC
ATC FACILITY: PCT/DCA
OTHER:

Concurrent with
CANCELLED RNAV(RNP) Rwy 1, Amdt 1
BY Fran K. Jackson
DATE 18 NOV 2011

RADIO FIX AND HOLDING DATA RECORD

NAME: OTIYU **STATE:** VA **COUNTRY:** US

LATITUDE/LONGITUDE: 385017.45N/0770617.54W **TYPE:** CNF

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

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	KDCA R01					265.50	3.20				

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RONALD REAGAN WASHINGTON NATL - RNAV (RNP) RWY 1			KDCA	WASHINGTON	DC (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 12/20/2007

DEVELOPED BY: **DATE:** 09/08/2007 **OFFICE:** AVN-101 **NAME:** JAMES CECIL

APPROVED BY: **DATE:** **OFFICE:** AVN-101 **NAME:** JOHN PANNELL

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: ATL
ARTCC: ZDC
ATC FACILITY: PCT/DCA
OTHER:

Concurrent with
CANCELLED RNAV (RNP) RW 41, AMDT 1
BY Frank Jackson
DATE 5 Dec 2011

PFAF
Calculations

Min Intermediate Segment Alt (a):	0.00
LTP MSL Elevation (b):	0.00
TCH:	0.00
Glidepath Angle (Θ):	3.00°
Distance from LTP to PFAF (D):	0.00
	0.00 NM
LTP/FTP Latitude:	000° 00' 00.00"
LTP/FTP Longitude:	000° 00' 00.00"
True RWY Bearing/True Course:	0.00
PFAF Latitude:	-000° 40' 40.00"
PFAF Longitude:	-000° 40' 00.00"

Latitude/Longitude valid for straight segment only

VEB
OCS Origin & Slope

Intermediate Segment Altitude:	1600
LTP Elevation:	11.4
Glidepath Angle:	3
TCH:	53.6
RNP Value:	0.30
Δ ISA:	-24.9704
Straight In Segment	
(*Wingspan =<262*) **LTP to Origin:**	3,712.04'
(*Wingspan =<136*) **LTP to Origin:**	3,500.31'
OCS Slope Ratio:	21.17 : 1
RF Turn Segment | Bank angle:	0.00°
(*Wingspan =<262*) **LTP to Origin:**	NA
(*Wingspan =<136*) **LTP to Origin:**	NA
OCS Slope Ratio:	NA

Version 20

VEB
Temperature Limits

Glidepath Angle:	3.00°	
Max Glidepath Angle:	3.50°	
PFAF Elevation:	1600	
LTP Elevation:	11.4	
ACT:	-10.00°C	
Min Glidepath Angle	2.81°	
NA Below	-10.00°C	14.00°F
NA Above	48.65°C	119.56°F

Intermediate Segment
VEB ROC

Glidepath Angle	3.00°
LTP MSL Elevation	11.40
TCH (ft)	53.60
OCS Slope	21.17
OCS Origin Distance (ft) *(measured along-track from LTP)*	3,712.04
Obstacle Distance (ft) *(measured along-track from LTP)*	61,999.10
VEB ROC *(at obstacle)*	**560**
Glidepath MSL altitude at Obstacle	3,406.34
OCS MSL altitude at Obstacle	2,846.09

DO NOT REMOVE FROM PACKAGE