

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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> KMVE	<u>PROCEDURE NAME</u> VOR RWY 14	<u>ORIGINAL/AMENDMENT</u> 5D	<u>CITY</u> MONTEVIDEO	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 1034	<u>TDZE</u> 1034	<u>SUPERSEDED</u> VOR RWY 14	<u>ORIGINAL/AMENDMENT</u> 5C	<u>DATED</u> 10/07/2021	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> MVE	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 11/03/2022	<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>
FITAS INT/DWN 30.46 DME		MVE VOR/DME					251.32	23.75	3000

MISSED APPROACH

MAP:

MVE VOR/DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3400 DIRECT MVE VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3400.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT L SIDE OF COURSE 309.78 OUTBOUND 2600 FT WITHIN 10 MILES OF MVE VOR/DME (IAF)
2.
3. FAC: 129.78 FAF: DIST FAF TO MAP: DIST FAF TO THLD:
4. MIN ALT: EBZAN/MVE 2.50 DME 1840
8. MSA FROM: MVE VOR/DME 360-270 2600, 270-360 3400

EQUIPMENT REQUIREMENTS NOTES:

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 3 AND 21.
CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FITAS ON V78 WESTBOUND V175 NORTHBOUND.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).



ADDITIONAL FLIGHT DATA:

CHART: MAX 6000 AT MVE VOR/DME.
HOLD NW, RT, 129.78 INBOUND.
CHART FAS OBST: 1149 TREE 450045N/0954349W.
1240 AAO 450131N/0954411W.
CHART VDP AT 1.13 DME
DISTANCE VDP TO THLD 1.07 NM.
FAC CROSSES RWY C/L EXTENDED 3012 FT FROM THLD.
EBZAN TO RW14: 3.01/30.

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
S-14	1840	1	806	1840	1 1/4	806	1840	2 1/2	806	1840	2 1/2	806			
CIRCLING	1840	1	806	1840	1 1/4	806	1840	2 1/2	806	1840	2 1/2	806			
EBZAN FIX MINIMUMS															
S-14	1400	1	366	1400	1	366	1400	1	366	1400	1	366			
CIRCLING	1560	1	526	1560	1	526	1700	1 3/4	666	1700	2	666			

- CHANGES - REASONS**
- INCORPORATED CHANGES FROM P-NOTAMS ON AMENDMENTS 5A, 5B, AND 5C INTO FORM - 8260.19I, 8-3-4.C(3).
 - REMOVED DAWSO FEEDER - PER IFP CHECKLIST REQUEST.
 - UPDATED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 2600 DIRECT MVE VOR/DME AND HOLD" TO "CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3400 DIRECT MVE VOR/DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3400." - NEW CONTROLLING OBSTACLE.
 - MOVED BACKUP ALTIMETER AND ASSOCIATED NOTES FROM 8260-3 TO 8260-9 PART C: GENERAL REMARKS AS CONTINGENCY NOTE - 8260.19I, 8-6-9F(3).
 - ADDITIONAL FLIGHT DATA: UPDATED FAS OBST FROM "1114 TREE 450013N/0954411W" TO "CHART FAS OBST: 1149 TREE 450045N/0954349W" - NEW CONTROLLING OBSTACLE.
 - ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 1.13 DME" AND "DISTANCE VDP TO THLD 1.07 NM" - NEW TARGETS EVALUATION.
 - MINIMUMS: UPDATED S-14 WHEN SDF RECEIVED ALL CATS FROM "1380 MDA/364 HAT" TO "1400 MDA/366 HAT" - NEW CONTROLLING OBSTACLE.
 - PROFILE LINE 4: CHANGED FROM "EBZAN/MVE 2.49 DME 1560*" TO "EBZAN/MVE 2.50 DME 1560*" - NEW TARGETS EVALUATION.
 - ADDED VDA "EBZAN TO RW14: 3.01/30" TO ADDITIONAL FLIGHT DATA - IAW 8260.19I 8-6-10 O(1).
 - ADDED "DISTANCE VDP TO THLD 1.07 NM" TO ADDITIONAL FLIGHT DATA - 20:1 PENETRATIONS HAVE BEEN ELIMINATED.
 - CHANGED FROM "FAC CROSSES RWY C/L EXTENDED 3003 FT FROM THLD" TO "FAC CROSSES RWY C/L EXTENDED 3012 FT FROM THLD" - 8260.19I, 8-6-10G(2).
 - CHANGED CHART NOTE: FROM "RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "CHART NOTE: RWY 14 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" - 34:1 PENETRATIONS, PER 8260.19I, 8-6-11K(3).
 - ADDED 7:1 OBSTACLE TO ADDITIONAL FLIGHT DATA 1240 AAO 450131N/0954410W - NEW OBSTACLE EVALUATION.
 - REMOVED CHART NOTE: WHEN VGSI INOP, STRAIGHT-IN/CIRCLING RWY 14 PROCEDURE NA AT NIGHT - NEW EVALUATION SHOWS NO 20:1 PENETRATIONS.
 - UPDATED S-14 ALL CATS MDA/HAT FROM "1560 MDA/526 HAT" TO "1840 MDA/806 HAT" AND CATS B/C/D VISIBILITY FROM CAT B "1 SM" CATS C/D "1 1/2 SM" TO CAT B "1 1/4 SM" CATS C/D "2 1/2 SM" - UPDATED 8260.3E VIS TABLES TO MEET OPTIMUM VDA.
 - UPDATED CIRCLING CATS A AND B MDA/HAA FROM "1560 MDA/526 HAA" TO "1840 MDA/806 HAA" AND CATS C AND D FROM "1700 MDA/665 HAA" TO "1840 MDA/806 HAA", VISIBILITY CAT B FROM "1 SM" TO 1 ¼ SM, CAT C FROM "1 3/4 SM" TO "2 1/2 SM" AND CAT D FROM "2 SM" TO 2 1/2 SM - PER TARGETS EVAL AND UPDATED 8260.3E VIS TABLES.
 - ADDED PROCEDURE NA NOTE AT FITAS ON V78 WESTBOUND V175 NORTHBOUND - TURN EXCEEDS 90 DEGREES.
 - CHANGED FROM "FITAS INT" TO "FITAS INT/DWN 30.46 DME" TERMINAL ROUTES - PER IFPT/ATC CHECKLIST REQUEST.

8/8/2022: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 7/5/2022.
THIS PROCEDURE IS NOW SET FOR HARD DATE PUBLICATION.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: AGL-220, ZMP ARTCC, PNM AFSS, AMGR.

FLIGHT CHECKED BY

PENDING

OFFICE

DATE

Digitally signed by
CASIMIR L TABAKA
Aug 08, 2022

DEVELOPED BY

CASIMIR L. TABAKA (GREG LINDSEY)

Digitally signed by
CASIMIR L TABAKA
Jul 05, 2022

OFFICE

AJV-A432

DATE

05/13/2022

APPROVED BY

JOHNNIE BAKER

Digitally signed by
CASIMIR L TABAKA
Jul 05, 2022

OFFICE

AJV-A430

DATE

TITLE
MANAGER



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

<u>AIRPORT ID</u> KMVE	<u>PROCEDURE NAME</u> VOR RWY 14	<u>AMDT NO.</u> 5D	<u>CITY</u> MONTEVIDEO	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 1034	<u>FACILITY</u> MVE
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
FITAS INT/DWN 30.46 DME

TO
MVE VOR/DME

<u>RNP</u>	<u>DISTANCE</u> 23.75	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>							<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 (27-001375)	450123.00N/0951558.00W	1570	500	50	5D	1000				AT430	3000
												TERRAIN	450654.00N/0951603.00W	1171 (1200)								AS1500	2700

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: PT

FROM
10 NM

TO
EBZAN/MVE 2.50 DME

<u>RNP</u>	<u>DISTANCE</u> 7.51	<u>PAT</u>	<u>MAP</u>	<u>HAT</u> 806	<u>HMAS</u>							<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	450200.57N/0954803.10W	1250	50	20	2C	300				DG290	1840

COMPUTATIONS

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

SEGMENT REMARKS:



FINAL: PT STEPDOWN

FROM
EBZAN/MVE 2.50 DME

TO
MVE VOR/DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
	2.49		MVE VOR/DME	366								
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
TREE	450044.76N/0954348.57W	1149	50	20	2C	250					1400	

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

PROCEDURE TURN

FROM
MVE VOR/DME

TO
10 NM

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
TOWER (27-000920)	451003.31N/0960003.27W	2318	500	50	5D	1000				SA-788	2600	
TERRAIN	450948.00N/0955454.00W	1099 (1100)								AS1500	2600	

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



MISSED APPROACH

FROM

MVE VOR/DME

TO

MVE VOR/DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1150					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3400
TOWER (27-001305)	445410.00N/0953924.00W		1490	250	50	4D	1000					2500
TERRAIN	445351.00N/0953709.00W		1099 (1100)								AS1500	2600

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

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
TOWER (27-001796)	445702.76N/0954251.00W	1.30	806/526	1209	500	50	5D	300		SI/AC50	1840/1560
CATEGORY B											
TOWER (27-001796)	445702.76N/0954251.00W	1.84	806/526	1209	500	50	5D	300		SI/AC50	1840/1560
CATEGORY C											
TOWER (27-000268)	445559.80N/0954228.81W	2.90	806/666	1387	50	20	2C	300		SI	1840/1700
CATEGORY D											
TOWER (27-000268)	445559.80N/0954228.81W	3.79	806/666	1387	50	20	2C	300		SI	1840/1700

CIRCLING REMARKS:



MSA

CENTER

MVE VOR/DME

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-270	TOWER (27-001696)	445818.54N/0951457.73W	088	19.7	1572	50	20	2C	1000			2600
270-360	TOWER (27-000920)	451003.31N/0960003.27W	312	16.9	2318	500	50	5D	1000			3400

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

<u>WX SERVICE</u> AWOS-3	<u>LOCATION</u> KMVE	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMVE	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS-3	<u>LOCATION</u> KGDB	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KGDB	<u>DISTANCE</u> 14.59	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 36

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KMVE 1034, KGDB 1048
RA = 35.5.

<u>PRIMARY NAVAID</u> MVE VOR/DME	<u>MONITOR POINT</u> UNMONITORED	<u>HRS OPERATION</u> 24	<u>CAT</u> 3
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW14 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)		NPI-G	
RW32 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)		NPI-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	25.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input type="checkbox"/>	3012	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>		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	VOR RWY 14		
34:1			
1052 TRAVERSE_WAY (27-057018) 445827.67N/0954254.41W (6.18)		1044 TRAVERSE_WAY (27-057235) 445824.23N/0954258.80W (0.71)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

VEGETATION HEIGHT WITHIN 5 NM 100' PER FPT.

FOR CONTINGENCY PURPOSES:
WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRANITE FALLS ALTIMETER SETTING: INCREASE ALL MDAS 40 FEET; INCREASE CIRCLING CATS A AND D VISIBILITY 1/4 SM. INCREASE EBZAN FIX MINIMUMS S-14 CATS C AND D VISIBILITY 1/8 SM AND CIRCLING CATS C AND D VISIBILITY 1/4 SM.
VDP NA WHEN USING GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEML FLD ALTIMETER SETTING.
EBZAN/MVE 2.50 DME 1880 WHEN USING GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEML FLD ALTIMETER SETTING.

RWY 3-21 UNMARKED TURF RWY.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1240 AAO 450131.10N/0954410.81W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT ID</u> KMVE	<u>PROCEDURE NAME</u> VOR RWY 14	<u>AMDT NO.</u> 5D	<u>CITY</u> MONTEVIDEO	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 1034	<u>FACILITY</u> MVE
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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	7.00
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	4.80
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	134.78
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1100
DISTANCE FROM	THLD	TO 1500FT POINT	7.00
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	4.80
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	134.78
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1100

THRESHOLD
COORDINATES
(IF STR-IN)

445821.52N/0954251.96W

ARP COORDINATES

445809.10N/0954237.40W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 32 DISTANCE 0.39 NM

FAF
COORDINATES

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

QUALITY
16
CHECKED

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

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> CASIMIR L. TABAKA (GREG LINDSEY)	<u>OFFICE</u> AJV-A432	<u>DATE</u> 05/13/2022	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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