

[Print](#)

Project Name: KRDU - RALEIGH-DURHAM INTL, NC

Project Reason: ADD CHART NOTE: ASTERISK, ASTERISK CHART NOTE: RVR 1800 AUTHORIZED with use of fd or ap or hud to da. (IAW MEMORANDUM FROM AFS-400 AUTHORIZING 1800 RVR FOR LPV AND GLS APPROACH PROCEDURES). CHANGED LNAV/VNAV DA/HAT FROM 690/270 TO 711/291 ALL CATS, (TREE 527 MSL (1A), 355144.08N/0784730.54W).

Last Updated By: THOMAS KIRKPATRICK

Last Updated At: 2017-06-27 19:06:35.872761

Status: Verified 7/6596

!FDC X/XXXX RDU IAP RALEIGH-DURHAM INTL, Raleigh/Durham, NC. RNAV (GPS) Y RWY 5R, AMDT 2A... LNAV/VNAV DA 711/HAT 291 ALL CATS. CHART NOTE: ASTERISK, ASTERISK RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. CHANGE LPV DA TO LPV DA ASTERISK, ASTERISK. THIS IS RNAV (GPS) Y RWY 5R, AMDT 2B. 1706271906-PERM

Digitally signed by

VICTOR B NASO

Jul 25, 2017



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										MISSED APPROACH						
FROM		TO			COURSE AND DISTANCE			ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW05R CLIMB TO 2600 DIRECT POBIC AND ON TRACK 097.48 TO ZEBUL AND HOLD. ADDITIONAL FLIGHT DATA: HOLD E, RT, 269.06 INBOUND. FAS OBST: 629 AAO 354720N/0785213W DISTANCE TO THLD FROM 200 HATH: 0.45 NM. CHART VDP AT 1.41 NM TO RW05R* *LNAV ONLY. WAAS CHANNEL # 90213 REFERENCE PATH ID: W05B LTP HAE: 89.1 M						
MUTSE (IAF)		PECIT (NOPT) (TF) (FB) (RNP 1.00)			322.12 / 10.00			3400								
FOGAP (IAF)		PECIT (NOPT) (TF) (FB) (RNP 1.00)			141.95 / 10.58			3400								
PECIT (IF/IAF)		PURME (TF) (FB) (RNP 1.00)			052.04 / 5.96			2400								
PURME (FAF)		RW05R (MAP) (TF) (FO) (RNP 0.30)			052.09 / 6.12											
RW05R (MAP)		620 MSL (CA)			052.09											
(SEE FORM 8260-10)																
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. HOLD SW PECIT, RT, 052.04 INBOUND, 3400 FT. IN LIEU OF PT (IAF) 3. FAC: 052.09 FAF: PURME DIST FAF TO MAP: 6.12 THLD: 6.12 4. MIN. ALT: PECIT 3400, PURME 2400 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 2400 GS ALT AT: PURME 2400 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 55.2 34:1 IS CLEAR 8. MSA FROM: _____																
										MAG VAR: 9W			EPOCH YEAR: 2020			
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**	620	2400	200	620	2400	200	620	2400	200	620	2400	200				
LNAV/VNAV DA	711	2400	291	711	2400	291	711	2400	291	711	2400	291				
LNAV MDA	900	2400	503	900	2400	503	900	5500	503	900	5500	503				
CIRCLING	960	1	525	960	1	525	960	1 1/2	525	1060	2	625				
NOTES: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15C (5F) OR ABOVE 41C (105F). CHART NOTE: DME/DME RNP-0.3 NA. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH ILS OR LOC RWY 5L, RNAV (GPS) Y RWY 5L, RNAV (RNP) Z RWY 5L. (CONTINUED ON PAGE 2)																
CITY AND STATE		ELEVATION: 435 TDZE: 420			FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 5R, AMDT 2B					SUP:				
RALEIGH/DURHAM, NC		AIRPORT NAME: RALEIGH-DURHAM INTL										AMDT: 2A				
												DATED 05/29/2014				

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE <div>ROUTINE</div>	
COORDINATED WITH: <div><div>ATA<div><input checked="" type="checkbox"/></div></div><div>AAT<div><input type="checkbox"/></div></div><div>ALPA<div><input checked="" type="checkbox"/></div></div><div>APA<div><input checked="" type="checkbox"/></div></div><div>AOPA<div><input checked="" type="checkbox"/></div></div><div>NBAA<div><input checked="" type="checkbox"/></div></div><div>OTHER (specify)<div><input checked="" type="checkbox"/>AIRPORT MANAGER, ZDC, RDU ATC</div></div></div>					
FLIGHT CHECKED BY					
NAME:				FIFO	DATE:
DEVELOPED BY					
NAME: <div><div><div>Digitally signed by</div><div>THOMAS L KIRKPATRICK</div><div>Jun 27, 2017</div></div><div>THOMAS L KIRKPATRICK</div></div>				FIFO AJV-5423	DATE: 06/27/2017
APPROVED BY					
NAME: <div><div>JULIE A. MORGAN</div><div>MANAGER</div></div>				FIFO AJV-5420	DATE:
CHANGES: 1. ADDED CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA. 2. CHANGED LPV DA TO LPV DA**. 3. CHANGED LNAV/VNAV DA/HAT FROM 690/270 TO 711/291 ALL CATS.					
REASONS: 1, 2. IAW MEMORANDUM FROM AFS-400 AUTHORIZING 1800 RVR FOR LPV AND GLS APPROACH PROCEDURES. 3. NEW CONTROLLING OBSTACLE.					

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
620 MSL	POBIC (DF) (RNP 1.00)		
POBIC	ZEBUL (TF) (FO) (RNP 1.00)	097.48 / 17.12	2600

NOTES, (CONT.):

CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.

CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA.

CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 AND LNAV CATS C/D VISIBILITY TO 1 3/8 MILE.

TAA

	FROM	TO	ALT
1.	322/30 CW 142/30 (NOPT)	PECIT (IF/IAF) (FB)	3400
2.	142/30 CW 232/30	FOGAP (IAF) (FB)	3400
3.	232/30 CW 322/30	MUTSE (IAF) (FB)	3400

CITY AND STATE

RALEIGH/DURHAM, NC

ELEVATION: 435

TDZE: 420

AIRPORT NAME:

RALEIGH-DURHAM INTL

FACILITY
IDENTIFIER:
RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) Y RWY 5R, AMDT 2B

SUP:

AMDT: 2A

DATED: 05/29/2014

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div>			
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	KRDU
RUNWAY	RW05R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05B
LTP/FTP LATITUDE	355152.6680N
LTP/FTP LONGITUDE	0784750.4180W
LTP/FTP ELLIPSOIDAL HEIGHT	+00891
FPAP LATITUDE	355255.6000N
FPAP LONGITUDE	0784632.7000W
THRESHOLD CROSSING HEIGHT (TCH)	00055.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0464
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
 <u>CRC REMAINDER</u>	 8EEAB43D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01211
FPAP ORTHOMETRIC HEIGHT	+01211

CITY AND STATE RALEIGH/DURHAM, NC	ELEVATION: 435 TDZE: 420 AIRPORT NAME: RALEIGH-DURHAM INTL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 5R, AMDT 2B	SUP:
				AMDT: 2A
				DATED: 05/29/2014

ALL AFFECTED PROCEDURES REVIEWED? <div><input type="checkbox"/> YES</div> <div><input type="checkbox"/> NO</div>		COORDINATES OF FACILITIES		REQUIRED EFFECTIVE DATE	
COORDINATED WITH:					
ATA <div><input type="checkbox"/></div>		AAT <div><input type="checkbox"/></div>	ALPA <div><input type="checkbox"/></div>	APA <div><input type="checkbox"/></div>	AOPA <div><input type="checkbox"/></div>
NBAA <div><input type="checkbox"/></div>		OTHER (specify) <div><input type="checkbox"/></div> <div></div>			
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.			
STRAIGHT-IN AREA		322/30 CW 142/30		PECIT		1. TOWER (37-001034)		353044.00N/0785841.00W		2149 (3C)		1000		AT251		3400			
						2. TERRAIN		355651.00N/0792606.00W		991 (1000)				AS1500		2500			
LEFT BASE AREA		142/30 CW 232/30		FOGAP		3. TOWER (37-000083)		355200.00N/0791000.00W		2049 (2C)		1000		AT351		3400			
						4. TERRAIN		361445.00N/0792451.00W		936 (900)				AS1500		2400			
RIGHT BASE AREA		232/30 CW 322/30		MUTSE		5. TOWER (37-002504)		354029.00N/0783139.00W		2349 (1A)		1000				3400			
						6. TERRAIN		354636.00N/0784700.00W		562 (600)				AS1500		2000			
INITIAL		MUTSE		PECIT		7. TOWER (37-000061)		353642.00N/0784825.00W		832 (5D)		1000		AT1568		3400			
						8. TERRAIN		353803.00N/0785106.00W		509 (500)				AS1500		2000			
INITIAL		FOGAP		PECIT		9. AAO		355130.00N/0790509.00W		870 (4E)		1000		AT1530		3400			
						10. TERRAIN		355130.00N/0790509.00W		670 (700)				AS1500		2200			
INTERMEDIATE		PECIT (IF/IAF)		PURME		11. AAO		354327.00N/0785236.00W		663 (4E)		500		AC98 AT1139		2400			
						12. TERRAIN		334327.00N/0785236.00W		463 (500)				AS1500		2000			
FINAL: LPV		PURME		RW05R								ASC				620/200			
FINAL: LNAV/VNAV		PURME		RW05R		13. TREE (37-080101)		355144.08N/0784730.54W		527 (1A)		23.44:1				711/291			
2. HOLD-IN-LIEU-OF-PT		PECIT		P-5		15. CL TWR (37-000881)		353805.00N/0785704.00W		786 (5D)		1000		AT1614		3400			
						16. TERRAIN		354403.00N/0790400.00W		499 (500)				AS1500		2000			
3. MISSED APPROACH	MAP:		DA / DA / RW05R		ZEBUL		17. C-TWR (37-001244)		355252.00N/0784709.00W		660 (1A)		ASC				2600		
	ELEV:		429/527/794				18. TOWER (37-001488)		355626.00N/0782844.00W		1549 (5D)				AC50		1600		
						19. TERRAIN		355546.11N/0784418.36W		549 (500)				AS1500		2000			
4. CIRCLING AREA		DISTANCE		HT. ABV. ARPT.															
CATEGORY A		1.3 NM		REQUIRED	350	ACTUAL	525	17. C-TWR (37-001244)		355252.00N/0784709.00W		660 (1A)		300		960			
CATEGORY B		1.5 NM			450		525	17. C-TWR (37-001244)		355252.00N/0784709.00W		660 (1A)		300		960			
CATEGORY C		1.7 NM			450		525	17. C-TWR (37-001244)		355252.00N/0784709.00W		660 (1A)		300		960			
CATEGORY D		2.3 NM			550		625	20. TANK (37-002936)		355507.53N/0784438.02W		680 (4D)		300		AC50 XP30		1060	
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				ELEVATION: 435				FACILITY				PROCEDURE AND AMENDMENT NO:				REGION			
RALEIGH/DURHAM, NC				AIRPORT NAME: RALEIGH-DURHAM INTL				RNAV				RNAV (GPS) Y RWY 5R, AMDT 2B				ASO			

PART B - SUPPLEMENTAL DATA										PART C - REMARKS: VGSI DATA: 3.00/55 CRITICAL TEMPERATURES: CRITICAL LOW :-15C (+5F) CRITICAL HIGH :+41C (+105F) CRITICAL TEMPERATURE REMARKS AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION CRITICAL LOW TEMPERATURE BASED ON EFFECTIVE GPA. SEE ATTACHED AIRSPACE LETTER. BACK UP ALTIMETER SOURCE NOT DEVELOPED DUE TO REDUNDANT SOURCES AT KRDU. ISA STANDARD (-30) UTILIZED DUE TO HISTORICAL DATA NOT AVAILABLE ON WEB SITE. IAPA CALCULATES INTERMEDIATE SEGMENT LEG LENGTH PER 8260.54. IAPA CALCULATES INITIAL TO INTERMEDIATE DTA AS 4.78 UTILIZING 3890 AS TF-TF CALCULATION ALTITUDE. MIN SEG LENGTH PER PBN MEMO IS 4.78. 19 DEGREE BANK ANGLE WITH 6390 TF-TF CALCULATION ALTITUDE UTILIZED, PER PBN MEMO, TO EVALUATE 90 DEGREE TURN AT MUTSE IAF TO REMAIN UNDER 10 NM. INITIAL LEG LENGTHS FOR TAA BASED ON FUTURE DEVELOPMENT OF RNAV STARS. DISCUSSION WITH 101 AND 110 MANAGEMENT RESULTED IN KEEPING LAST COMPUTED LEG LENGTH WHICH EXCEEDED THE 8260.45 MAXIMUM OF 10NM BY .58NM USING DOWNWINDS FURTHER FROM THE PARALLEL RUNWAY. 3/12/2012 THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 09/14/2011. PER BRAD RUSH KRDU ATCT DIRECTED SIMULTANEOUS OPERATION NOTES. ATC AGREES TO MAINTAIN SEPARATION OF AIRCRAFT AS DEPENDENT CRITERIA IS UTILIZED. XP - MAINTAIN CURRENT MINIMUMS TO BE CONSISTENT WITH OTHER APPROACHES	
1. COMMUNICATIONS WITH:		2. WEATHER SERVICE			3. ALTIMETER SETTING						
ZDC ARTCC RDU TOWER RDU APP CON			N W S	OTHER: ASOS		SOURCE: KRDU					
			F A A			DISTANCE:					
			A / C			HOURS REMOTE OPERATION:					
SATISFACTORY ON:											
X	V H F	X	U H F		H F	LOCATION: KRDU			ADJUSTMENT: 0		
4. MONITOR STATUS	PRIMARY NAVAID:										
	MONITOR POINT:										
	HRS OPTN:	CAT 1		CAT 3							
5. APPROACH & RUNWAY LIGHTING	X	ALSF-2 23R									
		(S) SALS									
	X	MALSR 05L, 05R, 23L									
	X	HIRL 05L, 05R, 23L, 23R									
	X	MIRL 14, 32									
	X	REIL 32									
	X	TDZ 05L, 23L, 23R									
	X	C/L 05L, 05R, 23L, 23R									
X	OTHER (SPECIFY) TAXI WAY 05L PAPI-4L 05L, 05R, 23L, 23R, 32										
6. RUNWAY MARKINGS		BASIC									
		ALL WEATHER		PIR-G 05L, 05R, 23L, 23R							
		INSTRUMENT		NPI-G 14, 32							
7. RUNWAY VISUAL RANGE		APPROACH		05L, 05R, 23L, 23R							
		MIDFIELD		05L, 23R							
		ROLL OUT		05L, 05R, 23L, 23R							
8. GLIDE PATH		GP ANGLE: 3.00				ELEV RWY THRESHOLD: 397.4					
		DISTANCE FROM RWY:				ELEV GP ANTENNA:					
						THRESHOLD CROSSING HEIGHT: 55.2					
9. FINAL APPROACH COURSE AIMING		X	RUNWAY THRESHOLD							FT. FROM THRESHOLD	
		X	ON CENTERLINE							FT. FROM CENTERLINE	
10. WAIVERS: NONE											
PART D - PREPARED BY: THOMAS L KIRKPATRICK						DATE: 06/27/2017					
TITLE: AERONAUTICAL INFORMATION SPECIALIST						OFFICE: AJV-5423					

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD		
--	--	--

PART - A OBSTRUCTION DATA

[illegible]

PART B - SUPPLEMENTAL DATA										PART C - REMARKS:	
1. COMMUNICATIONS WITH:				2. WEATHER SERVICE			3. ALTIMETER SETTING				
SATISFACTORY ON:					N W S	OTHER:		SOURCE:			
					F A A			DISTANCE:			
					A / C			HOURS REMOTE OPERATION:			
	V H F		U H F		H F	LOCATION:			ADJUSTMENT:		
4. MONITOR STATUS		PRIMARY NAVAID:									
		MONITOR POINT:									
		HRS	CAT 1								
		OPTN:	CAT 3								
5. APPROACH & RUNWAY LIGHTING			ALS								
			(S) SALS								
			MALS								
			HIRL								
			MIRL								
			REIL								
			TDZ								
			C/LINE								
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:	