

**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> ELMIRA/CORNING RGNL	<u>AIRPORT ID</u> KELM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> 3C	<u>CITY</u> ELMIRA/CORNING	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 955	<u>TDZE</u> 944	<u>SUPERSEDED</u> RNAV (GPS) RWY 28	<u>ORIGINAL/AMENDMENT</u> 3B	<u>DATED</u> 10/16/2014	<u>MAG VAR</u> 12W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 31 DECEMBER 2020	<u>REQUIRED EFFECTIVE DATE</u> 12/31/2020	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 191/30 CW 011/30	NOPT	CEKAN	IAF	4000
2. 011/30 CW 191/30		011/10 CW 191/10	IF/IAF	4900
3. 011/10 CW 191/10		CEKAN		4000

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
CEKAN	IF/IAF	FIDON		TF	FB	1.00	281.49	6.00	3400
FIDON	FAF	ZIGAN/4.10 NM TO RW28		TF	FB	0.30	281.40	3.22	
ZIGAN/4.10 NM TO RW28		RW28	MAP	TF	FO	0.30	281.40	4.10	
RW28	MAP	1355 MSL		CA			281.40		
1355 MSL		MIXUE		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LP: RW28
LNAV: RW28

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT MIXUE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
2. HOLD E CEKAN, RT, 281.49 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 281.40 **FAF:** FIDON **DIST FAF TO MAP:** 7.32 **DIST FAF TO THLD:** 7.32
4. **MIN ALT:** CEKAN 4000, FIDON 3400, ZIGAN/4.10 NM TO RW28 2320
5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **GS ANT:**
6. **MIN GP INCPT:** **GP ALT AT FAF :** **OM:** **MM:** **IM:**
7. **GP ANGLE:** **34:1:** IS NOT CLEAR **20:1:** IS CLEAR **TCH:**
8. **MSA FROM:**

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

- CHART NOTE: CIRCLING NA FOR CAT D S OF RWYS 10 AND 28.
- CHART NOTE: RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
- CHART NOTE: CIRCLING RWY 10 NA AT NIGHT.
- CHART NOTE: CIRCLING NA TO RWYS 5 AND 23.

ADDITIONAL FLIGHT DATA:

HOLD W, RT, 101.08 INBOUND.
 CHART FAS OBST: 1237 TOWER 420913N/0765043W.
 FAS OBST: 1695 AAO 420931N/0764737W.
 1720 AAO 420939N/0764710W.
 CHART VDP AT 1.74 NM TO RW28.
 WAAS CHANNEL # 77730
 REFERENCE PATH ID: W28A
 CHART CIRCLING ICON.
 CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
 LTP HAE: 254.8 M

MINIMUMS:

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

ALTERNATE: NA CAT A 1100-2, CAT B 1200-2, CAT C 1200-3, CAT D 1400-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
	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
LP MDA	1540	1	596	1540	1	596	1540	1 3/4	596	1540	1 3/4	596			
LNAV MDA	1960	1 1/4	1016	1960	1 1/2	1016	1960	3	1016	1960	3	1016			
CIRCLING	2020	1 1/4	1065	2080	1 1/2	1125	2100	3	1145	2340	3	1385			

QUALITY
 23
 CHECKED

CHANGES - REASONS

1. REMOVED DME/DME RNP-0.3 NA NOTE, ADDED RNP APCH TO EQUIPMENT REQUIREMENTS SECTION - RNAV APPROACH REQUIRES ANNOTATION OF PBN NAVSPEC.
2. CHANGED ALTERNATE MINIMUMS FROM "CAT AB 1200-2, CAT C 1200-3, CAT D 1300-3" TO "CAT A 1100-2, CAT B 1200-2, CAT C 1200-3, CAT D 1400-3" - DECREASED CIRCLING CAT A/B/C HAA AND INCREASED CIRCLING CAT D HAA.
3. CHANGED CHART NOTE "HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" TO "RWY 28 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - IAW 8260.19H, PARA 8-6-11K(3), 34:1 PENETRATIONS EXIST.
4. ADDED "20:1 IS CLEAR" TO 8260.3 LINE 7 - IAW 8260.19H, PARA 8-6-7G(3).
5. CHANGED "CHART VDP AT 1.75 NM TO RW28" TO "CHART VDP AT 1.74 NM TO RW28" - NEW EVALUATION.
6. ADDED CHART NOTE: CIRCLING NA TO RWYS 5 AND 23. - RUNWAYS 5 AND 23 IDENTIFIED AS TURF RUNWAYS.
7. REMOVED ALL NOTES REFERENCING THE BACK-UP ALTIMETER SETTING - LOCAL WEATHER TRANSMITTED ON WMSCR AND DEEMED RELIABLE, NOTES MOVED TO FORM 8260-9 FOR CONTINGENCY USE.
8. INCREASED TAA SECTOR 2 ALTITUDE FROM 4100 TO 4900 AND ADDED 10 NM STEPDOWN ARC - SEGMENT HAS PRECIPITOUS TERRAIN, FULL ROC REQUIRED, STEPDOWN ARC LOWERED ALTITUDE TO 4000.
9. REMOVED 3.11/40.0 VDA FROM ADDITIONAL FLIGHT DATA; ADDED "CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES" - FLIGHT INSPECTION VALIDATION HAS DETERMINED THAT A VDA/TCH MUST NOT BE SPECIFIED ON THE CHART DUE TO OBSTACLES IN VISUAL AREA, IAW 8260.19H PARA 8-6-10P(1).
10. INCREASED LNAV MDA/HAT FROM 1880/936 TO 1960/1016 AND INCREASED CAT B VISIBILITY FROM 1 1/4 TO 1 1/2 AND CAT C/D FROM 2 1/2 TO 3 - NEW EVALUATION.
11. ADDED "CHART CIRCLING ICON" TO ADDITIONAL FLIGHT DATA; DECREASED CAT A CIRCLING MDA/HAA FROM 2100/1145 TO 2020/1065, CAT B FROM 2100/1145 TO 2080/1125, CAT C FROM 2120/1165 TO 2100/1145; INCREASED CAT D FROM 2160/1205 TO 2340/1385 - NEW EVALUATION, IAW 8260.3D NEW CIRCLING CRITERIA APPLIED.
12. ADDED CAT D CIRCLING RESTRICTION - PROVIDES OBSTACLE AVOIDANCE TO RESULT IN LOWEST POSSIBLE MDA/HAA.
13. ADDED MAX HOLD-IN-LIEU ALTITUDE OF 6000 TO PROFILE LINE 2 - IAW 8260.19H PARA 8-6-7B (2).
14. CHANGED LP FAS OBSTACLE FROM 1238 TOWER 420914N/0765049W TO 1237 TOWER 420939N/0764710W - NEW OBSTACLE EVALUATION.
15. CHANGED LNAV FAS OBSTACLE FROM 1626 TOWER 420854N/0765132W TO 1695 AAO 420931N/0764737W - NEW OBSTACLE EVALUATION, NEW LNAV FAS OBSTACLE IS ALSO LP 7:1 OBSTACLE.
16. CHANGED CRC REMAINDER FROM 7CA76B34 TO C8AB8813 - FLIGHT CHECK REMOVED THE VDA FROM THIS PROCEDURE DUE TO OBSTACLES.
17. ADDED 7:1 OBSTACLE 1720 AAO 420939N/0764710W - NEW EVALUATION.

COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA** **OTHER:** ELM APP CON, ZNY ARTCC, ZOB ARTCC, ELM ATCT, APT MGR

FLIGHT CHECKED BY

Pending

Digitally signed by
DAVID TEFFETELLER
Oct 13, 2020

OFFICE
FICO

DATE

DEVELOPED BY
DIANE S LAIR

Digitally signed by
DIANE S LAIR
Jul 07, 2020

OFFICE
AJV-A433

DATE
02/10/2020

APPROVED BY
GEORGE DAVIS

Digitally signed by
DAVID TEFFETELLER
Oct 13, 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	KELM
RUNWAY	RW28
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28A
LTP/FTP LATITUDE	420928.6900N
LTP/FTP LONGITUDE	0765304.1965W
LTP/FTP ELLIPSOIDAL HEIGHT	+02548
FPAP LATITUDE	420927.5685N
FPAP LONGITUDE	0765503.9845W
THRESHOLD CROSSING HEIGHT (TCH)	00000.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	00.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	0.0
CRC REMAINDER	C8AB8813

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+02877
FPAP ORTHOMETRIC HEIGHT	+02877

