

**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 ID</u><br>APC       | <u>PROCEDURE NAME</u><br>RNAV (GPS) RWY 19R | <u>ORIGINAL/AMENDMENT</u><br>ORIG | <u>CITY</u><br>NAPA                       | <u>STATE</u><br>CA        |
| <u>AIRPORT ELEVATION</u><br>36 | <u>TDZE</u><br>30                           | <u>SUPERSEDED</u>                 | <u>DATED</u>                              | <u>EPOCH YEAR</u><br>2005 |
| <u>FACILITY</u><br>RNAV        | <u>COORDINATES OF FACILITIES</u>            | <u>ACTUAL EFFECTIVE DATE</u>      | <u>REQUIRED EFFECTIVE DATE</u><br>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> |
|------------------------|-----------------|------------------------|-----------------|-----------------|--------------|------------|---------------|-----------------|-----------------|
| BURDE                  |                 | SNOMA                  |                 | TF              | FB           | 1.00       | 011.48        | 6.34            | 6000            |
| SNOMA                  |                 | HEHAW                  |                 | TF              | FB           | 1.00       | 337.52        | 6.05            | 6000            |
| HEHAW                  |                 | RRIBT                  |                 | TF              | FB           | 1.00       | 006.48        | 6.44            | 6000            |
| REBAS                  |                 | WEBRR                  |                 | TF              | FB           | 1.00       | 340.76        | 18.22           | 6000            |
| WEBRR                  |                 | RRIBT                  |                 | TF              | FB           | 1.00       | 321.12        | 10.24           | 6000            |
| RRIBT                  |                 | BARKZ                  |                 | TF              | FB           | 1.00       | 002.45        | 5.24            | 6000            |
| BESSA                  |                 | ARRFF                  |                 | TF              | FB           | 1.00       | 220.74        | 5.88            | 6000            |
| RAGGS                  |                 | ARRFF                  |                 | TF              | FB           | 1.00       | 292.92        | 5.56            | 6000            |
| RUMSY                  | IAF             | POPES                  |                 | TF              | FB           | 1.00       | 170.18        | 23.48           | 5900            |
| ARRFF                  | IAF             | POPES                  |                 | TF              | FB           | 1.00       | 222.86        | 5.33            | 5900            |
| BARKZ                  | IAF             | POPES                  |                 | TF              | FB           | 1.00       | 073.39        | 5.69            | 5900            |
| POPES                  |                 | OIINK                  |                 | TF              | FB           | 1.00       | 162.16        | 5.22            | 3700            |
| OIINK                  | IF              | BAAHH                  |                 | TF              | FB           | 1.00       | 135.71        | 3.35            | 2900            |
| BAAHH                  |                 | NAAYY                  |                 | TF              | FB           | 1.00       | 135.73        | 3.15            | 1900            |
| NAAYY                  | FAF             | ROOAR/1.28 NM TO CUKOO |                 | TF              | FB           | 0.30       | 165.75        | 3.12            |                 |
| ROOAR/1.28 NM TO CUKOO |                 | CUKOO                  | MAP             | TF              | FO           | 0.30       | 165.75        | 1.28            |                 |
| CUKOO                  | MAP             | 700 MSL                |                 | CA              |              |            | 165.75        |                 | 700             |
| 700 MSL                |                 | FESAV                  |                 | DF              | FO           | 1.00       |               |                 | 3000            |

QUALITY  
10  
CHECKED

MISSED APPROACH

MAP:

LNAV: CUKOO

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3000 DIRECT FESAV AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

|    |                         |                                                                |              |           |                  |       |
|----|-------------------------|----------------------------------------------------------------|--------------|-----------|------------------|-------|
| 1. | PT                      | SIDE OF COURSE                                                 | OUTBOUND     | FT WITHIN | MILES OF         | (IAF) |
| 2. | PROFILE STARTS AT OIINK |                                                                |              |           |                  |       |
| 3. | FAC:                    | 165.75                                                         | FAF:         | NAAYY     | DIST FAF TO MAP: | 4.40  |
| 4. | MIN ALT:                | OIINK 3700, BAAHH 2900, NAAYY 1900, ROOAR/1.28 NM TO CUKOO 740 |              |           |                  |       |
| 5. | DIST TO THLD FROM OM:   | MM:                                                            | IM:          | 150 HAT:  | GS ANT:          |       |
| 6. | MIN GP INCPT:           | GP ALT AT FAF:                                                 |              |           | OM:              | MM:   |
| 7. | GP ANGLE:               | 34:1:                                                          | IS NOT CLEAR | 20:1:     | IS CLEAR         | TCH:  |
| 8. | MSA FROM:               | CUKOO 5100                                                     |              |           |                  |       |

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 19R HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART NOTE: CIRCLING CATS A/B/C NA EAST OF RWY 19R AND NORTHWEST OF RWY 24.  
CHART NOTE: CIRCLING CAT D NA EAST OF RWY 19L-1R.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT REBAS ON V87 SOUTHBOUND AND V150 SOUTHWEST BOUND.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BESSA ON V195 NORTHBOUND.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RAGGS ON T329/V494 EASTBOUND AND V195 SOUTHBOUND.  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT RUMSY ON V301 NORTHEAST BOUND.  
CHART SPEED ICON IN PLANVIEW AT RRIBT: MAX 230 KIAS.  
CHART SPEED ICON IN PLANVIEW AT POPES: MAX 210 KIAS.

ADDITIONAL FLIGHT DATA:

CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 20.00 DEGREES

HOLD NW, RT, 135.00 INBOUND.  
CHART FAS OBST: 363 TREE (06-040652) 381516N/1221540W.  
693 AAO 381836N/1221606W.  
FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD.  
NAAYY TO RW19R: 3.50/52.  
CHART CIRCLING ICON.



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

**ALTERNATE:**    NA    ☐ STANDARD - CAT C, D 1300-3, 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 |
| LNAV MDA   | 680    | 1   | 650     | 680    | 1   | 650     | 680    | 1 7/8 | 650     | 680    | 1 7/8 | 650     |        |     |         |
| CIRCLING   | 680    | 1   | 644     | 680    | 1   | 644     | 1280   | 3     | 1244    | 1300   | 3     | 1264    |        |     |         |

**CHANGES - REASONS**  
ORIGINAL PROCEDURE.

**COORDINATED WITH:**

A4A☐

ALPA☒

AOPA☒

APA☐

HAI☐

NBAA☒

OTHER: ZOA, NORCAL TRACON, APC ATCT, APT MGR

|                                           |                                                                     |                           |                           |                         |
|-------------------------------------------|---------------------------------------------------------------------|---------------------------|---------------------------|-------------------------|
| <b>FLIGHT CHECKED BY</b><br>KEVIN Y CHENG | <i>Digitally signed by</i><br><b>JOSEPH L ZEDER</b><br>Jul 24, 2024 | <b>OFFICE</b><br>FPO      | <b>DATE</b><br>07/23/2024 |                         |
| <b>DEVELOPED BY</b><br>JON NEIDIGH        | <i>Digitally signed by</i><br><b>JOSEPH L ZEDER</b><br>Jul 24, 2024 | <b>OFFICE</b><br>AJV-A432 | <b>DATE</b><br>02/27/2024 |                         |
| <b>APPROVED BY</b><br>CASIMIR L. TABAKA   | <i>Digitally signed by</i><br><b>JOSEPH L ZEDER</b><br>Jul 24, 2024 | <b>OFFICE</b><br>AJV-A432 | <b>DATE</b>               | <b>TITLE</b><br>MANAGER |



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

|                          |                                             |                         |                     |                    |                                |                         |
|--------------------------|---------------------------------------------|-------------------------|---------------------|--------------------|--------------------------------|-------------------------|
| <u>AIRPORT ID</u><br>APC | <u>PROCEDURE NAME</u><br>RNAV (GPS) RWY 19R | <u>AMDT NO.</u><br>ORIG | <u>CITY</u><br>NAPA | <u>STATE</u><br>CA | <u>AIRPORT ELEVATION</u><br>36 | <u>FACILITY</u><br>RNAV |
|--------------------------|---------------------------------------------|-------------------------|---------------------|--------------------|--------------------------------|-------------------------|

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM  
BURDE

TO  
SNOMA

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           |            | <u>HAT</u> | <u>HMAS</u> |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-------------|-------------|--------------------|----------------|
| 1.00               | 6.34                   |                 |             |             |           |            |            |             |             |                    |                |
| <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               | 380900.00N/1223536.00W | 1669            | 215         | 8           | 4B        | 2000       |            |             |             | AT2331             | 6000           |
| TERRAIN            | 380900.00N/1223536.00W | 1568 (1600)     |             |             |           |            |            |             |             | AS1500             | 3100           |

COMPUTATIONS

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

SEGMENT REMARKS:

FEEDER: STEPDOWN

FROM  
SNOMA

TO  
HEHAW

| <u>RNP</u><br>1.00 | <u>DISTANCE</u><br>6.05 | <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> |
| AAO                | 381909.00N/1223436.00W  | 2340            | 215         | 8           | 4B        | 2000       |            |             |             | AT1660             | 6000           |
| TERRAIN            | 381754.00N/1223324.00W  | 1765 (1800)     |             |             |           |            |            |             |             | AS1500             | 3300           |

COMPUTATIONS

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

SEGMENT REMARKS:



FEEDER: STEPDOWN

FROM

HEHAW

TO

RRIBT

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 6.44                   |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 382033.00N/1223424.00W | 2559            | 215         | 8           | 4B        | 2000       |             |           |             | AT1441             | 6000           |
| TERRAIN            | 382033.00N/1223427.00W | 2358 (2400)     |             |             |           |            |             |           |             | AS1500             | 3900           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER

FROM

REBAS

TO

WEBRR

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 18.22                  |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 381527.00N/1222312.00W | 873             | 215         | 8           | 4B        | 2000       |             |           |             | AT3127             | 6000           |
| TERRAIN            | 375633.00N/1222409.00W | 479 (500)       |             |             |           |            |             |           |             | AS1500             | 2000           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FEEDER: STEPDOWN

FROM

WEBRR

TO

RRIBT

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 10.24                  |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 382245.00N/1222654.00W | 2878            | 215         | 8           | 4B        | 2000       |             |           |             | AT1122             | 6000           |
| TERRAIN            | 382245.00N/1222654.00W | 2677 (2700)     |             |             |           |            |             |           |             | AS1500             | 4200           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER: STEPDOWN

FROM

RRIBT

TO

BARKZ

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 5.24                   |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 382727.00N/1223036.00W | 2927            | 215         | 8           | 4B        | 2000       |             |           |             | AT1073             | 6000           |
| TERRAIN            | 382727.00N/1223036.00W | 2726 (2700)     |             |             |           |            |             |           |             | AS1500             | 4200           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FEEDER

FROM

BESSA

TO

ARRFF

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 5.88                   |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 383627.00N/1220821.00W | 2861            | 215         | 8           | 4B        | 2000       |             |           |             | AT1139             | 6000           |
| TERRAIN            | 383642.00N/1221012.00W | 2309 (2300)     |             |             |           |            |             |           |             | AS1500             | 3800           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FEEDER

FROM

RAGGS

TO

ARRFF

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 5.56                   |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 383303.00N/1221609.00W | 2487            | 215         | 8           | 4B        | 2000       |             |           |             | AT1513             | 6000           |
| TERRAIN            | 382921.00N/1221336.00W | 1961 (2000)     |             |             |           |            |             |           |             | AS1500             | 3500           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

RUMSY

TO

POPES

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           |            | <u>HAT</u> | <u>HMAS</u> |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-------------|-------------|--------------------|----------------|
| 1.00               | 23.48                  |                 |             |             |           |            |            |             |             |                    |                |
| <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                | 385124.00N/1221724.00W | 3229            | 215         | 8           | 4B        | 1000       |            |             |             | PR250 AT1421       | 5900           |
| TERRAIN            | 385124.00N/1221724.00W | 3028 (3000)     |             |             |           |            |            |             |             | AS1500             | 4500           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

ARRFF

TO

POPES

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           |            | <u>HAT</u> | <u>HMAS</u> |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-------------|-------------|--------------------|----------------|
| 1.00               | 5.33                   |                 |             |             |           |            |            |             |             |                    |                |
| <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                | 383303.00N/1221609.00W | 2487            | 215         | 8           | 4B        | 1000       |            |             |             | PR220 AT2193       | 5900           |
| TERRAIN            | 383303.00N/1221609.00W | 2286 (2300)     |             |             |           |            |            |             |             | AS1500             | 3800           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

BARKZ

TO

POPES

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 5.69                   |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 382833.00N/1221945.00W | 1936            | 215         | 8           | 4B        | 1000       |             |           |             | PR250 AT2714       | 5900           |
| TERRAIN            | 383051.00N/1221939.00W | 1732 (1700)     |             |             |           |            |             |           |             | AS1500             | 3200           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM

POPES

TO

OIINK

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|-------------|-----------|-------------|--------------------|----------------|
| 1.00               | 5.22                   |                 |             |             |           |            |             |           |             |                    |                |
| <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                | 382824.00N/1221821.00W | 2379            | 215         | 8           | 4B        | 1000       |             |           |             | PR230              | 3700           |
| TERRAIN            | 382824.00N/1221821.00W | 2178 (2200)     |             |             |           |            |             |           |             | AS1500             | 3700           |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM

OIINK

TO

BAAHH

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> |            |           | <u>HMAS</u> |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| 1.00               | 3.35                   |                 |             |             |           |            |            |           |             |                    |                |
| <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                | 382521.00N/1221821.00W | 2205            | 215         | 8           | 4B        | 500        |            |           |             | PR190              | 2900           |
| TERRAIN            | 382300.00N/1222239.00W | 1194 (1200)     |             |             |           |            |            |           |             | AS1500             | 2700           |

COMPUTATIONS

ALTKIASKTASHAAVKTWTRBADTACOURSE CHANGEDVEBVEB OCSRF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM

BAAHH

TO

NAAYY

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             |           | <u>HAT</u> |            |           | <u>HMAS</u> |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|-----------|------------|------------|-----------|-------------|--------------------|----------------|
| 1.00               | 3.15                   |                 |             |             |           |            |            |           |             |                    |                |
| <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                | 382306.00N/1221609.00W | 1578            | 215         | 8           | 4B        | 500        |            |           |             | PR140 SA-334       | 1900           |
| TERRAIN            | 381836.00N/1221606.00W | 492 (500)       |             |             |           |            |            |           |             | AS1000             | 1500           |

COMPUTATIONS

ALTKIASKTASHAAVKTWTRBADTACOURSE CHANGEDVEBVEB OCSRF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV

FROM

NAAYY

TO

ROOAR/1.28 NM TO CUKOO

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|------------|------------|-------------|-----------|-------------|--------------------|----------------|
| 0.30               | 3.12                   |                 |             |             |            |            |             |           |             |                    |                |
| <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                | 381739.00N/1221554.00W | 361             | 215         | 8           | 4B         | 250        |             |           |             | PR60 RA60          | 740            |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

ROOAR/1.28 NM TO CUKOO

TO

CUKOO

| <u>RNP</u>         | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u> |           |             |                    |                |
|--------------------|------------------------|-----------------|-------------|-------------|------------|------------|-------------|-----------|-------------|--------------------|----------------|
| 0.30               | 1.28                   |                 | CUKOO       |             | 650        |            |             |           |             |                    |                |
| <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 (06-040652)   | 381515.71N/1221539.52W | 363             | 50          | 20          | 2C         | 250        |             |           |             | SA-7 XP74          | 680            |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

XP ADJUSTMENT TO AVOID CIH EVALUATION AT FESAV



MISSSED APPROACH: LNAV

FROM

CUKOO

TO

FESAV

| <u>RNP</u><br>0.30-1.00 | <u>DISTANCE</u>        | <u>PAT</u>      | <u>MAP</u>  |             | <u>HAT</u> |            | <u>HMAS</u><br>580 |           |             |                    |                |
|-------------------------|------------------------|-----------------|-------------|-------------|------------|------------|--------------------|-----------|-------------|--------------------|----------------|
| <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                |           |             |                    | 3000           |
| TREE                    | 381106.00N/1221551.00W | 379             | 215         | 8           | 4B         | 1000       |                    |           |             |                    | 1400           |
| TERRAIN                 | 381106.00N/1221551.00W | 278 (300)       |             |             |            |            |                    |           |             | AS1500             | 1800           |

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          |                        |        |      |          |      |      |    |     |     |             |         |
| TERRAIN (06-040742) | 381229.72N/1221458.20W | 1.30   | 644  | 283      | 50   | 20   | 2C | 300 |     | SI          | 680     |
| CATEGORY B          |                        |        |      |          |      |      |    |     |     |             |         |
| TERRAIN (06-162089) | 381138.00N/1221426.83W | 1.81   | 644  | 363      | 20   | 10   | 1B | 300 |     |             | 680     |
| CATEGORY C          |                        |        |      |          |      |      |    |     |     |             |         |
| TREE                | 381121.00N/1221333.00W | 2.85   | 1244 | 963      | 215  | 8    | 4B | 300 |     |             | 1280    |
| CATEGORY D          |                        |        |      |          |      |      |    |     |     |             |         |
| AAO                 | 381618.00N/1221442.00W | 3.72   | 1264 | 994      | 215  | 8    | 4B | 300 |     |             | 1300    |

CIRCLING REMARKS:

CIRCLING CAT A AND B CONTROLLING OBSTACLES DETERMINED BY MAP STUDY. NUMEROUS SURVEYED OBSTACLES EXIST IN LOCATION OF TARGETS-IDENTIFIED TERRAIN+VEG RESULTS.

MSA

CENTER

CUKOO

RADIUS

25

QUALITY  
10  
CHECKED

| SECTOR  | OBSTRUCTION | COORDINATES            | BEARING | DISTANCE | ELEV MSL | HORZ | VERT | AC | ROC  | OCS | ADJUSTMENTS | MIN ALT |
|---------|-------------|------------------------|---------|----------|----------|------|------|----|------|-----|-------------|---------|
| 360-360 | AAO         | 375254.00N/1215454.00W | 126     | 27.0     | 4035     | 215  | 8    | 4B | 1000 |     |             | 5100    |

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZOA ARTCC, APC TOWER

| <u>WX SERVICE</u>         | <u>LOCATION</u> | <u>HRS OPERATION</u> | <u>ALTIMETER SOURCE</u> | <u>DISTANCE</u> | <u>SERVICE-A</u> | <u>ADJUSTMENTS</u> |
|---------------------------|-----------------|----------------------|-------------------------|-----------------|------------------|--------------------|
| ASOS                      | APC             | 24                   | APC                     | 0               | Y                | 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> |
| ASOS                      | CCR             | 24                   | CCR                     | 17.12           | Y                | 42                 |

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME  
KAPC 36, KCCR 23  
RA = 41.2

| <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> |
| RW01R                                      |                      | BSC-G                  |                            |
| RW19L                                      |                      | BSC-G                  |                            |
| RW06 - MIRL (PCL), REIL (PCL)              |                      | NPI-G                  |                            |
| RW19R - MIRL (PCL), PAPI-4L                |                      | NPI-G                  |                            |
| RW24 - MIRL (PCL)                          |                      | NPI-G                  |                            |
| RW01L - MALS (PCL), MIRL (PCL)             |                      | PIR-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> |
|-------------------------|---------------------------|------------|------------------------|--------------------------|-------------------|------------|
|                         |                           |            |                        |                          | 3.25              | 52.0       |

FINAL APPROACH COURSE AIMING

|                  |                                     |                       |                              |
|------------------|-------------------------------------|-----------------------|------------------------------|
| RUNWAY THRESHOLD | <input type="checkbox"/>            | 3000FT 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> |
|---------------------|----------------------|------------|----------------|
|---------------------|----------------------|------------|----------------|

CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

|            |      |
|------------|------|
| FINAL TYPE | LNAV |
| 20:1       |      |

| AIRPORT ID                                                                                                          | PROCEDURE NAME     | AMDT NO. | CITY                                               | STATE | AIRPORT ELEVATION | FACILITY |
|---------------------------------------------------------------------------------------------------------------------|--------------------|----------|----------------------------------------------------|-------|-------------------|----------|
| APC                                                                                                                 | RNAV (GPS) RWY 19R | ORIG     | NAPA                                               | CA    | 36                | RNAV     |
| 44 TRAVERSE_WAY (06-056646) 381329.01N/1221642.09W (0.43)                                                           |                    |          |                                                    |       |                   |          |
| FINAL TYPE                                                                                                          | LNAV               |          |                                                    |       |                   |          |
| 34:1                                                                                                                |                    |          |                                                    |       |                   |          |
| 168 TREE (06-161643) 381405.09N/1221616.61W (8.57)                                                                  |                    |          | 171 TREE (06-161190) 381415.59N/1221642.06W (3.51) |       |                   |          |
| PENETRATIONS REMARKS:                                                                                               |                    |          |                                                    |       |                   |          |
| 20:1 NPA VISUAL SURFACE PENETRATION IS A TOWER-CONTROLLED ACCESS ROAD AND MAY BE DISREGARDED IAW 8660.19I 2-11-2.C. |                    |          |                                                    |       |                   |          |

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

|                       |
|-----------------------|
| PENETRATIONS REMARKS: |
|                       |

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - VDP LESS THAN 0.5 NM FROM SDF.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FOR CONTINGENCY PURPOSES: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CONCORD ALTIMETER SETTING AND INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C/D 1/8 SM.

100 FT VEGETATION USED PER FPT.

ORDER 8260.3 CHAPTER 2 APPLIED TO 693 AAO 381836.00N/1221606.00W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



PART D: AIRSPACE

DOCKET #24-AWP-78

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                 | 3.22   |
| WIDTH OF        | FINAL        | SEGMENT AT 1000FT POINT         | 1.20   |
| TRUE COURSE OF  | FINAL        | SEGMENT CONTAINING 1000FT POINT | 180.75 |
| HIGH TERRAIN IN | FINAL        | SEGMENT CONTAINING 1000FT POINT | 400    |
| DISTANCE FROM   | FAF          | TO 1500FT POINT                 | 3.5    |
| WIDTH OF        | INTERMEDIATE | SEGMENT AT 1500FT POINT         | 6.00   |
| TRUE COURSE OF  | INTERMEDIATE | SEGMENT CONTAINING 1500FT POINT | 150.71 |
| HIGH TERRAIN IN | INTERMEDIATE | SEGMENT CONTAINING 1500FT POINT | 1200   |

|                                            |                                 |
|--------------------------------------------|---------------------------------|
| THRESHOLD COORDINATES (IF STR-IN)          | 381323.54N/1221640.67W          |
| ARP COORDINATES                            | 381247.48N/1221650.47W          |
| RUNWAY APCH END AND DIST FURTHEST FROM ARP | RUNWAY 19R DISTANCE 0.61 NM     |
| FAF COORDINATES                            | 381815.46N/1221622.96W          |
| FIX NAME COORDINATES                       | IF OIINK 382356.02N/1222025.37W |

REMARKS

PART E: PREPARED BY

|             |          |            |                                     |
|-------------|----------|------------|-------------------------------------|
| NAME        | OFFICE   | DATE       | TITLE                               |
| JON NEIDIGH | AJV-A432 | 02/27/2024 | AERONAUTICAL INFORMATION SPECIALIST |

