

**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.

|   |   |   |  |                                   |                                  |
|---|---|---|--|-----------------------------------|----------------------------------|
| <b><u>AIRPORT</u></b><br>MARTIN MUNI    | <b><u>AIRPORT ID</u></b><br>K9V6        | <b><u>PROCEDURE NAME</u></b><br>RNAV (GPS) RWY 32     | <b><u>ORIGINAL/AMENDMENT</u></b><br>1            | <b><u>CITY</u></b><br>MARTIN      | <b><u>STATE</u></b><br>SD        |
| <b><u>AIRPORT ELEVATION</u></b><br>3295 | <b><u>TDZE</u></b><br>3294              | <b><u>SUPERSEDED</u></b><br>RNAV (GPS) RWY 32         | <b><u>ORIGINAL/AMENDMENT</u></b><br>ORIG-A       | <b><u>DATED</u></b><br>07/21/2016 | <b><u>MAG VAR</u></b><br>6E      |
| <b><u>FACILITY</u></b><br>RNAV          | <b><u>COORDINATES OF FACILITIES</u></b> | <b><u>ACTUAL EFFECTIVE DATE</u></b><br>16 AUGUST 2018 | <b><u>REQUIRED EFFECTIVE DATE</u></b><br>ROUTINE | <b><u>CANCEL SUSPEND</u></b>      | <b><u>EPOCH YEAR</u></b><br>2020 |

**TAA**

| <b><u>FROM</u></b>  | <b><u>FIX TYPE</u></b> | <b><u>TO</u></b> | <b><u>FIX TYPE</u></b> | <b><u>ALTITUDE</u></b> |
|---------------------|------------------------|------------------|------------------------|------------------------|
| 1. 230/30 CW 050/30 | NOPT                   | USETY            | IF/IAF                 | 6000                   |
| 2. 050/30 CW 230/30 |                        | USETY            | IF/IAF                 | 6000                   |

**TERMINAL ROUTES**

| <b><u>FROM</u></b>    | <b><u>FIX TYPE</u></b> | <b><u>TO</u></b>      | <b><u>FIX TYPE</u></b> | <b><u>LEG TYPE</u></b> | <b><u>FO/FB</u></b> | <b><u>RNP</u></b> | <b><u>COURSE</u></b> | <b><u>DISTANCE</u></b> | <b><u>ALTITUDE</u></b> |
|-----------------------|------------------------|-----------------------|------------------------|------------------------|---------------------|-------------------|----------------------|------------------------|------------------------|
| USETY                 | IF/IAF                 | VUGGI                 |                        | TF                     | FB                  | 1.00              | 320.18               | 6.10                   | 5000                   |
| VUGGI                 | FAF                    | JESIP/2.50 NM TO RW32 |                        | TF                     | FB                  | 0.30              | 320.13               | 2.78                   |                        |
| JESIP/2.50 NM TO RW32 |                        | RW32                  | MAP                    | TF                     | FO                  | 0.30              | 320.13               | 2.50                   |                        |
| RW32                  | MAP                    | 3800 MSL              |                        | CA                     |                     |                   | 320.13               |                        | 3800                   |
| 3800 MSL              |                        | USETY                 |                        | DF                     | FO                  | 1.00              |                      |                        | 6000                   |

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW32

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3800 THEN CLIMBING RIGHT TURN TO 6000 DIRECT USETY AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD SE USETY, RT, 320.18 INBOUND, 6000 FT. IN LIEU OF PT (IAF), MAX 8000.

3. FAC: 320.13      FAF: VUGGI      DIST FAF TO MAP: 5.28      DIST FAF TO THLD: 5.28

4. MIN ALT: USETY 6000, VUGGI 5000, JESIP/2.50 NM TO RW32 4100\*

5. DIST TO THLD FROM OM:      MM:      IM:      150 HAT:      250 HAT: 0.71

6. MIN GP INCPT: 5000      GP ALT AT FAF : VUGGI 5000      OM:      MM:      IM:

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

8. MSA FROM:

PBN EQUIPMENT REQUIREMENTS NOTES

RNP APCH.

NOTES:

CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.  
CHART VDP AT 0.92 NM TO RW32\*  
\*LNAV ONLY  
WAAS CHANNEL #77540  
REFERENCE PATH ID: W32A  
CHART FAS OBST: 3335 TREE 430928N/1014312W.  
LTP HAE: 979.3 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/2

| 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       | 3544   | 1   | 250     | 3544   | 1   | 250     | 3544   | 1     | 250     |        | NA  |         |        |     |         |
| LNAV/VNAV DA | 3544   | 1   | 250     | 3544   | 1   | 250     | 3544   | 1     | 250     |        | NA  |         |        |     |         |
| LNAV MDA     | 3600   | 1   | 306     | 3600   | 1   | 306     | 3600   | 1     | 306     |        | NA  |         |        |     |         |
| CIRCLING     | 3780   | 1   | 485     | 3820   | 1   | 525     | 4060   | 2 1/2 | 765     |        | NA  |         |        |     |         |



**CHANGES - REASONS**

1. INCREASED MISSED APPROACH CLIMB TO ALTITUDE FROM 3700 TO 3800 - MINIMUM LENGTH REQUIREMENTS FOR LPV SECTION 1A.
2. DECREASED DISTANCE TO THLD FROM 339 HAT: 0.99 TO 250 HAT: 0.71 AND MOVED FROM ADDITIONAL FLIGHT DATA TO LINE 5 - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT AND CURRENT CRITERIA REQUIREMENT.
3. ADDED USETY HIL MAX ALTITUDE 8000 - CURRENT CRITERIA REQUIREMENT.
4. DECREASED LPV AND LNAV/VNAV ALL CATS DA/HAT FROM 3633/339 TO 3544/250 - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT.
5. DECREASED LPV AND LNAV/VNAV ALL CATS VISIBILITY FROM 1 1/4 TO 1 - IAW 8260.3C TABLE 3-3-1.
6. DECREASED LNAV ALL CATS MDA/HAT FROM 3680/386 TO 3600/306 - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT..
7. DECREASED LNAV CAT C VISIBILITY FROM 1 1/8 TO 1 - IAW 8260.3C TABLE 3-3-1.
8. DECREASED CMDA/HAA FOR CIRCLING CAT A FROM 3860/565 TO 3780/465, CIRCLING CAT B FROM 3920/625 TO 3820/525, CIRCLING CAT C FROM 4100/865 TO 4060/825 - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT.
9. INCREASED CAT C VISIBILITY FROM 2 1/4 TO 2 1/2 - IAW 8260.3C TABLE 3-3-7.
10. REMOVED CHART NOTE: DME/DME RNP-0.3 NA - ADDED PBN REQUIREMENT NOTE: RNP APCH.
11. REMOVED CHART NOTE "USE PINE RIDGE ALTIMETER SETTING" - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT.
12. CHANGED CHART NOTE "BARO-VNAV NA" TO "BARO-VNAV AND VDP NA WHEN USING PINE RIDGE ALTIMETER SETTING" AND MOVED TO 8260-9 PART C - LOCAL ALTIMETER ON WMSCR.
13. ADDED CHART VDP AT 0.92 NM TO RW32\* TO ADDITIONAL FLIGHT DATA - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT.
14. CHANGED "ALTERNATE NA" TO "STANDARD - CAT C 900-2 1/2" - LOCAL ALTIMETER ESTABLISHED SINCE LAST AMENDMENT.



|  |                           |  |                                |   |                    |
|--|---------------------------|--|--------------------------------|---|--------------------|
| <u>AIRPORT</u><br>MARTIN MUNI  | <u>AIRPORT ID</u><br>K9V6 | <u>PROCEDURE NAME</u><br>RNAV (GPS) RWY 32 | <u>ORIGINAL/AMENDMENT</u><br>1 | <u>CITY</u><br>MARTIN   | <u>STATE</u><br>SD |
| <u>COORDINATED WITH:</u>   |                           |  |                                |   |                    |
| A4A <input type="checkbox"/> ALPA <input checked="" type="checkbox"/> AOPA <input checked="" type="checkbox"/> APA <input type="checkbox"/> HAI <input type="checkbox"/> NBAA <input checked="" type="checkbox"/> OTHER: ZDV, AMGR |                           |  |                                |   |                    |
| <u>FLIGHT CHECKED BY</u><br>JAMES HAWLEY   |                           | <u>OFFICE</u><br>FICO                      | <u>DATE</u><br>05/14/2018      | Digitally signed by<br><b>ROBERT G HAMILTON</b><br>May 16, 2018 |                    |
| <u>DEVELOPED BY</u><br>DUSTIN DAVIDSON   |                           | <u>OFFICE</u><br>AJV-5422                  | <u>DATE</u><br>04/09/2018      | Digitally signed by<br><b>ROBERT G HAMILTON</b><br>May 16, 2018 |                    |
| <u>APPROVED BY</u><br>JULIE MORGAN   |                           | <u>OFFICE</u><br>AJV-5420                  | <u>DATE</u>                    | <u>TITLE</u><br>MANAGER   |                    |



**FAS DATA BLOCK INFORMATION**

| <b><u>DATA FIELD</u></b>                 | <b><u>DATA</u></b> |
|--|--------------------|
| OPERATION TYPE                           | 0                  |
| SBAS SERVICE PROVIDER IDENTIFIER         | 0                  |
| AIRPORT IDENTIFIER                       | K9V6               |
| RUNWAY                                   | RW32               |
| APPROACH PERFORMANCE DESIGNATOR          | 0                  |
| ROUTE INDICATOR                          |                    |
| REFERENCE PATH DATA SELECTOR             | 0                  |
| REFERENCE PATH IDENTIFIER (APPROACH ID)  | W32A               |
| LTP/FTP LATITUDE                         | 430941.1810N       |
| LTP/FTP LONGITUDE                        | 1014231.7900W      |
| LTP/FTP ELLIPSOIDAL HEIGHT               | +09793             |
| FPAP LATITUDE                            | 431055.1280N       |
| FPAP LONGITUDE                           | 1014339.7480W      |
| 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                            | 1624               |
| HORIZONTAL ALERT LIMIT (HAL)             | 40.0               |
| VERTICAL ALERT LIMIT (VAL)               | 50.0               |
| CRC REMAINDER                            | 88D642E4           |

**ADDITIONAL PATH POINT RECORD INFORMATION**

|                         |        |
|-------------------------|--------|
| ICAO CODE               | K3     |
| LTP ORTHOMETRIC HEIGHT  | +09990 |
| FPAP ORTHOMETRIC HEIGHT | +09990 |

