

**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> PRINCETON	<u>AIRPORT ID</u> 39N	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> PRINCETON/ROCKY HILL	<u>STATE</u> NJ	
<u>AIRPORT ELEVATION</u> 128	<u>TDZE</u> 128	<u>SUPERSEDED</u> RNAV (GPS) RWY 10	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 06/22/2017	<u>MAG VAR</u> 13W	<u>EPOCH YEAR</u> 2005
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 21 MAY 2020	<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>
SBJ VOR/DME		WATIB		TF	FB	1.00	270.79	8.75	2700
WATIB	IAF	FOLAM		TF	FB	1.00	187.38	9.36	2700
DIRPE	IAF	FOLAM	NOPT	TF	FB	1.00	152.65	6.01	2700
FOLAM	IF/IAF	CUPAY		TF	FB	1.00	102.17	6.71	1800
CUPAY	FAF	HODAB/2.20 NM TO RW10		TF	FB	0.30	102.27	2.25	
HODAB/2.20 NM TO RW10		RW10	MAP	TF	FO	0.30	102.27	2.20	
RW10	MAP	441 MSL		CA			102.27		
441 MSL		JETOR		DF	FO	1.00			2700

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW10

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2700 DIRECT JETOR AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
24
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W FOLAM, RT, 102.17 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 102.27 FAF: CUPAY DIST FAF TO MAP: 4.45 DIST FAF TO THLD: 4.45

4. MIN ALT: FOLAM 2700, CUPAY 1800, HODAB/2.20 NM TO RW10 960*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 313 HAT: 0.74 GS ANT: MM: IM:

6. MIN GP INCPT: 1800 GP ALT AT FAF : CUPAY 1800 OM:

7. GP ANGLE: 3.45 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH: 51.0

8. MSA FROM: RW10 2700

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: BARO-VNAV NA.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*LNAV ONLY
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SBJ VOR/DME AIRWAY RADIALS 237 CW 309.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: USE TRENTON ALTIMETER SETTING

ADDITIONAL FLIGHT DATA:

CHART TRENTON MERCER ASOS
CHART CIRCLING ICON
WAAS CHANNEL #86843
REFERENCE PATH ID: W10A
CHART FAS OBST: 321 TREE 402317N/0744202W.
HOLD E, RT, 282.50 INBOUND
LTP HAE: 3.2 M

MINIMUMS:

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

ALTERNATE: NA ☒

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	441	1	313	441	1	313	441	1	313	441	1	313			
LNAV/VNAV DA	533	1 1/8	405	533	1 1/8	405	533	1 1/8	405	533	1 1/8	405			
LNAV MDA	580	1	452	580	1	452	580	1 3/8	452	580	1 3/8	452			
CIRCLING	760	1	632	840	1	712	940	2 1/2	812	1000	2 3/4	872			



CHANGES - REASONS

1. ADDED "RNP APCH" TO PBN REQUIREMENTS NOTES - IAW 8260.19H, PARA 8-6-8B(1) AND MEMO 266 DATED 7/18/2018.
2. DELETED "CHART NOTE: DME/DME RNP-0.3 NA" - IAW 8260.19H, PARA 4-6-10E AND MEMO 266 DATED 7/18/2018.
3. CHANGED CHART NOTE FROM "USE TRENTON MERCER ALTIMETER SETTING; WHEN NOT RECEIVED, USE SOMERSET ALTIMETER SETTING" TO "USE TRENTON ALTIMETER SETTING" -AND REMOVED ALL NOTES REFERENCING THE BACK-UP ALTIMETER SETTING - LOCAL WEATHER TRANSMITTED ON WMSCR AND DEEMED RELIABLE, SECONDARY ALTIMETER NOT DEVELOPED, REDUNDANT SOURCES.
4. CHANGED 8260.3 LINE 4 FROM "860" TO "960*" - CHANGED HODAB FINAL SDF MIN ALTITUDE. ADDED LPV AND LNAV/VNAV, DOCUMENTED IAW 8260.19H, PARA 8-6-7D.
5. UPDATED FROM VDA/TCH 3.00/45 TO GP/TCH 3.45/51 - MATCHED VGSI ANGLE, TCH RAISED TO MITIGATE VGS PENETRATIONS DOCUMENTED IAW 8260.19H, PARA 8-6-7G(1) AND (2).
6. ADDED "20:1 IS NOT CLEAR" - IAW 8260.19H, PARA 8-6-7G(3).
7. ADDED "CHART NOTE: BARO-VNAV NA" - IAW 8260.19H PARA 8-6-9-E(8).
8. ADDED "CHART CIRCLING ICON" TO ADDITIONAL FLIGHT DATA - NEW CIRCLING CRITERIA APPLIED.
9. DELETED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT ARD VOR/DME ON V214-433 SOUTHWEST BOUND" - ARD VOR/DME REMOVED FROM PROCEDURE, FPT CHECKLIST.
10. ADDED LPV AND LNAV/VNAV MINIMUMS AND ASSOCIATED DOCUMENTATION- AIRPORT REMOVED TREES TO ALLOW FOR LPV AND LNAV/VNAV MINIMUMS, FPT CHECKLIST.
11. ADDED CAT D MINIMUMS - PER FPT CHECKLIST.
12. CHANGED CA LEG ALTITUDE FROM 528 MSL TO 441 MSL - UPDATED EVALUATION BASED ON LPV DA.
13. LOWERED CIRCLING CAT A MDA/HAA FROM 780/652 TO 760/632 - NEW OBSTACLE DATA.
14. RAISED CIRCLING CAT B MDA/HAA FROM 800/672 TO 840/712, CIRCLING CAT C MDA/HAA FROM 860/732 TO 940/812 - APPLIED NEW CIRCLING CRITERIA, NEW OBSTACLE DATA.
15. RAISED CIRCLING CAT C VISIBILITY FROM 2 TO 2 1/2 - UPDATED EVALUATION, MDA RAISED.
16. REMOVED ARD VOR/DME FEEDER TO HILOG INITIAL SEGMENT - FPT CHECKLIST, DUE TO ATC NON USE.
17. REMOVED HILOG TO FOLAM INITIAL SEGMENT - FPT CHECKLIST, DUE TO ATC NON USE.
18. REMOVED INITIAL FROM TECUT - SEGMENT LENGTHENED PER FPT REQUEST, EXTENDS TO NEW FIX WATIB.
19. ADDED NEW SEGMENT FROM SBJ VOR/DME TO WATIB TO FOLAM - FPT REQUEST TO SOFTEN TURN ANGLE AND MEET MINIMUM LEG LENGTHS REQUIREMENTS.
20. ADDED NEW TRANSTITION FROM DIRPE TO FOLAM - PROVIDES SHORTER ROUTE, FPT REQUEST.
21. CHANGED FOLAM INTERMEDIATE TO CUPAY FINAL SEGMENT DISTANCE FROM 6.1 NM TO 6.71 NM - CHANGED DESCENT ANGLE FROM 3.00 TO 3.45 THIS MOVED THE PFAF CUPAY 0.62 NM EAST.
22. CHANGED CUPAY FINAL TO HODAB STEPDOWN SEGMENT COURSE/DISTANCE FROM 102.26/2.86 TO 102.27/2.25 - CHANGED DESCENT ANGLE FROM 3.00 TO 3.45 THIS MOVED THE PFAF CUPAY 0.62 NM EAST.
23. CHANGED HODAB/2.20 NM STEPDOWN TO RW10 SEGMENT COURSE AND MISSED APPROACH POINT COURSE FROM 102.26 TO 102.27 - UPDATED EVALUATION BASED ON CUPAY MOVED 0.62 NM EAST.
24. CHANGED "DIST FAF TO MAP/THLD 5.06" TO "DIST FAF TO MAP/THLD: 4.45" - IAW 8260.19H, PARA 8-6-7C(3) AND (4).
25. CHANGED "CHART NOTE: RWY 10, 28 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "CHART NOTE: RWY 10 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED." - VISIBILITY REDUCTION APPLIES TO THE STRAIGHT IN RWY ONLY.
26. ADDED MAX HOLDING 6000 AT FOLAM - MAX ALTITUDE FROM 8260-2.
27. CHANGED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SBJ VOR/DME AIRWAY RADIAL 237 CW 295" TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON SBJ VOR/DME AIRWAY RADIAL 237 CW 309" - MAXIMUM ALLOWABLE COURSE CHANGE IS 90 DEGREES, AIRWAY AT 309 RADIAL IS MORE THAN A 90 DEGREE TURN WHICH IS PROHIBITED, DOCUMENTED IAW 8260.19H PARA 8-2-5(E).
28. CHANGED MSA FROM 2600 TO 2700 - NEW OBSTACLE EVALUATION.

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZNY, NY TRACON, AIRPORT MANAGER

FLIGHT CHECKED BY

BOB S PRESSLER

Digitally signed by
DAVID TEFFETELLER

Mar 24, 2020

OFFICE

FICO

DATE

3/8/2020

DEVELOPED BY

DAVID TEFFETELLER (GUY COPELAND)

Digitally signed by
DAVID TEFFETELLER

Mar 24, 2020

OFFICE

AJV-A433

DATE

11/11/2019

APPROVED BY

GEORGE DAVIS

Digitally signed by
DAVID TEFFETELLER

Mar 24, 2020

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	39N
RUNWAY	RW10
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W10A
LTP/FTP LATITUDE	402356.5190N
LTP/FTP LONGITUDE	0743955.0355W
LTP/FTP ELLIPSOIDAL HEIGHT	+00032
FPAP LATITUDE	402357.5420N
FPAP LONGITUDE	0743758.4190W
THRESHOLD CROSSING HEIGHT (TCH)	00051.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.45
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1680
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	F08496E8

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00366
FPAP ORTHOMETRIC HEIGHT	+00366

