

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> TIOGA MUNI	<u>AIRPORT ID</u> D60	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> TIOGA	<u>STATE</u> ND	
<u>AIRPORT ELEVATION</u> 2271	<u>TDZE</u> 2253	<u>SUPERSEDED</u> RNAV (GPS) RWY 12	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 01/02/2020	<u>MAG VAR</u> 8E	<u>EPOCH YEAR</u> 2015
<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>
ERUVE		CAKDU		TF	FO	1.00	294.80	28.58	4200
FONIA		CAKDU		TF	FO	1.00	000.06	15.77	4100
CAKDU	IF/IAF	CAGTA		TF	FB	1.00	125.08	6.50	4000
CAGTA	FAF	CALUL/2.30 NM TO RW12		TF	FB	0.30	125.17	3.08	
CALUL/2.30 NM TO RW12		RW12	MAP	TF	FO	0.30	125.17	2.30	
RW12	MAP	2720 MSL		CA			125.17		2720
2720 MSL		ERUVE		DF	FO	1.00			5000

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW12

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2720 THEN CLIMBING LEFT TURN TO 5000 DIRECT ERUVE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD NW CAKDU, RT, 125.08 INBOUND, 4100 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 125.17 FAF: CAGTA DIST FAF TO MAP: 5.38 DIST FAF TO THLD: 5.38
4. MIN ALT: CAKDU 4100, CAGTA 4000, CALUL/2.30 NM TO RW12 3000*
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.68 GS ANT: MM: IM:
6. MIN GP INCPT: 4000 GP ALT AT FAF : CAGTA 4000 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 45.0
8. MSA FROM: RW12 4100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 3 AND 21.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -19°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART: 2941 WINDMILL 482757N/1025844W
CHART CIRCLING ICON.
CHART VDP AT 1.61 NM TO RW12*
*LNAV ONLY
WAAS CHANNEL #82139
REFERENCE PATH ID: W12A
CHART FAS OBST: 2520 CRANE 482359N/1025444W.
HOLD E, RT, 260.84 INBOUND
LTP HAE: 664.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4

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	2503	1	250	2503	1	250	2503	1	250	2503	1	250			
LNAV/VNAV DA	2819	2	566	2819	2	566	2819	2	566	2819	2	566			
LNAV MDA	2780	1	527	2780	1	527	2780	1 1/2	527	2780	1 1/2	527			
CIRCLING	2820	1	549	2980	1	709	2980	2	709	3000	2 1/4	729			

QUALITY
6
CHECKED

CHANGES - REASONS

1. IF/IAF LEG CHANGED TO 4100 DUE TO NEW CONTROLLING OBSTRUCTION - MEET MINIMUM CLEARANCE.
2. MISSED APPROACH CA LEG ALTITUDE CHANGED FROM 2700 TO 2720 - SECTION 1 END ALTITUDE UPDATED TO 2703. CA LEG ALTITUDE RAISED TO MEET CRITERIA.
3. UPDATED MISSED APPROACH INSTRUCTIONS FROM CLIMB TO 2700 THEN CLIMBING LEFT TURN TO 5000 DIRECT ERUVE AND HOLD TO CLIMB TO 2720 THEN CLIMBING LEFT TURN TO 5000 DIRECT ERUVE AND HOLD - MATCH CA ALTITUDE.
4. UPDATED HOLD IN LIEU MINIMUM ALTITUDE IN PROFILE VIEW FROM 4000 FT TO 4100 FT - INCORPORATE ORIG-A P-NOTAM.
5. REMOVED NA WHEN LOCAL WEATHER NOT AVAILABLE - BACKUP ALTIMETER REMOVED FROM PROCEDURE.
6. ADDED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA - BACKUP ALTIMETER REMOVED FROM PROCEDURE.
7. REMOVED *LNAV ONLY FROM NOTES SECTION - DUPLICATION FROM ADDITIONAL FLIGHT DATA SECTION.
8. ADDED CHART: 2941 WINDMILL 482757N/1025844W TO ADDITIONAL FLIGHT DATA - DOCUMENT/CHART PFAF TO SDF 7:1 ELIMINATED OBST.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

DEVELOPED BY

RALPH P. MILLER

Digitally signed by

RALPH P MILLER

Feb 24, 2020

APPROVED BY

MARLON ROBINSON

Digitally signed by

DAVID DANNER

Feb 27, 2020

OFFICE

Digitally signed by

DATE

DAVID DANNER

Feb 27, 2020

OFFICE

AJV-A421

DATE

01/16/2020

OFFICE

AJV-A420

DATE

TITLE

MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	D60
RUNWAY	RW12
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W12A
LTP/FTP LATITUDE	482303.9370N
LTP/FTP LONGITUDE	1025416.7165W
LTP/FTP ELLIPSOIDAL HEIGHT	+06646
FPAP LATITUDE	482202.9300N
FPAP LONGITUDE	1025239.3725W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1192
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 CRC REMAINDER	 81503273

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+06829
FPAP ORTHOMETRIC HEIGHT	+06829