

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks 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 feet RVR.

<u>AIRPORT</u> RALEIGH-DURHAM INTL	<u>AIRPORT ID</u> KRDU	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 5R	<u>ORIGINAL/AMENDMENT</u> 4	<u>CITY</u> RALEIGH/DURHAM	<u>STATE</u> NC
<u>AIRPORT ELEVATION</u> 435	<u>TDZE</u> 420	<u>SUPERSEDED</u> RNAV (GPS) Y RWY 5R	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 11/08/2018	<u>MAG VAR</u> 9W
<u>EPOCH YEAR</u> 2020					
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 25 FEBRUARY 2021	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	

TERMINAL ROUTES

THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 21-03.

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
OTTOS	IAF	BEICH		TF	FB	1.00	073.27	6.40	5000
BEICH	IAF	RATTY		TF	FB	1.00	054.02	3.14	4000
RATTY		PECIT		TF	FB	1.00	053.99	2.60	3000
PECIT	IF	PURME		TF	FB	1.00	054.11	3.04	2200
PURME	FAF	AMORT/1.40 NM TO RW05R		TF	FB	0.30	054.09	4.08	
AMORT/1.40 NM TO RW05R		RW05R	MAP	TF	FO	0.30	054.09	1.40	
RW05R	MAP	1000 MSL		CA			054.09		1000
1000 MSL		ZEBUL		DF	FO	1.00			2600

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW05R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 2600 DIRECT ZEBUL AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
18
CHECKED

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. PROFILE STARTS AT BEICH					
3. FAC:	054.09	FAF: PURME	DIST FAF TO MAP:	5.48	DIST FAF TO THLD: 5.48
4. MIN ALT: BEICH 5000, RATTY 4000, PECIT 3000, PURME 2200, AMORT/1.40 NM TO RW05R 900*					
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.52	GS ANT:
6. MIN GP INCPT:	2200	GP ALT AT FAF :	PURME 2200	OM:	MM: IM:
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 56.3	
8. MSA FROM: RW05R 3400					

PBN REQUIREMENTS NOTE:

RNP APCH - GPS. 

NOTES:

CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED.
CHART NOTE: LNAV PROCEDURE NA DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: USE OF FD OR AP REQUIRED DURING SIMULTANEOUS OPERATIONS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 AND LNAV CATS C/D VISIBILITY TO RVR 5500.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA
CHART SPEED ICON IN PLANVIEW AT OTTOS: MAX 210 KIAS.
CHART SPEED ICON IN PLANVIEW AT BEICH: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART MANDATORY 6000 AT OTTOS.
*LNAV ONLY.
HOLD E, RT, 271.06 INBOUND.
CHART FAS OBST: 527 TREE 355144N/0784731W.
643 AAO 354751N/0785206W.
DISTANCE TO THLD FROM 200 HAT: 0.52 NM.
WAAS CHANNEL # 90213
REFERENCE PATH ID: W05B
CHART CIRCLING ICON.
LTP HAE: 89.1 M



MINIMUMS:
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/2

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA**	620	2400	200	620	2400	200	620	2400	200	620	2400	200			
LNAV/VNAV DA	688	2400	268	688	2400	268	688	2400	268	688	2400	268			
LNAV MDA	780	2400	360	780	2400	360	780	4000	360	780	4000	360			
CIRCLING	960	1	525	960	1	525	1020	1 1/2	585	1180	2 1/2	745			

CHANGES - REASONS

1. DELETED TAA AND MUTSE (IAF)/FOGAP (IAF) - FPT REQUEST/CHECKLIST.
2. ADDED IAF TRANSITION FROM OTTOS TO PECIT (IF) - FPT CHECKLIST.
3. CHANGED PECIT (IF) TO PURME (FAF) COURSE/DISTANCE FROM 054.04/5.97 TO 054.11/3.04 - PECIT MOVED 3.56 NM NE/PURME MOVED 0.63 NM NE.
4. CHANGED DIST FAF TO MAP/THLD FROM 6.11 TO 5.48 - PURME (FAF) MOVED 0.63 NM NE.
5. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 2600 DIRECT POBIC AND ON TRACK 099.48 TO ZEBUL AND HOLD" TO "CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 2600 DIRECT ZEBUL AND HOLD." - PER FPT CHECKLIST/DESIGN.
6. LOWERED FAF ALTITUDE FROM 2400 TO 2200 - PER FPT CHECKLIST/DESIGN.
7. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -10C (14F) OR ABOVE 54C (130F)" TO "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12°C OR ABOVE 54°C" -5 YEAR HISTORY CHANGED FROM (2012-2016) TO (2014-2018).
8. REMOVED ALL HOLD-IN-LIEU INFORMATION FROM PROFILE LINE 2 ON 8260-3 - HOLD-IN-LIEU DELETED FROM PROCEDURE.
9. LOWERED LNAV/VNAV DA/HAT FROM 710/290 TO 688/268 - NEW OBSTACLE EVALUATION.
10. CHANGED CRC REMAINDER FROM "610CC6FE" TO "7591CC03" - FPAP LAT/LONG CHANGED/DESIGN TCH CHANGED..
12. FPAP LAT/LONG CHANGED FROM "355255.6040N/0784632.6980W" TO "355255.6025N/0784632.6965W" - TARGETS EVALUATION RESULTS/DESIGN TCH CHANGED.
13. LOWERED CIRCLING CAT C MDA/HAA FROM 1040/605 TO 1020/585 - NEW OBSTACLE EVALUATION.
14. LOWERED MIN ALTITUDE AT PECIT FROM 3400 TO 3000 - PER FPT CHECKLIST/DESIGN.
15. ADDED "PROFILE STARTS AT PECIT" TO PROFILE LINE 2 8260-3 - HOLD-IN-LIEU DELETED FROM PROCEDURE.
16. CHANGED FAF (PURME) TO SDF (AMORT) DISTANCE FROM 4.71 TO 4.07 - PURME MOVED 0.64 NM NE.
17. RAISED LNAV CAT C/D VISIBILITY FROM RVR 3000 TO RVR 4000 - NEW VISCHECK VALUES.
18. LOWERED CIRCLING CAT C VISIBILITY FROM 1 3/4 TO 1 1/2 - NEW VISCHECK VALUES.

04/28/2020: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON: 12/20/2019:

1. CHANGED PROFILE LINE 2 FROM "PROFILE STARTS AT PECIT" TO "PROFILE STARTS AT BEICH."
2. CHANGED PROFILE LINE 4 FROM "PECIT 3000, PURME 2200, AMORT/1.40 NM TO RW05R 900*" TO "BEICH 5000, RATTY 4000, PECIT 3000, PURME 2200, AMORT/1.40 NM TO RW05R 900*."
3. ADDED IAF TO BEICH IN TERMINAL ROUTES.

01/06/2021: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON: 11/09/2020:

1. CHANGED "LPV DA" TO "LPV DA****" UNDER FINAL TYPE.

1/12/2021: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/9/2020.

- 1.CORRECTED PBN REQUIREMENT NOTE TO ADD "GPS".



COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZDC, AMGR, RDU ATC.

FLIGHT CHECKED BY

THOMAS ROBERT CONKLIN

Digitally signed by

JON DENTON

OFFICE

FIOG

DATE

03/04/2020

Digitally signed by

Jan 06, 2021

DEVELOPED BY

WARDELL HENNING (THERON CYRUS)

JON DENTON

Jan 06, 2021

OFFICE

AJV-A432

DATE

12/20/2019

APPROVED BY

LONNIE EVERHART

Digitally signed by

JON DENTON

Jan 06, 2021

OFFICE

AJV-A430

DATE

TITLE

MANAGER



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	0784750.4170W
LTP/FTP ELLIPSOIDAL HEIGHT	+00891
FPAP LATITUDE	355255.6025N
FPAP LONGITUDE	0784632.6965W
THRESHOLD CROSSING HEIGHT (TCH)	00056.3
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
CRC REMAINDER	781BA253

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+01212
FPAP ORTHOMETRIC HEIGHT	+01212

