

**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</u> SULLIVAN COUNTY INTL	<u>AIRPORT ID</u> KMSV	<u>PROCEDURE NAME</u> VOR RWY 33	<u>ORIGINAL/AMENDMENT</u> 4	<u>CITY</u> MONTICELLO	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 1403	<u>TDZE</u> 1393	<u>SUPERSEDED</u> VOR/DME RWY 33	<u>ORIGINAL/AMENDMENT</u> 3A	<u>DATED</u> 04/03/2014	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 1970
<u>FACILITY</u> HUO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
HUO VOR/DME	IAF	DYNEL/5.00 DME					343.67	5.00	3300
DYNEL/5.00 DME	IF	JAYCE/15.28 DME					343.67	10.28 (HUO R-344)	2700

**MISSED APPROACH**

**MAP:**

HUO 19.30 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1900 THEN CLIMBING LEFT TURN TO 4000 ON HUO VOR/DME R-340 TO JIBOT/HUO 31.66 DME/RADAR AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

1. PT      SIDE OF COURSE      OUTBOUND      FT WITHIN      MILES OF (IAF)
2. PROFILE STARTS AT HUO VOR/DME
3. FAC: 343.67      FAF: JAYCE/15.28 DME      DIST FAF TO MAP:      DIST FAF TO THLD: 4.02
4. MIN ALT: HUO VOR/DME 3500, DYNEL/5.00 DME 3300, JAYCE/15.28 DME 2700, UCQOV/17.00 DME 2140
8. MSA FROM: HUO VOR/DME 045-315 3500, 315-045 3900

**EQUIPMENT REQUIREMENTS NOTES:**

DME REQUIRED.

**NOTES:**

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HUO VOR/DME AIRWAY RADIALS 314 CW 019.



ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.  
JAYCE TO RW33: 3.00/39.2.  
FAS OBST: 1599 TREE 414128N/0744439W.  
HOLD N, RT, 159.90 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/2, 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
S-33	1900	1	507	1900	1	507	1900	1 3/8	507	1900	1 3/8	507			
CIRCLING	1900	1	497	1900	1	497	2020	1 3/4	617	2180	2 1/2	777			

CHANGES - REASONS

1. UPDATED PROFILE FAC AND IAF/IF TERMINAL ROUTE COURSE FROM 343.70 TO 343.67 - NEW BUILD EVALUATION CALCULATION.
2. CHANGED JAYCE/HUO 14 DME TO JAYCE 15.28 DME IN IF TERMINAL ROUTE - FIX LOCATION CHANGED TO MATCH VGSI SLOPE OF 3.00 DEGREE.
3. UPDATED DISTANCE FOR IF TERMINAL ROUTE FROM 9 TO 10.28 - FIX LOCATION CHANGED TO MATCH VGSI SLOPE OF 3.00 DEGREE.
4. MISSED APPROACH CHANGED FROM CLIMB TO 4000 DIRECT MS LOM AND HOLD TO CLIMB TO 1900 THEN CLIMBING LEFT TURN TO 4000 ON HUO VOR/DME R-340 TO JIBOT/HUO 31.66 DME AND HOLD. - DECOMMISSIONING OF MS LOM.
5. CHANGED (IF) FROM DESIGNATION HOU R-343.70/5 DME TO NAMED FIX DYNEL/5.00 DME. - ENSURE INTERMEDIATE FIX IS MORE DISTINGUISHABLE.
6. AUTHORIZED ALT MINS AND ADDED ALT MIN NOTES. - IAW 8260.19H PARA 8-6-11B(4).
7. UPDATED DIST FAF TO THLD FROM 5.25 TO 4.02. - NEW FAF LOCATION TO MATCH VGSI SLOPE OF 3.00 DEGREE.
8. UPDATED PROFILE MSA FROM HUO VORTAC 315-045 4100, 045-315 3400 TO HUO VOR/DME 045-315 3500, 315-045 3900 - NEW BUILD EVALUATION OF MSA.
9. REMOVED PLANVIEW NOTE: ADF REQUIRED AND ADDED DME REQUIRED IN EQUIPMENT REQUIREMENTS NOTES. - DECOMMISSIONING OF MS LOM.
10. CHANGED S-33 MDA/HAT/VIS CAT A/B FROM 1980 / 590 TO 1900 / 507, CAT C FROM 1980 / 590 / 1 1/2 TO 1900 / 507 / 1 3/8, AND CAT D FROM 1980 / 590 / 1 3/4 TO 1900 / 507 / 1 3/8. - NEW EVALUATION COMPLETED.
11. REMOVED SECONDARY ALTIMETER NOTES. - KMSV ON WMSCR AND FPT APPROVED MOVING TO -9 CONTINGENCY NOTES.
12. ADDED CHART CIRCLING ICON TO ADDITIONAL FLIGHT DATA - NEW CIRCLING CRITERIA APPLIED.
13. CHANGED FAS OBST: 1723 TREES 413926/744308 TO 1599 TREE 414128N/0744439W IN ADDITIONAL FLIGHT DATA - NEW OBST LOCATION FROM NEW EVALUATION.
14. CHANGED HOLD NW, RT 155 INBOUND TO HOLD N, RT, 159.90 INBOUND IN ADDITIONAL FLIGHT DATA - NEW MISSED APPROACH HOLD LOCATION.
15. UPDATED CIRCLING CAT C MINIMUMS FROM 1980 1 1/2 577 TO 2020 1 3/4 617 - NEW CIRCLING CRITERIA APPLIED.
16. UPDATED CIRCLING CAT D MINIMUMS FROM 1980 1 1/2 577 TO 2180 2 21/2 777 - NEW CIRCLING CRITERIA APPLIED.
17. REMOVED CHART NOTE: NIGHT LANDING NA, CHART NOTE RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM N/A - NO 20:1, 34:1 PENS NOTED.
18. CHANGED NAME FROM VOR/DME RWY 33 TO VOR RWY 33 - MEET CURRENT NAMING CRITERIA IN 8260.19H.
19. UPDATED CIRCLING CAT A MINIMUMS FROM 1980 1 577 TO 1900 1 497 - NEW CIRCLING CRITERIA APPLIED.
20. UPDATED CIRCLING CAT B MINIMUMS FROM 1980 1 577 TO 1900 1 497 - NEW CIRCLING CRITERIA APPLIED.
21. ADDED VDA/TCH TO ADDITIONAL FLIGHT DATA. - IAW 8260.19H 8-6-10 P.
22. ADDED FINAL SDF UCQOV/17.00 DME. - YIELDS LOWER MINIMUMS.
23. ADDED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HUO VOR/DME AIRWAY RADIALS 314 CW 019 IN NOTES. - IAW 8260.19H 8-2-5 E.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZNY, NY APCH, ISP FSS, AMGR

FLIGHT CHECKED BYOFFICEDATEDEVELOPED BY

CASIMIR L. TABAKA (ANDRE TUCKER)

*Digitally signed by***CASIMIR L TABAKA**

Aug 09, 2019

OFFICE

AJV-A422

DATE

04/15/2019

APPROVED BY

MARLON ROBINSON

*Digitally signed by***CASIMIR L TABAKA**

Aug 09, 2019

OFFICE

AJV-A420

DATETITLE

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
SULLIVAN COUNTY INTL	KMSV	VOR RWY 33	4	MONTICELLO	NY	1403	HUO

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM  
HUO VOR/DME

TO  
DYNEL/5.00 DME

RNP	DISTANCE 5.00	PAT	MAP	HAT	HMAS							
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
1.AAO	412821.00N/0743900.00W	1624	164	98	4E	1000				AT676	3300	
2.TERRAIN	412821.00N/0743900.00W	1424 (1400)								AS1500	2900	

COMPUTATIONS

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

INTERMEDIATE

FROM  
DYNEL/5.00 DME

TO  
JAYCE/15.28 DME

RNP	DISTANCE 10.28	PAT	MAP	HAT	HMAS							
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
3.AAO	413345.00N/0743718.00W	1834	164	98	4E	500				AC98 DG268	2700	
4.TERRAIN	413345.00N/0743718.00W	1634 (1600)								AS1000	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:



TO  
UCQOV/17.00 DME

HMAS

## COMPUTATIONS

RF CENTER FIX/DISTANCE**SEGMENT REMARKS:**

## FINAL: STEPDOWN

**FROM**  
UCQOV/17.00 DME

TO  
HUO 19.30 DME

MAP  
HUO 19.30 DME

HAT  
507

HMAS

## COMPUTATIONS

RF CENTER FIX/DISTANCE**SEGMENT REMARKS:**

MISSED APPROACH

FROM

HUO 19.30 DME

TO

JIBOT/HUO 31.66 DME/RADAR

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
							1650					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (36-002024)	414014.32N/0745015.36W		1644	20	125	1E		ASC				4000
8.AAO	415321.00N/0745300.00W		2399	164	98	4E	1000					3400
9.TERRAIN	415321.00N/0745300.00W		2199 (2200)								AS1500	3700

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											
10.TREE (36-022911)	414244.50N/0744935.52W	1.31	497	1582	50	20	2C	300			1900
CATEGORY B											
11.TREE (36-022888)	414352.73N/0744929.50W	1.86	497	1597	20	10	1B	300			1900
CATEGORY C											
12.TREE (36-022901)	414513.08N/0744745.20W	2.92	617	1701	20	10	1B	300			2020
CATEGORY D											
13.AAO	414047.41N/0744224.77W	3.82	777	1865	50	3	2A	300			2180

CIRCLING REMARKS:



<u>AIRPORT</u> SULLIVAN COUNTY INTL	<u>AIRPORT ID</u> KMSV	<u>PROCEDURE NAME</u> VOR RWY 33	<u>AMDT NO.</u> 4	<u>CITY</u> MONTICELLO	<u>STATE</u> NY	<u>AIRPORT ELEVATION</u> 1403	<u>FACILITY</u> HUO
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MSA

CENTER  
HUO VOR/DME

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>
045-315	AAO	414021.00N/0742121.00W	045	19.0	2464	164	98	4E	1000			3500
315-045	AAO	415327.00N/0743221.00W	016	29.0	2838	164	98	4E	1000			3900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:  
100 FT VEGETATION USED PER FPT.



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH  
NEW YORK APP CON, ISP FSS

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KMSV	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KMSV	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> ATIS	<u>LOCATION</u> KSWF	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KSWF	<u>DISTANCE</u> 33.18	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 205

WX REMARKS:  
RASS PRESSURE PATTERNS THE SAME KMSV 1403.1, KSWF 490.7 RA = 204.21.

<u>PRIMARY NAVAID</u> HUO VOR/DME	<u>MONITOR POINT</u> AOCC	<u>HRS OPERATION</u> 24	<u>CAT</u> 1
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW33 - HIRL, REIL (PCL), PAPI-4L	NPI-P	
RW15 - HIRL (PCL), REIL (PCL), PAPI-4L	PIR-P	

<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> 3.00	<u>TCH</u> 39.2
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	300
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

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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





AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
SULLIVAN COUNTY INTL	KMSV	VOR RWY 33	4	MONTICELLO	NY	1403	HUO
<div> <div>PART C: GENERAL REMARKS:</div> <div>VDP NOT ESTABLISHED - FIX ERROR GREATER THAN .5 NM.</div> <div>PRECIPITOUS TERRAIN EVALUATION COMPLETED.</div> <div>BACK UP ALTIMETER NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE NEWBURGH ALTIMETER SETTING AND INCREASE ALL MDA 220 FEET, INCREASE CAT C AND D VISIBILITY 5/8 SM, INCREASE CIRCLING CAT C VISIBILITY 3/4 SM AND CAT D 1/2 SM.</div> <div>UCQOV FIX MINIMUM 2360 WHEN USING NEWBURGH ALTIMETER SETTING.</div> <div>ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.</div> </div>							
<div> <div> <div> <div>QUALITY</div> <div>24</div> <div>CHECKED</div> </div> </div> </div>							
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<u>AIRPORT</u> SULLIVAN COUNTY INTL	<u>AIRPORT ID</u> KMSV	<u>PROCEDURE NAME</u> VOR RWY 33	<u>AMDT NO.</u> 4	<u>CITY</u> MONTICELLO	<u>STATE</u> NY	<u>AIRPORT ELEVATION</u> 1403	<u>FACILITY</u> HUO
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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	3.69
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	3.56
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	332.67
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1643
DISTANCE FROM	THLD	TO 1500FT POINT	14.30
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	8.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	332.67
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	1634

THRESHOLD  
COORDINATES  
(IF STR-IN)

414143.47N/0744719.43W

ARP COORDINATES

414205.90N/0744742.10W

RUNWAY APCH END  
AND DIST FURTHEST  
FROM ARP

RUNWAY 15 DISTANCE 0.52 NM

FAF  
COORDINATES

413809.24N/0744451.03W

FIX NAME  
COORDINATES

IF DYNEL: 412901.48N/0743833W

REMARKS

THLD DISPLACED 300FT, ACTUAL COORDINATES: 414141.11N/0744717.05W.

QUALITY  
24  
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PART E: PREPARED BY							
<u>NAME</u> CASIMIR L. TABAKA (ANDRE TUCKER)			<u>OFFICE</u> AJV-A422	<u>DATE</u> 04/15/2019	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST		

QUALITY  
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CHECKED

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