

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> DARLINGTON COUNTY	<u>AIRPORT ID</u> KUDG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-D	<u>CITY</u> DARLINGTON	<u>STATE</u> SC	
<u>AIRPORT ELEVATION</u> 192	<u>TDZE</u> 189	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>DATED</u> 04/28/2016	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<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>
FLO VORTAC		WOMUT		TF	FO	1.00	289.56	19.80	2000
WARNR		WOMUT		TF	FO	1.00	196.95	9.79	2000
WOMUT	IF/IAF	UMAGE		TF	FB	1.00	049.56	6.10	1800
UMAGE	FAF	RW05	MAP	TF	FO	0.30	049.60	4.83	
RW05	MAP	493 MSL		CA	FB		049.60		
493 MSL		PIDCI		DF	FB	1.00			
PIDCI		DUNGY		TF	FO	1.00	079.35	11.45	2000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 DIRECT PIDCI AND ON TRACK 079.35 TO DUNGY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SW WOMUT, RT, 049.56 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 049.60

FAF: UIMAGE

DIST FAF TO MAP: 4.83

DIST FAF TO THLD: 4.83

4. MIN ALT: WOMUT 2000, UIMAGE 1800

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

304 HAT: 0.79

GS ANT:

6. MIN GP INCPT: 1800

GP ALT AT FAF : UIMAGE 1800

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 52.0

8. MSA FROM: RW05 3200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON FLO VORTAC AIRWAY RADIALS 224 CW 006.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.00 NM TO RW05*
*LNAV ONLY
WAAS CHANNEL #42704
REFERENCE PATH ID: W05A
CHART FAS OBST: 292 TREE 342620N/0795332W.
HOLD S, RT, 009.31 INBOUND
LTP HAE: 25.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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	493	1	304	493	1	304	493	1	304	493	1	304			
LNAV/VNAV DA	562	1 1/4	373	562	1 1/4	373	562	1 1/4	373	562	1 1/4	373			
LNAV MDA	560	1	371	560	1	371	560	1	371	560	1 1/4	371			
CIRCLING	640	1	448	660	1	468	660	1 1/2	468	760	2	568			



CHANGES - REASONS

- 1. INCORPORATED P-NOTAMS FDC 4/5166, 5/8145, AND 6/2442 UPDATING BACK-UP ALTIMETER SETTING NOTE, NIGHT LANDING NOTE, HELICOPTER VISIBILITY NOTE, PROCEDURE NA NOTE, VDP NOTE, AND AIRPORT NAME CHANGE - UPDATED AIRPORT/SURVEY DATA AND IAW 8260.19H.
- 2. UPDATED DISTANCE FROM FLO VORTAC TO WOMUT FROM 19.81 TO 19.80 - RECALCULATED DISTANCE.
- 3. UPDATED MISSED APPROACH INSTRUCTIONS FROM CLIMB TO 2000 DIRECT PIDCI AND VIA 079.35 TRACK TO DUNGY AND HOLD TO CLIMB TO 2000 DIRECT PIDCI AND ON TRACK 079.35 TO DUNGY AND HOLD - IAW 8260.19H PARA 8-6-6 D (11).
- 4. MOVED DISTANCE TO THLD FROM 304 HAT FROM ADDITIONAL FLIGHT DATA TO PROFILE LINE 5 - IAW 8260.19H PARA 8-6-7 E.
- 5. ADDED MAX ALTITUDE 6000 TO WOMUT HOLD-IN-LIEU - IAW 8260.19H PARA 8-6-7 B (2).
- 6. CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR AND ADDED 20:1 IS CLEAR - IAW 8260.19H PARA 8-6-7 G (3).
- 7. DELETED CHART NOTE DME/DME RNP -0.3 NA AND ADDED PBN REQUIREMENTS NOTE RNP APCH - IAW 8260.19H PARA 8-6-8 B (1).
- 8. CHANGED CHART NOTE FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C (5F) OR ABOVE 48°C (118F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C - IAW 8260.19H PARA 8-6-9 (S).
- 9. REMOVED BACK-UP ALTIMETER SETTING NOTE AND BARO-VNAV AND VDP NA NOTE WHEN USING FLORENCE ALTIMETER SETTING - AWOS IS ON WMSCR, NOTE ADDED TO 8260-9 FOR CONTINGENCY USE..
- 10. DELETED NA WHEN LOCAL WEATHER NOT AVAILABLE - IAW 8260.19H PARA 8-6-9 F.
- 11. UPDATED CIRCLING CAT A MDA/HAA FROM 620/428 TO 640/448 - NEW CONTROLLING OBSTACLE/UPDATED SURVEY.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** FLO APP CON, AIRPORT MANAGER, ZJX, ZDC

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

FRANK JACKSON JR

Digitally signed by
FRANK JACKSON
Nov 16, 2018

OFFICE

AJV-5432

DATE

10/04/2018

APPROVED BY

PATRICK MULQUEEN

OFFICE

AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KUDG
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	342631.2730N
LTP/FTP LONGITUDE	0795333.7885W
LTP/FTP ELLIPSOIDAL HEIGHT	+00257
FPAP LATITUDE	342735.8500N
FPAP LONGITUDE	0795219.4300W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CF09FDA1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K7
LTP ORTHOMETRIC HEIGHT	+00575
FPAP ORTHOMETRIC HEIGHT	+00575



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
DARLINGTON COUNTY	KUDG	RNAV (GPS) RWY 5	ORIG-D	DARLINGTON	SC	192	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM FLO VORTAC TO WOMUT

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	19.80										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.TOWER (45-000081)	341618.00N/0794333.00W	948	20	3	1A	1000					2000
2.TERRAIN	342000.00N/0800054.00W	207 (200)								AS1500	1700

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER

FROM WARNR TO WOMUT

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	9.79										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.TOWER (45-000901)	341745.00N/0800140.00W	711	50	20	2C	1000				AT289	2000
4.TERRAIN	342742.00N/0800300.00W	348 (300)								AS1500	1800

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH : LNAV/VNAV

FROM

DA

TO

DUNGY

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 401					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
								ASC				2000
9.TOWER (45-002463)	343101.80N/0793859.30W		428	50	20	2C	1000					1500
10.TERRAIN	343024.00N/0795121.00W		178 (200)								AS1500	1700

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM

RW05

TO

DUNGY

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 460					
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
								ASC				2000
9.TOWER (45-002463)	343101.80N/0793859.30W		428	50	20	2C	1000					1500
10.TERRAIN	343024.00N/0795121.00W		178 (200)								AS1500	1700

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
11.TOWER (45-021267)	342612.40N/0795246.46W	1.30	448	321	20	3	1A	300			640
CATEGORY B											
11.TOWER (45-021267)	342612.40N/0795246.46W	1.50	468	321	20	3	1A	300		HAA	660
CATEGORY C											
11.TOWER (45-021267)	342612.40N/0795246.46W	1.70	468	321	20	3	1A	300		HAA	660
CATEGORY D											
12.TOWER (45-000108)	342851.27N/0795136.20W	2.30	568	404	20	3	1A	300		XP56	760

CIRCLING REMARKS:

CIRCLING AREA DIMENSIONS CHANGED DUE TO THE DISMANTLING OF RWYS 10/28 AND 16/34.
XP: RETAIN CURRENT MINIMUMS, ACCURACY CODE UPDATED.

MSA

CENTER

RW05

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (45-000481)	342205.00N/0791920.00W	105	28.7	2114	500	50	5D	1000			3200

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

VEGETATION HEIGHT 100' PER FPT.



PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

CONTINGENCY ALTIMETER NOTE FOR FLORENCE:
WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FLORENCE ALTIMETER SETTING AND INCREASE LPV DA TO 541, LNAV/VNAV DA TO 610 AND ALL MDA 60 FEET; INCREASE LNAV CAT C VISIBILITY 1/8 SM.
BARO-VNAV AND VDP NA WHEN USING FLORENCE ALTIMETER SETTING.



PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.01
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	043.60
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	199
DISTANCE FROM	THLD	TO 1500FT POINT	4.63
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	043.60
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	199

THRESHOLD
COORDINATES
(IF STR-IN)342631.27N/0795333.79W

ARP COORDINATES342657.78N/0795324.22W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP RUNWAY 23 DISTANCE 0.54 NM

FAF
COORDINATES342301.21N/0795735.33W

FIX NAME
COORDINATES

REMARKS
NO ADDITIONAL AIRSPACE REQUIRED.



<u>AIRPORT</u> DARLINGTON COUNTY	<u>AIRPORT ID</u> KUDG	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>AMDT NO.</u> ORIG-D	<u>CITY</u> DARLINGTON	<u>STATE</u> SC	<u>AIRPORT ELEVATION</u> 192	<u>FACILITY</u> RNAV
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PART E: PREPARED BY

<u>NAME</u> FRANK JACKSON JR	<u>OFFICE</u> AJV-5432	<u>DATE</u> 10/04/2018	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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