

**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> PROVO MUNI | <u>AIRPORT ID</u> KPVU | <u>PROCEDURE NAME</u> RNAV (GPS) RWY 13 | <u>ORIGINAL/AMENDMENT</u> 3 | <u>CITY</u> PROVO | <u>STATE</u> UT | |
| <u>AIRPORT ELEVATION</u> 4497 | <u>TDZE</u> 4497 | <u>SUPERSEDED</u> RNAV (GPS) RWY 13 | <u>ORIGINAL/AMENDMENT</u> 2A | <u>DATED</u> 12/11/2014 | <u>MAG VAR</u> 12E | <u>EPOCH YEAR</u> 2010 |
| <u>FACILITY</u> RNAV | <u>COORDINATES OF FACILITIES</u> | <u>ACTUAL EFFECTIVE DATE</u> | <u>REQUIRED EFFECTIVE DATE</u> ROUTINE | <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> |
|-------------|-----------------|------------|-----------------|-----------------|--------------|------------|---------------|-----------------|-----------------|
| JAURN | IAF | DICOT | | TF | FB | 1.00 | 133.63 | 5.19 | 8000 |
| ZUXAG | IAF | DICOT | | TF | FB | 1.00 | 049.38 | 10.00 | 8000 |
| DICOT | IF | ZEGUR | | TF | FB | 1.00 | 133.69 | 5.26 | 6800 |
| ZEGUR | | WAVIT | | TF | FB | 1.00 | 133.73 | 2.19 | 6300 |
| WAVIT | FAF | RW13 | MAP | TF | FO | 0.30 | 133.75 | 5.50 | |
| RW13 | MAP | 4756 MSL | | CA | | | 133.75 | | |
| 4756 MSL | | HUNSU | | DF | FB | 1.00 | | | |
| HUNSU | | FEBGO | | TF | FB | 1.00 | 190.69 | 4.45 | |
| FEBGO | | ZARAK | | TF | FB | 1.00 | 217.90 | 11.42 | |
| ZARAK | | JAMUK | | TF | FB | 1.00 | 301.69 | 7.14 | |
| JAMUK | | FFU VORTAC | | TF | FO | 1.00 | 357.84 | 14.60 | 9000 |

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 9000 DIRECT HUNSU AND ON TRACK 190.69 TO FEBGO AND ON TRACK 217.90 TO ZARAK AND ON TRACK 301.69 TO JAMUK AND ON TRACK 357.84 TO FFU VORTAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT DICOT

3. FAC: 133.75

FAF: WAVIT

DIST FAF TO MAP: 5.50

DIST FAF TO THLD: 5.50

4. MIN ALT: DICOT 8000, ZEGUR 6800, WAVIT 6300

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

259 HAT: 0.65

GS ANT:

6. MIN GP INCPT: 6300

GP ALT AT FAF : WAVIT 6300

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS NOT CLEAR

20:1: IS CLEAR

TCH: 50.2

8. MSA FROM: RW13 13100

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA E OF RWY 18-36.
CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT.
CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT JAURN ON V21 NORTHBOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART R-6412 A, B & C, D
CHART VDP AT 0.98 NM TO RW13*
*LNAV ONLY
WAAS CHANNEL #97307
REFERENCE PATH ID: W13A
CHART FAS OBST: 4603 TREE 401412N/1114342W.
HOLD S, RT, 340.00 INBOUND
LTP HAE: 1353.2 M

MINIMUMS:

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

ALTERNATE: NA ☐ NA WHEN LOCAL WEATHER NOT AVAILABLE.; STANDARD - CAT D 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 | 4756 | 3/4 | 259 | 4756 | 3/4 | 259 | 4756 | 3/4 | 259 | 4756 | 3/4 | 259 | | | |
| LNAV/VNAV DA | 4838 | 1 | 341 | 4838 | 1 | 341 | 4838 | 1 | 341 | 4838 | 1 | 341 | | | QUALITY 29 CHECKED |
| LNAV MDA | 4940 | 1 | 443 | 4940 | 1 | 443 | 4940 | 1 3/8 | 443 | 4940 | 1 3/8 | 443 | | | |
| CIRCLING | 4940 | 1 | 443 | 4980 | 1 | 483 | 5140 | 1 3/4 | 643 | 5280 | 2 1/2 | 783 | | | |

CHANGES - REASONS

1. CHANGED ZUXAG TO DICOT COURSE FROM 049.39 TO 049.38 - NEW SURVEY.
2. CHANGED DICOT TO WAVIT TO DICOT TO ZEGUR; DISTANCE FROM 7.45 TO 5.26; ALTITUDE FROM 6300 TO 6800 - INTERMEDIATE SDF ADDED.
3. ADDED ZEGUR TO WAVIT - INTERMEDIATE SDF ADDED.
4. CHANGED RW13 (MAP) MSL FROM 4697 TO 4756 - NEW SURVEY.
5. CHANGED HUNSU TO SANNO TO HUNSU TO FEBGO; COURSE/DISTANCE FROM 205.72/11.86 TO 190.69/4.45 - NEW MISSED APPROACH DESIGN.
6. ADDED FEBGO TO ZARAK - NEW MISSED APPROACH DESIGN.
7. CHANGED SANNO TO MEDKE TO ZARAK TO JAMUK; COURSE/DISTANCE FROM 296.00/8.00 TO 301.69/7.14 - NEW MISSED APPROACH DESIGN.
8. CHANGED MEDKE TO FFU VORTAC TO JAMUK TO FFU VORTAC; COURSE/DISTANCE FROM 350.09/12.31 TO 357.84/14.60 - NEW MISSED APPROACH DESIGN.
9. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 9000 DIRECT HUNSU AND ON TRACK 205.72 TO SANNO AND RIGHT TURN ON TRACK 296.00 TO MEDKE AND ON TRACK 350.09 TO FFU VORTAC AND HOLD." TO "CLIMB TO 9000 DIRECT HUNSU AND ON TRACK 190.69 TO FEBGO AND ON TRACK 217.90 TO ZARAK AND ON TRACK 301.69 TO JAMUK AND ON TRACK 357.84 TO FFU VORTAC AND HOLD." - NEW MISSED APPROACH DESIGN.
10. CHANGED CHART FAS OBST FROM 4590 TREE 401410N/1114359W TO 4603 TREE 401412N/1114342W - NEW CONTROLLING OBSTACLE.
11. DELETED DISTANCE TO THLD FROM 200 HATH: 0.47 NM UNDER ADDITIONAL FLIGHT DATA AND ADDED 259 HAT: 0.65 TO LINE 5 - NEW CONTROLLING OBSTACLE.
12. CHANGED LTP HAE FROM 1353.3 M TO 1353.2 M - NEW SURVEY.
13. CHANGED LINE 7 FROM 34:1 IS CLEAR TO 34:1 IS NOT CLEAR; ADDED 20:1 IS CLEAR - NEW SURVEY.
14. CHANGED LPV DA/HAT FROM 4697/200 TO 4756/259 FOR ALL CATS- NEW CONTROLLING OBSTACLE.
15. CHANGED LNAV/VNAV DA/HAT FROM 4940/443 TO 4838/341 AND VISIBILITY FROM 1 1/2 TO 1 FOR ALL CATS - NEW CONTROLLING OBSTACLE AND VIS CALC.
16. CHANGED LNAV MDA/HAT FROM 5040/543 TO 4940/443 FOR ALL CATS AND VISIBILITY FOR CAT C/D FROM 1 5/8 TO 1 3/8 - NEW CONTROLLING OBSTACLE AND VIS CALC.
17. CHANGED CIRCLING CMDA/HAA FROM 5040/543 TO 4940/443 FOR CAT A; FROM 5040/543 TO 4980/483 FOR CAT B; FROM 5040/543 TO 5140/643 FOR CAT C; FROM 5060/563 TO 5280/783 FOR CAT D; VISIBILITY FROM 1 5/8 TO 1 3/4 FOR CAT C AND FROM 2 TO 2 1/2 FOR CAT D - NEW CONTROLLING OBSTACLE AND VIS CALC.
18. CHANGED CHART NOTE: "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23C (-9F) OR ABOVE 40C (104F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -23°C OR ABOVE 54°C" - FAHRENHEIT NO LONGER REQUIRED; NEW HIGH TEMPERATURE BASED OFF ISA30.
19. DELETED CHART NOTE: DME/DME RNP-0.3 NA AND REPLACED WITH PBN REQUIREMENTS NOTE RNP APCH - IAW .19H EQUIPMENT REQUIREMENTS NOTES.
20. CHANGED MSA FROM 13200 TO 13100 ON LINE 8 - NEW CONTROLLING OBSTACLE.
21. DELETED CHART PLANVIEW NOTE: RADAR REQUIRED FOR ARRIVALS AT ZUXAG - NOT REQUIRED FOR GPS PROCEDURES.
22. CHANGED CHART NOTE: FROM "CIRCLING NA E OF RWY 18 AND 31" TO "CIRCLING NA E OF RWY 18-36" - CHANGED FORMATTING IAW .19H AND CHANGED RWY 31 TO 36.
23. CHANGED FAS DATA BLOCK AS FOLLOWS: LTP LAT/LONG FROM 401348.7560N/1114356.7895W TO 401348.7650N/1114356.8000W; LTP ELLIPSOIDAL HEIGHT FROM +13533 TO +13532; FPAP LAT/LONG FROM 401235.0200N/1114251.4000W TO 401235.0220N/1114251.4135W; VERTICAL LIMIT FROM 35.0 TO 50.0; CRC REMAINDER FROM C282109C TO 8B023CF9 - NEW SURVEY.
24. ADDED CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED - IAW 8260.19H PARA 8-6-11 K. (3).
25. ADDED CAT D 800-2 1/2 AND NA WHEN LOCAL WEATHER NOT AVAILABLE TO ALTERNATE MINIMUMS - IAW MEMO #266 IMPLEMENTATION OF 8260.19H.1.
26. CHANGED VDP FROM 1.55 NM TO 0.98 NM - MINIMUMS LOWERED.
27. ADDED CHART CIRCLING ICON - UPDATED TO NEW CIRCLING CRITERIA.
28. ADDED CIRCLING RWY 18, 36 NA AT NIGHT - 20:1 PENETRATIONS FOR BOTH RWYS.
29. INCORPORATED THE CHANGES FROM AMDT 2A NOTAM - THRE CHANGED TO TDZE.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZLC, UT AERO, AMGR, SLC APP CON, PVU ATCT.

FLIGHT CHECKED BY

ALEX KRAUSE

OFFICE

FICO

DATE

2/26/2020

Digitally signed by

ALLAN WILL

Nov 06, 2020

DEVELOPED BY

ALLAN WILL (SHANE FOWLER)

OFFICE

AJV-A423

DATE

11/19/2019

Digitally signed by

ALLAN WILL

Nov 06, 2020

APPROVED BY

MARLON ROBINSON

OFFICE

AJV-A420

DATE

Digitally signed by

ALLAN WILL

Nov 06, 2020

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

| <u>DATA FIELD</u> | <u>DATA</u> |
|--|---------------|
| OPERATION TYPE | 0 |
| SBAS SERVICE PROVIDER IDENTIFIER | 0 |
| AIRPORT IDENTIFIER | KPVU |
| RUNWAY | RW13 |
| APPROACH PERFORMANCE DESIGNATOR | 0 |
| ROUTE INDICATOR | |
| REFERENCE PATH DATA SELECTOR | 0 |
| REFERENCE PATH IDENTIFIER (APPROACH ID) | W13A |
| LTP/FTP LATITUDE | 401348.7650N |
| LTP/FTP LONGITUDE | 1114356.8000W |
| LTP/FTP ELLIPSOIDAL HEIGHT | +13532 |
| FPAP LATITUDE | 401235.0220N |
| FPAP LONGITUDE | 1114251.4135W |
| THRESHOLD CROSSING HEIGHT (TCH) | 00050.2 |
| TCH UNITS SELECTOR (METERS OR FEET USED) | F |
| GLIDEPATH ANGLE (GPA) | 03.00 |
| COURSE WIDTH AT THRESHOLD | 106.75 |
| LENGTH OFFSET | 0128 |
| HORIZONTAL ALERT LIMIT (HAL) | 40.0 |
| VERTICAL ALERT LIMIT (VAL) | 50.0 |
| | |
| CRC REMAINDER | 8B023CF9 |

ADDITIONAL PATH POINT RECORD INFORMATION

| | |
|-------------------------|--------|
| ICAO CODE | K2 |
| LTP ORTHOMETRIC HEIGHT | +13707 |
| FPAP ORTHOMETRIC HEIGHT | +13707 |

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

| | | | | | | | |
|------------------------------|---------------------------|--|----------------------|----------------------|--------------------|----------------------------------|-------------------------|
| <u>AIRPORT</u> PROVO MUNI | <u>AIRPORT ID</u> KPVU | <u>PROCEDURE NAME</u> RNAV (GPS) RWY 13 | <u>AMDT NO.</u> 3 | <u>CITY</u> PROVO | <u>STATE</u> UT | <u>AIRPORT ELEVATION</u> 4497 | <u>FACILITY</u> RNAV |
|------------------------------|---------------------------|--|----------------------|----------------------|--------------------|----------------------------------|-------------------------|

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM TO
JAURN DICOT

| <u>RNP</u> | <u>DISTANCE</u> 5.19 | <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> |
| 1.AAO | 402627.00N/1115812.00W | | 6181 | 164 | 98 | 4E | 1000 | | | | PR200 AT619 | 8000 |
| 2.TERRAIN | 402627.00N/1115812.00W | | 5980 (6000) | | | | | | | | AS1500 | 7500 |

COMPUTATIONS

| | | | | | | | | | | | |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|
| <u>ALT</u> | <u>KIAS</u> | <u>KTAS</u> | <u>HAA</u> | <u>VKTW</u> | <u>TR</u> | <u>BA</u> | <u>DTA</u> | <u>COURSE CHANGE</u> | <u>DVEB</u> | <u>VEB OCS</u> | <u>RF CENTER FIX/DISTANCE</u> |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|

SEGMENT REMARKS:

INITIAL

FROM TO
ZUXAG DICOT

| <u>RNP</u> | <u>DISTANCE</u> 10.00 | <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> |
| 3.AAO | 402435.88N/1115846.20W | | 6500 | 50 | 20 | 2C | 1000 | | | | PR340 AT160 | 8000 |
| 4.TERRAIN | 402436.00N/1115845.00W | | 6017 (6000) | | | | | | | | AS1500 | 7500 |

COMPUTATIONS

| | | | | | | | | | | | |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|
| <u>ALT</u> | <u>KIAS</u> | <u>KTAS</u> | <u>HAA</u> | <u>VKTW</u> | <u>TR</u> | <u>BA</u> | <u>DTA</u> | <u>COURSE CHANGE</u> | <u>DVEB</u> | <u>VEB OCS</u> | <u>RF CENTER FIX/DISTANCE</u> |
|------------|-------------|-------------|------------|-------------|-----------|-----------|------------|----------------------|-------------|----------------|-------------------------------|

SEGMENT REMARKS:



INTERMEDIATE

FROM
DICOT

TO
ZEGUR

| RNP | DISTANCE 5.26 | PAT | MAP | HAT | | | HMAS | | | | | |
|-------------|------------------------|-----|-------------|------|------|----|------|-----|----|------|----------------------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 5.AAO | 402718.00N/1115200.00W | | 6155 | 164 | 98 | 4E | 500 | | | | AC98 SA-625 AT542 PR130 | 6800 |
| 6.TERRAIN | 402621.00N/1115224.00W | | 5032 (5000) | | | | | | | | AS1500 | 6500 |

COMPUTATIONS

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

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM
ZEGUR

TO
WAVIT

| RNP | DISTANCE 2.19 | PAT | MAP | HAT | | | HMAS | | | | | |
|-------------|------------------------|-----|-------------|------|------|----|------|-----|----|------|-----------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 7.AAO | 402203.00N/1114806.00W | | 4735 | 164 | 98 | 4E | 500 | | | | AC98 SA-1 AT968 | 6300 |
| 8.TERRAIN | 402057.00N/1114757.00W | | 4494 (4500) | | | | | | | | AS1500 | 6000 |

COMPUTATIONS

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

SEGMENT REMARKS:



FINAL: LPV

FROM
WAVIT

TO
RW13

| <u>RNP</u> | <u>DISTANCE</u> 5.50 | <u>PAT</u> | <u>MAP</u> DA | <u>HAT</u> 259 | | | <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> |
| 9.TREE (49-050308) | 401408.47N/1114408.10W | | 4573 | 20 | 3 | 1A | | 34:1 | | | MA9 | 4756 |

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM
WAVIT

TO
RW13

| <u>RNP</u> | <u>DISTANCE</u> 5.50 | <u>PAT</u> | <u>MAP</u> DA | <u>HAT</u> 341 | | | <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> |
| 10.TREE (49-050923) | 401412.05N/1114341.92W | | 4603 | 20 | 3 | 1A | 161 | | | | MA74 | 4838 |

COMPUTATIONS

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

SEGMENT REMARKS:



FINAL: LNAV

FROM
WAVIT

TO
RW13

| <u>RNP</u> | <u>DISTANCE</u> 5.50 | <u>PAT</u> | <u>MAP</u> RW13 | <u>HAT</u> 443 | | | <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> |
| 10.TREE (49-050923) | 401412.05N/1114341.92W | | 4603 | 20 | 3 | 1A | 250 | | | | MA66 | 4940 |

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
FFU VORTAC

| <u>RNP</u> | <u>DISTANCE</u> | <u>PAT</u> | <u>MAP</u> | <u>HAT</u> | | | <u>HMAS</u> 4565 | | | | | |
|---------------------|------------------------|------------|-----------------|-------------|-------------|-----------|---------------------|------------|-----------|-------------|--------------------|----------------|
| <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> |
| 11.TREE (49-050275) | 401408.98N/1114405.56W | | 4580 | 20 | 3 | 1A | | ASC | | | | 9000 |
| 13.AAO | 401524.00N/1115536.00W | | 7840 | 50 | 20 | 2C | 1000 | | | | PR152 | 9000 |
| 14.TERRAIN | 401630.00N/1115630.00W | | 7670 (7700) | | | | | | | | AS1000 | 8700 |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

PPV TOOL (AFS APPROVAL LETTER) USED FOR PRECIPITOUS TERRAIN EVALUATION VS TARGETS EVALUATION TO MAINTAIN 9000 PER FPT. PPV MAX VALUE 253. 253 X .6 = 152.



MISSED APPROACH : LNAV/VNAV

FROM
DA

TO
FFU VORTAC

| RNP | DISTANCE | PAT | MAP | HAT | | | HMAS 4677 | | | | | |
|-------------|------------------------|-----|-------------|------|------|----|--------------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 12.AAO | 395914.93N/1114344.82W | | 7279 | 50 | 20 | 2C | | ASC | | | SA-498 | 9000 |
| 13.AAO | 401524.00N/1115536.00W | | 7840 | 50 | 20 | 2C | 1000 | | | | PR152 | 9000 |
| 14.TERRAIN | 401630.00N/1115630.00W | | 7670 (7700) | | | | | | | | AS1000 | 8700 |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

PPV TOOL (AFS APPROVAL LETTER) USED FOR PRECIPITOUS TERRAIN EVALUATION VS TARGETS EVALUATION TO MAINTAIN 9000 PER FPT. PPV MAX VALUE 253. 253 X .6 = 152.

MISSED APPROACH : LNAV

FROM
RW13

TO
FFU VORTAC

| <u>RNP</u> | <u>DISTANCE</u> | <u>PAT</u> | <u>MAP</u> | <u>HAT</u> | | | <u>HMAS</u> 4840 | | | | | |
|--------------------|------------------------|------------|-----------------|-------------|-------------|-----------|---------------------|------------|-----------|-------------|--------------------|----------------|
| <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> |
| 12.AAO | 395914.93N/1114344.82W | | 7279 | 50 | 20 | 2C | | ASC | | | SA-498 | 9000 |
| 13.AAO | 401524.00N/1115536.00W | | 7840 | 50 | 20 | 2C | 1000 | | | | PR152 | 9000 |
| 14.TERRAIN | 401630.00N/1115630.00W | | 7670 (7700) | | | | | | | | AS1000 | 8700 |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

PPV TOOL (AFS APPROVAL LETTER) USED FOR PRECIPITOUS TERRAIN EVALUATION VS TARGETS EVALUATION TO MAINTAIN 9000 PER FPT. PPV MAX VALUE 253. 253 X .6 = 152.



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 (49-050923) | 401412.05N/1114341.92W | 1.38 | 443 | 4603 | 20 | 3 | 1A | 300 | | SI | 4940 |
| CATEGORY B | | | | | | | | | | | |
| 15.CRANE (49-050592) | 401459.86N/1114255.68W | 1.97 | 483 | 4680 | 20 | 3 | 1A | 300 | | | 4980 |
| CATEGORY C | | | | | | | | | | | |
| 16.POLE (49-050359) | 401629.67N/1114215.11W | 3.12 | 643 | 4836 | 20 | 3 | 1A | 300 | | | 5140 |
| CATEGORY D | | | | | | | | | | | |
| 17.AAO | 401730.00N/1114136.00W | 4.09 | 783 | 4964 | 50 | 20 | 2C | 300 | | | 5280 |

CIRCLING REMARKS:

MSA

CENTER
RW13

RADIUS
25

| SECTOR | OBSTRUCTION | COORDINATES | BEARING | DISTANCE | ELEV MSL | HORZ | VERT | AC | ROC | OCS | ADJUSTMENTS | MIN ALT |
|---------|-------------|------------------------|---------|----------|----------|------|------|----|------|-----|-------------|---------|
| 360-360 | AAO | 394918.00N/1114533.00W | 171 | 24.5 | 12057 | 164 | 98 | 4E | 1000 | | | 13100 |

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

PVU TOWER, ZLC ARTCC, SLC APP CON

| | | | | | | |
|---------------------------|-------------------------|----------------------------|---------------------------------|----------------------|-----------------------|-------------------------|
| <u>WX SERVICE</u> AWOS | <u>LOCATION</u> KPVU | <u>HRS OPERATION</u> 24 | <u>ALTIMETER SOURCE</u> KPVU | <u>DISTANCE</u> 0 | <u>SERVICE-A</u> Y | <u>ADJUSTMENTS</u> 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> |

WX REMARKS:

NO BACKUP ALTIMETER SOURCE AVAILABLE.

| | | | |
|--|----------------------|------------------------|----------------------------|
| <u>PRIMARY NAVAID</u> | <u>MONITOR POINT</u> | <u>HRS OPERATION</u> | <u>CAT</u> |
| <u>APPROACH AND RUNWAY LIGHTING SYSTEM</u> | | <u>RUNWAY MARKINGS</u> | <u>RUNWAY VISUAL RANGE</u> |
| RW18 - MIRL (PCL), PAPI-2L | | BSC-G | |
| RW36 - MIRL (PCL), PAPI-2L | | BSC-G | |
| RW31 - HIRL, PAPI-2L | | NPI-G | |
| RW13 - HIRL, REIL, PAPI-4L | | PIR-G | |

| | | | | | | |
|---------------------------------|-------------------------------------|--------------------|------------------------|--------------------------|---------------------------|--------------------|
| <u>GLIDESLOPE ANGLE</u> 3.00 | <u>ELEV RWY THRESHOLD</u> 4496.9 | <u>TCH</u> 50.2 | <u>ELEV GS ANTENNA</u> | <u>DISTANCE FROM RWY</u> | <u>VGSI ANGLE</u> 3.00 | <u>TCH</u> 49.8 |
|---------------------------------|-------------------------------------|--------------------|------------------------|--------------------------|---------------------------|--------------------|

FINAL APPROACH COURSE AIMING

| | | | |
|------------------|-------------------------------------|--------------------|------------------------------|
| RUNWAY THRESHOLD | <input checked="" type="checkbox"/> | FT FROM THRESHOLD | DISPLACED THRESHOLD DISTANCE |
| ON CENTERLINE | <input checked="" type="checkbox"/> | FT FROM CENTERLINE | |

CRITICAL TEMPERATURES

| | | | |
|-----------------------------|------------------------------|--------------------|-------------------------|
| <u>CRITICAL LOW</u> -23C | <u>CRITICAL HIGH</u> +54C | <u>ACT</u> -23C | <u>APT ISA</u> +6.1C |
|-----------------------------|------------------------------|--------------------|-------------------------|

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 1018 HIGH TEMP 1343.



"VISUAL PORTION OF FINAL" PENETRATIONS

| | | | |
|---|-------------------------------|---|--|
| Final Type | CIRCLING - RWY 18 | | |
| 20:1 | | | |
| 4534 TREE (49-022352) 401344.39N/1114309.43W (1.43) | | | |
| Final Type | CIRCLING - RWY 36 | | |
| 20:1 | | | |
| 4532 TREE (49-022355) 401223.36N/1114335.62W (7.53) | | 4523 TREE (49-050622) 401224.13N/1114330.28W (6.56) | |
| 4518 TRAVERSE_WAY (49-050558) 401224.75N/1114329.70W (5.09) | | 4518 TRAVERSE_WAY (49-050451) 401224.32N/1114330.88W (2.03) | |
| 4507 TREE (49-050720) 401226.30N/1114330.59W (1.07) | | 4504 TREE (49-050295) 401226.72N/1114329.81W (0.76) | |
| Final Type | LPV, LNAV/VNAV, LNAV - RWY 13 | | |
| 34:1 | | | |
| 4573 TREE (49-050308) 401408.47N/1114408.10W (18.99) | | 4547 TREE (49-050803) 401403.65N/1114403.79W (10.38) | |
| 4561 TREE (49-050925) 401408.56N/1114409.49W (4.99) | | 4558 TREE (49-050240) 401407.91N/1114408.64W (4.68) | |
| 4546 TREE (49-050655) 401404.84N/1114405.39W (4.4) | | 4562 TREE (49-050788) 401409.94N/1114409.41W (2.69) | |
| 4563 TREE (49-050508) 401409.92N/1114411.00W (1.7) | | | |

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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



PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

TAA NOT DEVELOPED PER FPT.

30 FT SAILBOATS, AVERAGE WATER DEPTH 16 FT, MAX WATER DEPTH 33 FT, LAKE SURFACE ELEVATION 4190 FT. (RETAINED FROM PREVIOUS AMDT)

PPV TOOL WAS USED FOR PRECIPITOUS TERRAIN EVALUATION.
PPV VALUE OF 132' USED FOR THE MISSED HOLDING (PPV MAX VALUE 220. 220 X .6 = 132).

HIGH TERRAIN IN MISSED LOCATED WITHIN THE 700' FLOOR. 1000' APPLIED TO MAINTAIN 9000 AT MISSED APPROACH CLEARANCE LIMIT PER ATC REQUEST.

LPV, LNAV/VNAV, LNAV PFAF/FAF COLLOCATED WITH ILS OR LOC RWY 13 PFAF.

LPV SLOPE: 34:1

LNAV/VNAV SLOPE: 23.34:1

ORDER 8260.3, VOLUME 1, 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 | 2.99 |
| WIDTH OF | FINAL | SEGMENT AT 1000FT POINT | 1.20 |
| TRUE COURSE OF | FINAL | SEGMENT CONTAINING 1000FT POINT | 145.75 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1000FT POINT | 4500 |
| DISTANCE FROM | THLD | TO 1500FT POINT | 4.90 |
| WIDTH OF | FINAL | SEGMENT AT 1500FT POINT | 1.57 |
| TRUE COURSE OF | FINAL | SEGMENT CONTAINING 1500FT POINT | 145.75 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1500FT POINT | 4500 |

THRESHOLD
COORDINATES
(IF STR-IN)401348.77N/1114356.80W

ARP COORDINATES401309.00N/1114324.10W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARPRUNWAY 13 DISTANCE 0.78 NM

FAF
COORDINATES401821.96N/1114759.46W

FIX NAME
COORDINATES

REMARKS
NO ADDITIONAL AIRSPACE REQUIRED



PART E: PREPARED BY

| | | | |
|--|---------------------------|---------------------------|---|
| <u>NAME</u> ALLAN WILL (SHANE FOWLER) | <u>OFFICE</u> AJV-A423 | <u>DATE</u> 11/19/2019 | <u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST |
|--|---------------------------|---------------------------|---|

