

**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 ID</u> KAXN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> ALEXANDRIA	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1425	<u>TDZE</u> 1424	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 4E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 045/30 CW 225/30	NOPT	MMOLY	IF/IAF	3300
2. 225/30 CW 045/30		225/20 CW 045/20		3600
3. 225/20 CW 045/20		MMOLY	IF/IAF	3300

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
MMOLY	IF/IAF	DONCL		TF	FB	1.00	135.18	6.00	3000
DONCL	FAF	TODRT/1.60 NM TO RW13		TF	FB	0.30	135.25	3.27	
TODRT/1.60 NM TO RW13		RW13	MAP	TF	FO	0.30	135.25	1.60	
RW13	MAP	1674 MSL		CA			135.25		
1674 MSL		WUNYE		DF	FO	1.00			3600

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3600 DIRECT WUNYE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



AIRPORT ID
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PROCEDURE NAME
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ORIGINAL/AMENDMENT
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CITY
ALEXANDRIA

STATE
MN

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2. HOLD NW MMOLY, RT, 135.18 INBOUND, 3300 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAC: 135.25 FAF: DONCL DIST FAF TO MAP: 4.86 DIST FAF TO THLD: 4.86

4. MIN ALT: MMOLY 3300, DONCL 3000, TODRT/1.60 NM TO RW13 1960

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.70 GS ANT:

6. MIN GP INCPT: 3000 GP ALT AT PFAF: DONCL 3000 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -24°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 315.44 INBOUND.
FAS OBST: 1540 AAO 455243N/0952453W.
CHART 1891 TOWER 455625N/0952804W.
WAAS CHANNEL # 50245
REFERENCE PATH ID: W13A
LTP HAE: 404.1 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

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	1674	1	250	1674	1	250	1674	1	250	1674	1	250				
LNAV/VNAV DA	1721	1	297	1721	1	297	1721	1	297	1721	1	297				
LNAV MDA	1800	1	376	1800	1	376	1800	1	376	1800	1	376				
CIRCLING	1900	1	475	1900	1	475	1940	1 1/2	515	2000	2	575				



CHANGES - REASONS

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MN

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZMP, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY
CHRISTOPHER SCHONES

Digitally signed by
CHRISTOPHER SCHONES
May 17, 2023

OFFICE
AJV-A432

DATE
10/05/2023

APPROVED BY
CASIMIR TABAKA

OFFICE
AJV-A432

DATE
10/05/2023

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KAXN
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	455217.8745N
LTP/FTP LONGITUDE	0952407.4830W
LTP/FTP ELLIPSOIDAL HEIGHT	+04041
FPAP LATITUDE	455110.3310N
FPAP LONGITUDE	0952244.3615W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1200
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	422E8F14

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04302
FPAP ORTHOMETRIC HEIGHT	+04302



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

<u>AIRPORT ID</u> KAXN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>AMDT NO.</u> ORIG	<u>CITY</u> ALEXANDRIA	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 1425	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM 045/30 CW 225/30 **TO** MMOLY

RNP DISTANCE PAT MAP HAT HMAS

<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>
AAO	461154.00N/0952948.00W	1982	164	98	4E	1000					3000
TERRAIN	461154.00N/0952948.00W	1781 (1800)								AS1500	3300

COMPUTATIONS

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

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM 225/30 CW 045/30 **TO** 225/20 CW 045/20

RNP DISTANCE PAT MAP HAT HMAS

<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>
TOWER (27-001046)	454159.00N/0951037.00W	2545	250	50	4D	1000					3600
TERRAIN	461157.00N/0945948.00W	1584 (1600)								AS1500	3100

COMPUTATIONS

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

SEGMENT REMARKS:



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AMDT NO.
ORIG

CITY
ALEXANDRIA

STATE
MN

AIRPORT ELEVATION
1425

FACILITY
RNAV

STRAIGHT-IN AREA

FROM
225/20 CW 045/20

TO
MMOLY

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (27-001711)	460643.79N/0952038.30W	1939	50	20	2C	1000				AT361	3300
TERRAIN	460642.00N/0952115.00W	1578 (1600)								AS1500	3100

COMPUTATIONS

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

SEGMENT REMARKS:

INTERMEDIATE

FROM
MMOLY (IF/IAF)

TO
DONCL

RNP **DISTANCE**
6.00 **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (27-002208)	455625.00N/0952804.00W	1891	250	50	4D	500					2400
TERRAIN	455848.00N/0953218.00W	1509 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
KAXN

PROCEDURE NAME
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AMDT NO.
ORIG

CITY
ALEXANDRIA

STATE
MN

AIRPORT ELEVATION
1425

FACILITY
RNAV

FINAL: LPV

FROM
DONCL

TO
DA

<u>RNP</u>	<u>DISTANCE</u> 4.86	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 250	<u>HMAS</u>
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<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>
TREE (27-027425)	455223.01N/0952407.86W	1423	20	2	1A		34.00:1				1674

COMPUTATIONS

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

FINAL: LNAV/VNAV

FROM
DONCL

TO
DA

<u>RNP</u>	<u>DISTANCE</u> 4.86	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 297	<u>HMAS</u>
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<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>
TREE	455242.52N/0952453.35W	1540	50	20	2C	161				AC20	1721

COMPUTATIONS

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



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AIRPORT ELEVATION
1425

FACILITY
RNAV

MISSED APPROACH : LNAV/VNAV

FROM DA **TO** WUNYE

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**
1560

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3600
AAO	454833.00N/0952139.00W	1644	164	98	4E	1000					2700
TERRAIN	455057.00N/0952321.00W	1466 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM RW13 **TO** WUNYE

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**
1700

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3600
AAO	454833.00N/0952139.00W	1644	164	98	4E	1000					2700
TERRAIN	455057.00N/0952321.00W	1466 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZMP ARTCC, PNM FSS

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KAXN	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KAXN	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS-3	<u>LOCATION</u> KGHW	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KGHW	<u>DISTANCE</u> 13.71	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 36

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KAXN 1425, KGHW 1394
RA=36.0

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW04 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	NPI-G	
RW22 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	NPI-G	
RW13 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	PIR-G	
RW31 - MIRL (PCL), ODALS (PCL), PAPI-4L (PCL)	PIR-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 1411.5	<u>TCH</u> 40.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 34.0
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u> -24C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -30C	<u>APT ISA</u> +12.18C
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CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2018-2022).
CRITICAL LOW TEMPERATURE BASED ON EFFECTIVE GPA.
DESCENT RATE (FPM): STANDARD TEMP 974 HIGH TEMP 1285.



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FACILITY
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"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - VDP LOCATED WITHIN 0.5 NM FROM FINAL FIX.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BACKUP ALTIMETER NOTE: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GLENWOOD MUNI ALTIMETER SETTING AND INCREASE LPV DA TO 1710 FEET. INCREASE LNAV/VNAV DA TO 1757 FEET. INCREASE ALL MDAS 40 FEET AND LNAV VISIBILITY CAT C/D 1/8 SM.

BARO-VNAV NA WHEN USING GLENWOOD MUNI ALTIMETER SETTING.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1891 TOWER (27-002208) 455625.00N/0952804.00W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



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FACILITY
RNAV

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	3.19
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	139.25
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1500
DISTANCE FROM	THLD	TO 1500FT POINT	4.86
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.13
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	139.25
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1500

**THRESHOLD
COORDINATES** 455217.87N/0952407.48W
(IF STR-IN)

ARP COORDINATES 455158.70N/0952340.80W

**RUNWAY APCH END
AND DIST FURTHEST
FROM ARP** RUNWAY 13 DISTANCE 0.45 NM

**FAF
COORDINATES** 455558.90N/0952840.05W

**FIX NAME
COORDINATES**

REMARKS



AIRPORT ID
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STATE
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AIRPORT ELEVATION
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FACILITY
RNAV

PART E: PREPARED BY

NAME
CHRISTOPHER SCHONES

OFFICE
AJV-A432

DATE
10/05/2023

TITLE
AERONAUTICAL INFORMATION SPECIALIST

