

<b>RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33</b>				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										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW20  CLIMB TO 2300 DIRECT NUTTY AND HOLD.  ADDITIONAL FLIGHT DATA: HOLD S, RT, 021.77 INBOUND. CHART FAS OBST: 161 T-L TWR 370906N/0762943W CHART FAS OBST: 159 TREE 370917N/0762937W CHART 236 TOWER 371054N/0762910W CHART 504 STACK 371255N/0762740W DISTANCE TO THLD FROM 337 HAT: 0.93 NM. CHART VDP AT 1.11 NM TO RW20* *LNAV ONLY. WAAS CHANNEL # 97420 REFERENCE PATH ID: W20A CHART CIRCLING ICON. LTP HAE: -23.2 M					
ORF VORTAC		PANLE (TF) (FO) (RNP 2.00)		344.71 / 28.26				2000							
CCV VORTAC (IAF)		PANLE (NOPT) (TF) (FB) (RNP 1.00)		274.96 / 21.38				2000							
HCM VORTAC (IAF)		PANLE (NOPT) (TF) (FB) (RNP 1.00)		129.64 / 14.91				2000							
PANLE (IF/IAF)		RACOT (TF) (FB) (RNP 1.00)		201.84 / 6.03				1700							
RACOT (FAF)		ROBOY/2.20 NM TO RW20 (TF) (FB) (RNP 0.30)		201.82 / 2.81											
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD N PANLE, RT, 201.84 INBOUND, 2000 FT. IN LIEU OF PT (IAF) 3. FAC: 201.82 FAF: RACOT DIST FAF TO MAP: 5.00 THLD: 5.00 4. MIN. ALT: PANLE 2000, RACOT 1700, ROBOY/2.20 NM TO RW20 780* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1700 GS ALT AT: RACOT 1700 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 42.0 34:1 IS NOT CLEAR 8. MSA FROM: RW20 2300															
										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
LPV DA	379	1 1/8	337	379	1 1/8	337	379	1 1/8	337	379	1 1/8	337			
LNAV/VNAV DA	474	1 1/2	432	474	1 1/2	432	474	1 1/2	432	474	1 1/2	432			
LNAV MDA	440	1	398	440	1	398	440	1 1/8	398	440	1 1/8	398			
CIRCLING	520	1	478	540	1	498	740	2	698	780	2 1/4	738			
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 48C (118F). @ CAT D 800-2 1/4 CHART NOTE: DME/DME RNP-0.3 NA. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT CCV VORTAC ON V286 SOUTHEAST BOUND. CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.															
CITY AND STATE NEWPORT NEWS, VA		ELEVATION: 42 TDZE: 42 AIRPORT NAME: NEWPORT NEWS/WILLIAMSBURG INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 20, AMDT 2B						SUP: AMDT: 2A DATED 10/17/2013			



ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
ROUTINE					
COORDINATED WITH:					
ATA <div><input checked="" type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>		ALPA <div><input checked="" type="checkbox"/></div>	
APA <div><input type="checkbox"/></div>		AOPA <div><input checked="" type="checkbox"/></div>		NBAA <div><input checked="" type="checkbox"/></div>	
OTHER (specify)		<div><input checked="" type="checkbox"/> ZDC, ORF APP CON, PHF ATCT AMGR</div>			
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME: <div>DANIEL D. OLSON</div>				FIFO <div>AJV-5421</div>	DATE: <div>11/18/2016</div>
APPROVED BY					
NAME: <div>TONY R LAWSON</div> <div>MANAGER</div>				FIFO <div>AJV-5420</div>	DATE:
CHANGES:					
<div>1. ADDED CHART CIRCLING ICON. 2. ADDED CHART VDP AT 1.11 NM TO RW 20. 3. CHANGED "HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA" TO "RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED". 4. REMOVED CHART NOTE : "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED..." 5. CHANGED LPV VIS ALL CATS FROM 1 1/4 TO 1 1/8. 6. CHANGED LNAV VIS CAT C/D FROM 1 AND 1 1/4 TO VIS FOR BOTH TO 1 1/8. 7. CHANGED CIRCLING CAT B MDA/HAA FROM 520/478 TO 540/498. 8. CHANGED CIRCLING CAT C MDA/VIS/HAA FROM 520/ 1 1/2 /478 TO 740/2/698. 9. CHANGED CIRCLING CAT D MDA/VIS/HAA FROM 600/2/558 TO 780/ 2 1/4 /738. 10. ADDED CAT D ALTERNATE MIN NOTE. 11. REMOVED NA WHEN LOCAL WEATHER NOT AVAILABLE. 12. REVISED LTP AND FPAP COORDINATES IN FAS DATA, ALSO NEW CRC REMAINDER. 13. REMOVED "BARO-VNAV NA WHEN USING NORFOLK..." 14. REMOVED "WHEN RWY 20 VGSI INOP..."</div>					
REASONS:					
<div>1. NEW CIR CLING CRITERIA APPLIED. 2. 20:1 PENETRATIONS REMOVED, VDP NOW AUTHORIZED. 3. 20:1 PENETRATIONS REMOVED, ONLY 34:1 PENETRATIONS REMAINING. 4. BOTH ALTIMETER SOURCES ARE ON WMSCR AND AVAILABLE 24 HRS. 5, 6. NEW VIS CRITERIA. 7, 8, 9. NEW CONTROLLING OBSTACLE AS A RESULT OF APPLYING NEW CIRCLING CRITERIA. 10. RAISE IN CIRLING MDA/VIS. 11. NOT REQUIRED AS PER CRITERIA. 12. TO MATCH CURRENT AIRNAV DATA AND REVISED CALCULATIONS. 13. BACKUP ALTIMETER NOTES REMOVED. 14. VGSI MITIGATION APPROVAL EXPIRED .</div>					



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, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
ROBOY/2.20 NM TO RW20	RW20 (MAP) (TF) (FO) (RNP 0.30)	201.82 / 2.20	
RW20 (MAP)	379 MSL	201.82	
379 MSL	NUTYI (DF) (FO) (RNP 1.00)		2300

QUALITY  
16  
CHECKED

CITY AND STATE  
NEWPORT NEWS, VA

ELEVATION: 42 TDZE: 42  
AIRPORT NAME:  
NEWPORT NEWS/WILLIAMSBURG INTL

FACILITY  
IDENTIFIER:  
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:  
RNAV (GPS) RWY 20, AMDT 2B

SUP:  
AMDT: 2A  
DATED: 10/17/2013

ALL AFFECTED PROCEDURES REVIEWED?		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
<input type="checkbox"/> YES <input type="checkbox"/> NO					
COORDINATED WITH:					
ATA	AAT	ALPA	APA	AOPA	NBAA      OTHER (specify)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME:				FIFO	DATE:
APPROVED BY					
NAME:				FIFO	DATE:
CHANGES:					
REASONS:					

**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE  
FLIGHT STANDARDS SERVICE - FAR 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.

**FAS DATA BLOCK INFORMATION**

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KPHF
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	0
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	370830.8570N
LTP/FTP LONGITUDE	0762939.9740W
LTP/FTP ELLIPSOIDAL HEIGHT	-00232
FPAP LATITUDE	370703.8575N
FPAP LONGITUDE	0763004.6745W
THRESHOLD CROSSING HEIGHT (TCH)	00042.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0760
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 <u>CRC REMAINDER</u>	 7DF59FC2

**ADDITIONAL PATH POINT RECORD INFORMATION**

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00128
FPAP ORTHOMETRIC HEIGHT	+00128

QUALITY  
16  
CHECKED

CITY AND STATE  NEWPORT NEWS, VA	ELEVATION: 42 AIRPORT NAME:  NEWPORT NEWS/WILLIAMSBURG INTL	TDZE: 42   	FACILITY IDENTIFIER:  RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:  RNAV (GPS) RWY 20, AMDT 2B	SUP:
					AMDT: 2A
					DATED: 10/17/2013

ALL AFFECTED PROCEDURES REVIEWED?		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
<input type="checkbox"/> YES <input type="checkbox"/> NO					
COORDINATED WITH:					
ATA	AAT	ALPA	APA	AOPA	NBAA      OTHER (specify)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _____
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	ORF VORTAC	PANLE	1. TOWER (51-000651)	371709.00N/0763049.00W	539 (2C)	1000	AT461	2000
			2. TERRAIN	371338.00N/0762659.00W	69 (100)		AS1500	1600
INITIAL	CCV VORTAC	PANLE	3. AAO	371812.00N/0762539.00W	233 (4E)	1000	AT767	2000
			4. TERRAIN	371812.00N/0762539.00W	33 (0)		AS1500	1500
INITIAL	HCM VORTAC	PANLE	5. TOWER (51-020238)	372330.50N/0763125.50W	398 (5D)	1000	AT602	2000
			6. TERRAIN	372854.00N/0764006.00W	125 (100)		AS1500	1600
INTERMEDIATE	PANLE (IF/IAF)	RACOT	1. TOWER (51-000651)	371709.00N/0763049.00W	539 (2C)	500	AT661	1700
			7. TERRAIN	371338.00N/0762659.00W	66 (100)		AS1500	1600
FINAL: LPV	RACOT	RW20	8. TREE (KPHFL060)	370910.21N/0762934.97W	150 (1B)	34:1	AC10 MA66	379/337
FINAL: LNAV/VNAV	RACOT	RW20	9. TREE	370917.00N/0762937.00W	159 (2C)	23.4:1	AC20 MA13	474/432
FINAL: LNAV	RACOT	ROBOY/2.20 NM TO RW20	10. TOWER (51-001921)	371209.40N/0762951.50W	463 (2C)	250	RA49 SA-21 DG20	780
FINAL: LNAV STEPDOWN	ROBOY/2.20 NM TO RW20	RW20	11. T-L TWR (51-001022)	370906.00N/0762943.00W	161 (1A)	250	MA13	440
2. HOLD-IN-LIEU-OF-PT	PANLE	P-4	1. TOWER (51-000651)	371709.00N/0763049.00W	539 (2C)	1000	AT461	2000
			12. TERRAIN	372612.00N/0763042.00W	109 (100)		AS1500	1600
3. MISSED APPROACH	MAP: DA / DA / RW20	NUTIY	8. TREE (KPHFL060)	370910.21N/0762934.97W	150 (1B)	ASC	AC10	2300
	ELEV: 154/191/190		15. TOWER (51-000107)	365844.56N/0763526.16W	472 (3D)	1000		1500
			16. TERRAIN	371006.00N/0763045.00W	86 (100)		AS1500	1600
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.						
CATEGORY A	1.3 NM	REQUIRED 350	ACTUAL 478	13. TOWER (51-000891)	370820.57N/0763123.81W	209 (1A)	300	520
CATEGORY B	1.5 NM	REQUIRED 450	ACTUAL 498	14. TOWER (51-001272)	370744.53N/0763218.67W	230 (1A)	300	540
CATEGORY C	1.7 NM	REQUIRED 450	ACTUAL 698	18. TOWER (51-001054)	370948.00N/0763208.00W	438 (2C)	300	740
CATEGORY D	2.3 NM	REQUIRED 550	ACTUAL 738	19. TOWER (51-001921)	371209.40N/0762951.50W	463 (2C)	300	780
CATEGORY E	4.5 NM	REQUIRED 550	ACTUAL					
5. MINIMUM SAFE ALTITUDES	PRIMARY NAVAID: RW20							
SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)
360-360	TWR (51-001802)	190/20.0	1282 (1A)	2300				
CITY AND STATE	ELEVATION: 42	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION				
NEWPORT NEWS, VA	AIRPORT NAME: NEWPORT NEWS/WILLIAMSBURG INTL	RNAV	RNAV (GPS) RWY 20, AMDT 2B	AEA				

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:  PRECIPITOUS TERRAIN EVALUATION COMPLETED.  2. KPHF/KORF ASOS TRANSMITTED TO WMSCR, HRS OPTN: 24.  TAA NOT DEVELOPED PER ATC. VEGETATION HEIGHT: 100' PER IFF CHECKLIST.  LPV INTERMEDIATE SEGMENT TERRAIN: AS 372009.00N/0763124.00W 66'.  ORDER 8260.3 CHAPTER 2 APPLIED TO 504 STACK 371255N/0762740W. ORDER 8260.3 CHAPTER 2 APPLIED TO 236 TOWER 371054N/0762910W.  AVERAGE COLD TEMPERATURE BASED ON STANDARD -30°C ISA DEVIATION.  ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED. CAT A: 1.30NM CAT B: 1.81NM CAT C: 2.84NM CAT D: 3.70NM  NO ADDITIONAL AIRSPACE REQUIRED. RASS PRESSURE PATTERNS SAME KPHF 42, KORF 27 RA = 48.10 (FOR CONTINGENCY PURPOSES).  MISSED APPROACH OBSTACLES CONT: 17. T-L TWR (51-000670) 370854.54N/0762752.62W 189 (1B) ASC, AC10, 1200 13. TOWER (51-000891) 370820.57N/0763123.81W 209 (1A) 1000, 1300  VGSI DATA: 3.00/42.9  "VISUAL PORTION OF FINAL" PENETRATIONS: CIRCLING RWY 20 STANDARD VISUAL AREA ONLY: 20:1 120 TREE (KPHFL049) 370846.19N/0762930.38W (3.68)  RW20 34:1 114 TREE (KPHFT1427) 370853.93N/0762935.40W (8.44) 117 TREE (KPHFT1477) 370855.10N/0762935.59W (8.15) 76 TREE (KPHFL040) 370841.22N/0762933.82W (6.47) 112 TREE (KPHFT1442) 370854.04N/0762934.39W (5.59) 113 TREE (KPHFL055) 370855.24N/0762935.90W (3.90) 73 TREE (KPHFT1323) 370841.23N/0762933.82W (3.44) 109 TREE (KPHFT1440) 370854.04N/0762934.59W (2.69) 108 TREE (KPHFT1421) 370853.90N/0762935.53W (2.60) 108 TREE (KPHFT1422) 370853.85N/0762935.24W (2.59) 108 TREE (KPHFL054) 370854.03N/0762934.55W (1.70) 111 TREE (KPHFT1482) 370854.93N/0762933.74W (1.66) 107 TREE (KPHFT1428) 370853.92N/0762935.02W (1.27) 107 TREE (KPHFT1431) 370853.87N/0762934.56W (1.17) 152 TREE (KPHFT1865) 370909.62N/0762934.72W (0.57) 106 TREE (KPHFT1435) 370854.01N/0762935.17W (0.09)		
1. COMMUNICATIONS WITH:			2. WEATHER SERVICE			3. ALTIMETER SETTING						
ORF APP CON PHF TOWER ZDC ARTCC				N W S	OTHER: ASOS		SOURCE:KPHF / KORF					
				F A A			DISTANCE: 0 / 19.96					
				A / C			HOURS REMOTE OPERATION:					
SATISFACTORY ON:												
X	V H F	X	U H F		H F	LOCATION: KPHF			ADJUSTMENT: 0 / 49			
4. MONITOR STATUS	PRIMARY NAVAID:											
	MONITOR POINT:											
	HRS OPTN:		CAT 1		CAT 3							
5. APPROACH & RUNWAY LIGHTING		ALS										
		(S) SALS										
	X	MALSR 07 (PCL)										
	X	HIRL 02 (PCL), 07 (PCL), 20 (PCL), 25 (PCL)										
		MIRL										
	X	REIL 20 (PCL), 25 (PCL)										
		TDZ										
		C/LINE										
	X	OTHER (SPECIFY) VASI-4L 25 (PCL) PAPI-4L 02, 20										
6. RUNWAY MARKINGS		BASIC										
		ALL WEATHER PIR-G 07, 25										
		INSTRUMENT NPI-G 02, 20										
7. RUNWAY VISUAL RANGE		APPROACH 07										
		MIDFIELD										
		ROLL OUT										
8. GLIDE PATH		GP ANGLE: 3.00				ELEV RWY THRESHOLD: 42.1						
		DISTANCE FROM RWY:				ELEV GP ANTENNA:						
						THRESHOLD CROSSING HEIGHT: 42.0						
9. FINAL APPROACH COURSE AIMING			X	RUNWAY THRESHOLD					FT. FROM THRESHOLD			
			X	ON CENTERLINE					FT. FROM CENTERLINE			
10. WAIVERS: NONE												
PART D - PREPARED BY: DANIEL D. OLSON						DATE: 11/18/2016						
TITLE: AERONAUTICAL INFORMATION SPECIALIST						OFFICE: AJV-5421						

