

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

| <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> |
|-------------------|-----------------------|-----------------|-------------|--------------|--------------------------|-----------------|
| JYG               | RNAV (GPS) RWY 33     | 1C              | ST JAMES    | MN           | 1068                     | RNAV            |

**PART A: OBSTRUCTION DATA SEGMENTS**

**STRAIGHT-IN AREA**

**FROM** 238/30 CW 058/30 **TO** PUGJU

| <u>RNP</u>           | <u>DISTANCE</u>        | <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> |
| WINDMILL (27-021311) | 433720.57N/0950626.60W | 1913            | 500         | 50          | 5D         | 1000       |            |           |             | AT287              | 3200           |
| TERRAIN              | 433500.00N/0950048.00W | 1456 (1500)     |             |             |            |            |            |           |             | AS1500             | 3000           |

**COMPUTATIONS**

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

**SEGMENT REMARKS:**

**STRAIGHT-IN AREA**

**FROM** 058/30 CW 238/30 **TO** PUGJU

| <u>RNP</u>         | <u>DISTANCE</u>        | <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 (27-000016)  | 435612.30N/0942439.00W | 2124            | 250         | 50          | 4D        | 1000       |            |           |             |                    | 3200           |
| TERRAIN            | 434209.00N/0950600.00W | 1564 (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

PUGJU (IF/IAF)

TO

JATTY

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|------------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 4.99                   |                 |             |             |            |            |             |           |             |                    |                |
| <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                | 434845.00N/0942727.00W | 1342            | 215         | 8           | 4B         | 500        |             |           |             |                    | 1900           |
| TERRAIN            | 434945.00N/0942815.00W | 1128 (1100)     |             |             |            |            |             |           |             | AS1500             | 2600           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

JATTY

TO

RW33

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|------------|------------|-------------|-----------|-------------|--------------------|----------------|
| 0.30               | 4.95                   |                 | DA          |             | 276        |            |             |           |             |                    |                |
| <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 (27-039779)   | 435829.69N/0943254.87W | 1145            | 20          | 3           | 1A         |            | 34.00:1     |           |             |                    | 1344           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

JATTY

TO

RW33

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|------------|------------|-------------|-----------|-------------|--------------------|----------------|
| 0.30               | 4.95                   |                 | DA          |             | 372        |            |             |           |             |                    |                |
| <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               | 435742.00N/0943309.00W | 1173            | 215         | 8           | 4B         |            | 23.43:1     |           |             | AC8                | 1440           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

LOWERED TO LNAV MINIMUMS IAW 8260.58C 3-3-5.

FINAL: LNAV

FROM

JATTY

TO

CADLO/2.80 NM TO RW33

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|------------|------------|-------------|-----------|-------------|--------------------|----------------|
| 0.30               | 2.21                   |                 |             |             |            |            |             |           |             |                    |                |
| <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                | 435427.00N/0942927.00W | 1303            | 215         | 8           | 4B         | 250        |             |           |             | RA60 DG360         | 1980           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

CADLO/2.80 NM TO RW33

TO

RW33

| <u>RNP</u> | <u>DISTANCE</u> | <u>PAT</u> | <u>MAP</u> | <u>HAT</u> | <u>HMAS</u> |
|------------|-----------------|------------|------------|------------|-------------|
| 0.30       | 2.80            |            | RW33       | 372        |             |

| <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               | 435812.00N/0943315.00W | 1186            | 215         | 8           | 4B        | 250        |            |           |             |                    | 1440           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

HOLD-IN-LIEU OF PT

FROM

PUGJU

TO

P-5

| <u>RNP</u> | <u>DISTANCE</u> | <u>PAT</u> | <u>MAP</u> | <u>HAT</u> | <u>HMAS</u> |
|------------|-----------------|------------|------------|------------|-------------|
|            |                 | P-5        |            |            |             |

| <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 (27-000016)  | 435612.30N/0942439.00W | 2124            | 250         | 50          | 4D        | 1000       |            |           |             | SA-704 AT780       | 3200           |
| TERRAIN            | 434642.00N/0942915.00W | 1177 (1200)     |             |             |           |            |            |           |             | AS1500             | 2700           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LPV

FROM

DA

TO

AMILY

| <u>RNP</u><br>0.30-1.00 | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u><br>1144 |           |             |                    |                |
|-------------------------|------------------------|-----------------|-------------|-------------|-----------|------------|---------------------|-----------|-------------|--------------------|----------------|
| <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> |
|                         |                        |                 |             |             |           |            | ASC                 |           |             |                    | 3200           |
| TOWER (27-000813)       | 440624.63N/0943545.29W | 2035            | 250         | 50          | 4D        | 1000       |                     |           |             | SA-145 AT210       | 3100           |
| TERRAIN                 | 435836.00N/0943233.00W | 1089 (1100)     |             |             |           |            |                     |           |             | AS1500             | 2600           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

AMILY

| <div>RNP</div> <div>0.30-1.00</div> | <div>DISTANCE</div>    | <div>PAT</div> | <div>MAP</div> |      |    |      | <div>HAT</div> | <div>HMAS</div> <div>1353</div> |      |              |         |
|-------------------------------------|------------------------|----------------|----------------|------|----|------|----------------|---------------------------------|------|--------------|---------|
| OBSTRUCTION                         | COORDINATES            | ELEV MSL       | HORZ           | VERT | AC | ROC  | OCS            | CG                              | CGTA | ADJUSTMENTS  | MIN ALT |
|                                     |                        |                |                |      |    |      | ASC            |                                 |      |              | 3200    |
| TOWER (27-000813)                   | 440624.63N/0943545.29W | 2035           | 250            | 50   | 4D | 1000 |                |                                 |      | SA-145 AT210 | 3100    |
| TERRAIN                             | 435836.00N/0943233.00W | 1089 (1100)    |                |      |    |      |                |                                 |      | AS1500       | 2600    |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LNAV

FROM

RW33

TO

AMILY

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           |            | <u>HAT</u> | <u>HMAS</u> |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-------------|-------------|--------------------|----------------|
| 0.30-1.00          |                        |                 |             |             |           |            |            |             |             | 1341               |                |
| <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> |
|                    |                        |                 |             |             |           |            | ASC        |             |             |                    | 3200           |
| TOWER (27-000813)  | 440624.63N/0943545.29W | 2035            | 250         | 50          | 4D        | 1000       |            |             |             | SA-145 AT210       | 3100           |
| TERRAIN            | 435836.00N/0943233.00W | 1089 (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  |                        |        |     |          |      |      |    |     |     |             |         |
| TREE        | 435812.00N/0943315.00W | 1.30   | 432 | 1186     | 215  | 8    | 4B | 300 |     |             | 1500    |
| CATEGORY B  |                        |        |     |          |      |      |    |     |     |             |         |
| TREE        | 435839.00N/0943512.00W | 1.84   | 452 | 1196     | 215  | 8    | 4B | 300 |     | HAA         | 1520    |

CIRCLING REMARKS:

MSA/ESA

CENTER

RADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZMP ARTCC, PNM FSS

| WX SERVICE         | LOCATION | HRS OPERATION | ALTIMETER SOURCE | DISTANCE | WMSCR | ADJUSTMENTS |
|--------------------|----------|---------------|------------------|----------|-------|-------------|
| AWOS-3PT           | JYG      | 24            | JYG              |          | Y     | 0           |
| BACK-UP WX SERVICE | LOCATION | HRS OPERATION | ALTIMETER SOURCE | DISTANCE | WMSCR | ADJUSTMENTS |
| AWOS-3             | ULM      | 24            | ULM              | 20.15    | Y     | 55          |



**WX REMARKS:**

RASS PRESSURE PATTERNS THE SAME  
KJYG 1068, KULM 1011  
RA = 54.3

| PRIMARY NAVAID                               | MONITOR POINT | HRS OPERATION   | CAT                 |
|----------------------------------------------|---------------|-----------------|---------------------|
| APPROACH AND RUNWAY LIGHTING SYSTEM          |               | RUNWAY MARKINGS | RUNWAY VISUAL RANGE |
| RW15 - REIL (PCL), MIRL (PCL), PAPI-4L (PCL) |               | NPI-G           |                     |
| RW33 - REIL (PCL), MIRL (PCL), PAPI-4L (PCL) |               | NPI-G           |                     |

|                  |                    |      |                 |                   |            |      |
|------------------|--------------------|------|-----------------|-------------------|------------|------|
| GLIDESLOPE ANGLE | ELEV RWY THRESHOLD | TCH  | ELEV GS ANTENNA | DISTANCE FROM RWY | VGSI ANGLE | TCH  |
| 3.00             | 1065.3             | 40.0 |                 |                   | 2.83       | 40.0 |

**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**

|              |               |         |         |
|--------------|---------------|---------|---------|
| CRITICAL LOW | CRITICAL HIGH | ACT     | APT ISA |
| -17C         | +54C          | +12.89C | -17C    |

**CRITICAL TEMPERATURE REMARKS:**

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.  
CRITICAL LOW TEMPERATURE BASED ON ACT.  
DESCENT RATE (FPM): STANDARD TEMP 719 HIGH TEMP 1139.

**"VISUAL PORTION OF FINAL" PENETRATIONS**

|                                                         |                      |                                                         |  |
|---------------------------------------------------------|----------------------|---------------------------------------------------------|--|
| FINAL TYPE                                              | LPV, LNAV/VNAV, LNAV |                                                         |  |
| 34:1                                                    |                      |                                                         |  |
| 1131 TREE (27-039330) 435837.3200N/0943256.1300W (8.7)  |                      | 1130 TREE (27-039329) 435837.3900N/0943255.6300W (7.33) |  |
| 1145 TREE (27-039779) 435829.6900N/0943254.8700W (1.78) |                      |                                                         |  |
| <b><u>PENETRATIONS REMARKS:</u></b>                     |                      |                                                         |  |
|                                                         |                      |                                                         |  |

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.

VGS PENETRATIONS LIGHTING 27-087136 AND 27-087147 ARE INSTALLED IAW AC150.

OBSTACLES 27-023535, 27-023560, AND 27-023561, LABELED AS POLES, ARE IN ACTUALITY ACCEPTABLE OBSTACLE TYPE REIL CONFIRMED BY FPT/FPT REQUESTED OBSTACLE UPDATED DESCRIPTION.

FC REPORTS LPV GLIDEPATH DOES NOT ALIGN WITH VGSI BETWEEN 600-1000 FT FROM THRESHOLD - RETAIN NON COINCIDENT NOTE.

100 FT VEGETATION.

LNAV/VNAV LOWERED TO LNAV MINIMUMS IAW 8260.58C 3-3-5.  
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

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                 | 3.12   |
| WIDTH OF        | FINAL | SEGMENT AT 1000FT POINT         | 1.20   |
| TRUE COURSE OF  | FINAL | SEGMENT CONTAINING 1000FT POINT | 329.28 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1000FT POINT | 1100   |
| DISTANCE FROM   | THLD  | TO 1500FT POINT                 | 4.81   |
| WIDTH OF        | FINAL | SEGMENT AT 1500FT POINT         | 1.95   |
| TRUE COURSE OF  | FINAL | SEGMENT CONTAINING 1500FT POINT | 329.28 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1500FT POINT | 1100   |

|                                            |                            |
|--------------------------------------------|----------------------------|
| THRESHOLD COORDINATES (IF STR-IN)          | 435853.90N/0943314.72W     |
| ARP COORDINATES                            | 435910.87N/0943328.71W     |
| RUNWAY APCH END AND DIST FURTHEST FROM ARP | RUNWAY 15 DISTANCE 0.33 NM |
| FAF COORDINATES                            | 435435.62N/0942942.13W     |
| FIX NAME COORDINATES                       |                            |

REMARKS

IF/IAF PUGJU 435018.06N 0942610.73W 30 NM RADIUS.

PART E: PREPARED BY

|                                       |          |            |                                     |
|---------------------------------------|----------|------------|-------------------------------------|
| NAME                                  | OFFICE   | DATE       | TITLE                               |
| ROBERT G HAMILTON (DANIEL R. JOHNSON) | AJV-A433 | 12/01/2025 | AERONAUTICAL INFORMATION SPECIALIST |

