

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>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
MASSENA INTL-RICHARDS FIELD	KMSS	RNAV (GPS) RWY 23	1C	MASSENA	NY	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
221	221	RNAV (GPS) RWY 23	1B	02/05/2015	14W	1980
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
RNAV			ROUTINE			

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>
MSS VORTAC		SALAS		TF	FO	2.00	018.45	11.30	2500
SALAS	IF/IAF	NEKIC		TF	FB	1.00	225.32	6.10	1900
NEKIC	FAF	ZATSI/2.00 NM TO RW23		TF	FB	0.30	225.27	3.06	
ZATSI/2.00 NM TO RW23		RW23	MAP	TF	FO	0.30	225.25	2.00	
RW23	MAP	621 MSL		CA			225.25		
621 MSL		DORIE		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LNAV: RW23

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT DORIE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
2. HOLD NE SALAS, LT, 225.32 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 225.27 **FAF:** NEKIC **DIST FAF TO MAP:** 5.06 **DIST FAF TO THLD:** 5.06
4. **MIN ALT:** SALAS 2500, NEKIC 1900, ZATSI/2.00 NM TO RW23 900
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 NOT CLEAR **TCH:**
8. **MSA FROM:** RW23 3800



PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: STRAIGHT-IN RWY 23 NA AT NIGHT, CIRCLING RWY 9, 23, 27 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES.
CHART ADIRONDACK MOA
CHART CRANBERRY MOA
CHART TUPPER MOA
CHART FAS OBST: 439 POWERLINE 445805N/0744943W.
HOLD SW, LT, 045.12 INBOUND

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
LNAV MDA	740	1	519	740	1	519	740	1 1/2	519	740	1 3/4	519			
CIRCLING	740	1	519	740	1	519	800	1 1/2	579	900	2 1/4	679			

CHANGES - REASONS

1. PREVIOUSLY CHARTED CHANGES FROM P-NOTAM 4/1409 INCORPORATED ON THIS FORM: "NIGHT LANDING: RWY 9 NA", "DELETE NOTE: CIRCLING TO RWY 9-27 NA AT NIGHT", "DELETE NOTE: WHEN VGSi INOP, STRAIGHT-IN/CIRCLING RWY 23 NA AT NIGHT", "DELETE NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA".
2. ADDED "CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES", REMOVED "NEKIC TO RWY23: 3.05/43" FROM ADDITIONAL FLIGHT DATA, AND DELETED DESCENT ANGLE 3.05/TCH 43 FROM PROFILE VIEW - INCORPORATED FLIGHT INSPECTION GENERATED NOTAM 8/9049: "DELETE DESCENT ANGLE 3.05/TCH 43", "PROFILE NOTE: VISUAL SEGMENT - OBSTACLES".
3. CHANGED CHART NOTE FROM "NIGHT LANDING: RWY 9 NA" TO "STRAIGHT-IN RWY 23 NA AT NIGHT, CIRCLING RWY 9, 23, 27 NA AT NIGHT" - FLIGHT CHECK N71 REPORTED VISUAL SEGMENT OBSTACLES EXIST FOR RWYS 9, 23, 27.
4. MOVED CONTINGENCY ALTIMETER NOTES TO BACK OF FORM 8260-9 - KMSS ALTIMETER SETTING IS ON WMSCR, NOTE NO LONGER REQUIRED.
5. INCREASED RNP VALUE FROM 0.50 TO 1.00 IN TERMINAL ROUTES INTERMEDIATE SEGMENT - IAW FAAO 8260.58A, TABLE 1-2-1.
6. REMOVED RNP VALUE 1.00 IN TERMINAL ROUTES CA LEG - IAW FAAO 8260.58A, TABLE 1-2-1, NOTE 1.
7. ADDED PBN REQUIREMENTS NOTE: RNP APCH - PER FAAO 8260.58A, TABLE 1-2-1.
8. REMOVED DME/DME RNP-0.3 NA NOTE - NO LONGER REQUIRED.
9. ADDED CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" - RWY 23 HAS NO OIS SURVEY, 20:1 VISUAL SURFACE PENETRATIONS ARE ASSUMED.
10. DELETED PLANVIEW NOTE "PROCEDURE NA FOR ARRIVALS ON MSS VORTAC AIRWAY RADIAL 061" - THERE IS NO AIRWAY RADIAL 061 ON THE MSS VORTAC.

PDF EDITS: 8/08/2018
DELETED NEW CIRCLING CRITERIA REMARK FROM GENERAL REMARKS - KNOWN SIAP ERROR.



COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZBW, EASTERN FPT, AMGR.

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

DEVELOPED BY

WILLIAM HANBY

APPROVED BY

JULIE MORGAN

OFFICE

Digitally signed by

WILLIAM HANBY

Aug 08, 2018

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

Digitally signed by
ROBERT G HAMILTON
Aug 15, 2018

DATE

06/08/2018

DATE

Digitally signed by
ROBERT G HAMILTON
Aug 15, 2018

TITLE

MANAGER



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
MASSENA INTL-RICHARDS FIELD	KMSS	RNAV (GPS) RWY 23	1C	MASSENA	NY	221	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM TO
MSS VORTAC SALAS

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	11.30										
<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 (CA-002404)	450338.00N/0744439.00W	594	18228	1500	4D	1000				AT906	2500
2.TERRAIN	450445.00N/0744748.00W	358 (400)								AS1500	1900

COMPUTATIONS

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

SEGMENT
REMARKS:

INTERMEDIATE

FROM TO
SALAS (IF/IAF) NEKIC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	6.10										
<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 (CA-002404)	450338.00N/0744439.00W	594	18228	1500	4D	500				AT806	1900
3.TERRAIN	450518.00N/0744733.00W	315 (300)								AS1500	1800

COMPUTATIONS

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

SEGMENT
REMARKS:



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>RADIUS</u>	<u>HAA</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
CATEGORY A											
10.TOWER (36-000607)	445510.00N/0745000.00W	1.30	519	421	20	3	1A	300			740
CATEGORY B											
10.TOWER (36-000607)	445510.00N/0745000.00W	1.50	519	421	20	3	1A	300			740
CATEGORY C											
5.POWERLINE	445805.34N/0744943.36W	1.70	579	439	250	50	4D	300		AC50	800
CATEGORY D											
11.TOWER (36-000118)	445410.85N/0745300.65W	2.30	679	570	20	3	1A	300		XP30	900

CIRCLING REMARKS:
OBSTACLE #11: XP = 30 FT - TO RETAIN PUBLISHED MINIMUMS.
MSA

CENTER
RW23

RADIUS
25

<u>SECTOR</u>	<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>BEARING</u>	<u>DISTANCE</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
360-360	AAO	443241.80N/0742957.80W	163	27.9	2718	1000	3	6A	1000			3800

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA
COMMUNICATIONS WITH
ZBW ARTCC, BTV FSS



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
MASSENA INTL-RICHARDS FIELD	KMSS	RNAV (GPS) RWY 23	1C	MASSENA	NY	221	RNAV

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	KMSS	24	KMSS	0	Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
AWOS-3P	KPTD	24	KPTD	16.228	N	73

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KMSS 201.1, KPTD 475.0
RA = 72.83

CONTINGENCY ALTIMETER: KPTD
NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE POTSDAM ALTIMETER SETTING AND INCREASE ALL MDAS 80 FEET; INCREASE LNAV CAT C VISIBILITY 1/4 SM AND INCREASE CIRCLING CATS C/D VISIBILITY 1/4 SM.

<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>
RW09 - MIRL (PCL), REIL (PCL)	NPI-G	
RW23 - HIRL (PCL), PAPI-4L	NPI-G	
RW27 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	NPI-G	
RW05 - HIRL (PCL), REIL (PCL), PAPI-4L	PIR-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
					3.00	43.1

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<div>X</div>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<div>X</div>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	CIRCLING RWY 27
20:1	
FLIGHT CHECK REPORTED VISUAL SEGMENT OBSTACLES.	

QUALITY
10
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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Final Type	CIRCLING RWY 9
20:1	
290 TREE (36-022486) 445557.05N/0745136.01W (19.30)	295 TREE (36-022487) 445602.99N/0745141.72W (11.52)
Final Type	LNAV
20:1	
20:1 PENETRATIONS ASSUMED DUE TO NO OIS SURVEY.	
Final Type	LNAV
34:1	
34:1 PENETRATIONS ASSUMED DUE TO NO OIS SURVEY.	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - 20:1 VISUAL SURFACE PENETRATIONS REPORTED BY FLIGHT CHECK.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
100' VEGETATION HEIGHT PER EASTERN FPT.

NO OBSTACLE SURVEY EXISTS FOR THIS RUNWAY - 20:1 VISUAL SURFACE PENETRATIONS ARE ASSUMED. FLIGHT CHECK N71, STEVEN BAUER, REPORTED VISUAL SEGMENT OBSTACLES FOR RWYS 9, 23, 27. THESE ARE THE CAUSE FOR THE STRAIGHT-IN AND CIRCLING NIGHT RESTRICTIONS AND THE REMOVAL OF THE VDA 3.05/TCH 43 FROM THE PUBLISHED PROCEDURE.

PREVIOUS PROCEDURE BUILT USING DESCENT ANGLE 3.05/TCH 43.
COMPUTED DESCENT ANGLE 3.05/TCH 43 REMOVED PER FLIGHT CHECK.

TAA NOT DEVELOPED DUE TO PROXIMITY OF CANADIAN AIRSPACE PER ATC ON PUBLISHED PROCEDURE.

LPV AND LNAV/VNAV NOT DEVELOPED DUE TO NO SURVEY.
UNABLE TO CONFIRM GQS IS CLEAR.

LNAV CATS C, D VISIBILITIES RETAINED, LOWER VISIBILITIES POSSIBLE ON NEXT FULL AMENDMENT.

ALTITUDES AT ALL FIXES WERE ATC REQUIREMENTS NOTED ON PREVIOUS 8260-9.

OBST #4: 527 MSL TOWER (36-002333) HEIGHT AND 4D ACCURACY PREVIOUSLY VERIFIED BY FLIGHT INSPECTION (JOHN CLOUGH ON 06/24/04).



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MASSENA INTL-RICHARDS FIELD	KMSS	RNAV (GPS) RWY 23	1C	MASSENA	NY	221	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	3.06
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.66
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	211.27
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	306
DISTANCE FROM	THLD	TO 1500FT POINT	4.86
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.00
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	211.27
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	306

THRESHOLD
COORDINATES
(IF STR-IN)445635.39N/0745017.47W

ARP COORDINATES445610.50N/0745042.40W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 23 DISTANCE 0.51 NM

FAF
COORDINATES450055.15N/0744635.36W

FIX NAME
COORDINATES

IF/IAF SALAS: 450607.61N/0744207.33W

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
MASSENA INTL-RICHARDS FIELD	KMSS	RNAV (GPS) RWY 23	1C	MASSENA	NY	221	RNAV

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
WILLIAM HANBY	AJV-5422	06/08/2018	AERONAUTICAL INFORMATION SPECIALIST

