

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> KARB | <u>PROCEDURE NAME</u> RNAV (GPS) RWY 24 | <u>ORIGINAL/AMENDMENT</u> 2F | <u>CITY</u> ANN ARBOR | <u>STATE</u> MI | | |
| <u>AIRPORT ELEVATION</u> 839 | <u>TDZE</u> 831 | <u>SUPERSEDED</u> RNAV (GPS) RWY 24 | <u>ORIGINAL/AMENDMENT</u> 2E | <u>DATED</u> 07/18/2019 | <u>MAG VAR</u> 5W | <u>EPOCH YEAR</u> 1985 |
| <u>FACILITY</u> RNAV | <u>COORDINATES OF FACILITIES</u> | <u>ACTUAL EFFECTIVE DATE</u> | <u>REQUIRED EFFECTIVE DATE</u> ROUTINE | <u>CANCEL/SUSPEND</u> | | |

TAA

| FROM | FIX TYPE | TO | FIX TYPE | ALTITUDE |
|---------------------|----------|-------|----------|----------|
| 1. 150/30 CW 330/30 | NOPT | VAQOL | IF/IAF | 3000 |
| 2. 330/30 CW 150/30 | | VAQOL | IAF | 3100 |

TERMINAL ROUTES

| FROM | FIX TYPE | TO | FIX TYPE | LEG TYPE | FO/FB | RNP | COURSE | DISTANCE | ALTITUDE |
|-----------------------|----------|-----------------------|----------|----------|-------|------|--------|----------|----------|
| VAQOL | IF/IAF | WUVRU | | TF | FB | 1.00 | 239.68 | 6.93 | 2500 |
| WUVRU | FAF | ISPIW/2.50 NM TO RW24 | | TF | FB | 0.30 | 239.59 | 2.63 | |
| ISPIW/2.50 NM TO RW24 | | RW24 | MAP | TF | FO | 0.30 | 239.59 | 2.50 | |
| RW24 | MAP | 1132 MSL | | CA | | | 239.59 | | |
| 1132 MSL | | YACNU | | DF | FO | 1.00 | | | 3000 |

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW24

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT YACNU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NE VAQOL, RT, 239.68 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 8000.

3. FAC: 239.59FAF: WUVRU

DIST FAF TO MAP: 5.13DIST FAF TO THLD: 5.13

4. MIN ALT: VAQOL 3000, WUVRU 2500, ISPIW/2.50 NM TO RW24 1660

5. DIST TO THLD FROM OM:MM:IM:150 HAT:301 HAT: 0.83GS ANT:

6. MIN GP INCPT: 2500GP ALT AT PFAF : WUVRU 2500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 12 AND 30.
CHART NOTE: RWY 24 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 38°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

HOLD SW, RT, 059.37 INBOUND.
CHART FAS OBST: 989 TREE 421349N/0834259W.
WAAS CHANNEL # 61120
REFERENCE PATH ID: W24A
LTP HAE: 217.6 M

MINIMUMS:

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

ALTERNATE: NA ☐ 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 |
| LPV DA | 1132 | 1 | 301 | 1132 | 1 | 301 | 1132 | 1 | 301 | 1132 | 1 | 301 | | | |
| LNAV/VNAV DA | 1170 | 1 | 339 | 1170 | 1 | 339 | 1170 | 1 | 339 | 1170 | 1 | 339 | | | |
| LNAV MDA | 1300 | 1 | 469 | 1300 | 1 | 469 | 1300 | 1 3/8 | 469 | 1300 | 1 3/8 | 469 | | | |



CHANGES - REASONS

1. RAISED PRIMARY/SECONDARY LPV DA FROM 1081/1119 TO 1132/1174 - NEW MA CONTROLLING OBSTACLE: 912 TRANSMISSION LINE (26-128998) 421347.33N/0834347.00W.
2. RAISED PRIMARY/SECONDARY LNAV/VNAV DA FROM 1155/1195 TO 1170/1212 - ADDED AC ADJUSTMENT FOR EXISTING UD OBSTACLE.
3. THLD TO HAT DISTANCE CHANGED FROM 0.66 TO 0.83 NM - HAT CHANGED FROM 250 TO 301.
4. MA CA LEG INCREASED FROM 1076 TO 1132 - LPV DA INCREASE.
5. INCREASED CAT C/D LNAV VISIBILITY FROM 1 1/4 TO 1 3/8 - BASED ON CURRENT VISIBILITY CRITERIA.
6. CHANGED NOTE "RNP APCH" TO "RNP APCH - GPS" -- IAW 8260.19I 8-6-8(B)2.
7. REMOVED ALL REFERENCE TO "*" TO INDICATE LNAV ONLY - IAW 8260.19I 8-6-10(M).
8. REMOVED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLOW RUN ALTIMETER SETTING AND INCREASE ALL DA/MDA 40 FEET" - MOVED SECONDARY ALTIMETER INFORMATION TO 8260-9 FORM IAW 8260.19I 8-6-9(F)3.

THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 6/21/2022.

1. TERMINAL ROUTE VAQOL TO WUVRU: RNP VALUE CHANGED FROM 0.5 TO 1.0.
2. ADDED "VAQOL 3000" TO PROFILE LINE 4.
3. ADDED CHART NOTE "CIRCLING NA TO RWYS 12 AND 30".

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZOB, AMGR, ARB ATCT, DTW APP CON, STATE AVIATION.

FLIGHT CHECKED BY
BRIAN PETER CARSON

Digitally signed by
CASIMIR L TABAKA

OFFICE
FIOG

DATE
06/16/2022

DEVELOPED BY
KARLIE BUNTIN

Digitally signed by
KARLIE B BUNTIN

Jul 07, 2022

OFFICE
AJV-A432

DATE
03/18/2022

APPROVED BY
LONNIE EVERHART

Jul 06, 2022

Digitally signed by
CASIMIR L TABAKA

Jul 07, 2022

OFFICE
AJV-A430

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

| <u>DATA FIELD</u> | <u>DATA</u> |
|--|---------------|
| OPERATION TYPE | 0 |
| SBAS SERVICE PROVIDER IDENTIFIER | 0 |
| AIRPORT IDENTIFIER | KARB |
| RUNWAY | RW24 |
| APPROACH PERFORMANCE DESIGNATOR | 0 |
| ROUTE INDICATOR | |
| REFERENCE PATH DATA SELECTOR | 0 |
| REFERENCE PATH IDENTIFIER (APPROACH ID) | W24A |
| LTP/FTP LATITUDE | 421332.9680N |
| LTP/FTP LONGITUDE | 0834422.4465W |
| LTP/FTP ELLIPSOIDAL HEIGHT | +02176 |
| FPAP LATITUDE | 421241.2400N |
| FPAP LONGITUDE | 0834600.1000W |
| THRESHOLD CROSSING HEIGHT (TCH) | 00040.0 |
| TCH UNITS SELECTOR (METERS OR FEET USED) | F |
| GLIDEPATH ANGLE (GPA) | 03.00 |
| COURSE WIDTH AT THRESHOLD | 106.75 |
| LENGTH OFFSET | 1680 |
| HORIZONTAL ALERT LIMIT (HAL) | 40.0 |
| VERTICAL ALERT LIMIT (VAL) | 50.0 |
| | |
| CRC REMAINDER | F15FFE25 |

ADDITIONAL PATH POINT RECORD INFORMATION

| | |
|-------------------------|--------|
| ICAO CODE | K5 |
| LTP ORTHOMETRIC HEIGHT | +02518 |
| FPAP ORTHOMETRIC HEIGHT | +02518 |



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

| | | | | | | |
|---------------------------|--|-----------------------|--------------------------|--------------------|---------------------------------|-------------------------|
| <u>AIRPORT ID</u> KARB | <u>PROCEDURE NAME</u> RNAV (GPS) RWY 24 | <u>AMDT NO.</u> 2F | <u>CITY</u> ANN ARBOR | <u>STATE</u> MI | <u>AIRPORT ELEVATION</u> 839 | <u>FACILITY</u> RNAV |
|---------------------------|--|-----------------------|--------------------------|--------------------|---------------------------------|-------------------------|

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
150/30 CW 330/30

TO
VAQOL

| <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> | |
| 1.TOWER (26-000093) | 422858.00N/0831219.00W | 1749 | 20 | 50 | 1D | 1000 | | | | AT251 | 3000 | |
| 2.TERRAIN | 424845.00N/0831212.00W | 1244 (1200) | | | | | | | | AS1500 | 2700 | |

COMPUTATIONS

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

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM
330/30 CW 150/30

TO
VAQOL

| <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> | |
| 3.TOWER (26-000991) | 422225.60N/0840410.22W | 2045 | 20 | 3 | 1A | 1000 | | | | | 3100 | |
| 4.TERRAIN | 423406.00N/0834012.00W | 1205 (1200) | | | | | | | | AS1500 | 2700 | |

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE

FROM
VAQOL (IF/IAF)

TO
WUVRU

| RNP | DISTANCE 6.93 | PAT | MAP | HAT | | | HMAS | | | | | |
|---------------------|------------------------|-----|-----------|------|------|----|------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 5.TOWER (26-000689) | 421802.70N/0833827.80W | | 1255 | 50 | 20 | 2C | 500 | | | | AT745 | 2500 |
| 6.TERRAIN | 421724.00N/0833845.00W | | 903 (900) | | | | | | | | AS1500 | 2400 |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM
WUVRU

TO
RW24

| RNP | DISTANCE 5.13 | PAT | MAP DA | HAT 301 | | | HMAS | | | | | |
|-------------------------------|------------------------|-----|-----------|------------|------|----|------|------|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| TRANSMISSION_LINE (26-128997) | 421347.33N/0834347.00W | | 912 | 50 | 20 | 2C | | 34:1 | | | AC20 MA51 | 1132 |

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM
WUVRU

TO
RW24

| RNP | DISTANCE 5.13 | PAT | MAP DA | HAT 339 | | | HMAS | | | | | |
|-------------|------------------------|-----|-----------|------------|------|----|------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 8.TREE | 421349.09N/0834258.89W | | 989 | 50 | 20 | 2C | 161 | | | | AC20 | 1170 |

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV

FROM
WUVRU

TO
ISPIW/2.50 NM TO RW24

| RNP | DISTANCE 2.63 | PAT | MAP | HAT | | | HMAS | | | | | |
|-------------|------------------------|-----|----------|------|------|----|------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 9.AAO | 421648.65N/0833940.81W | | 1079 | 50 | 20 | 2C | 250 | | | | RA40 DG291 | 1660 |

COMPUTATIONS

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

SEGMENT REMARKS:



FINAL: LNAV STEPDOWN

FROM
ISPIW/2.50 NM TO RW24

TO
RW24

| <u>RNP</u> | <u>DISTANCE</u> 2.50 | <u>PAT</u> | <u>MAP</u> RW24 | <u>HAT</u> 469 | | | <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> |
| 8.TREE | 421349.09N/0834258.89W | | 989 | 50 | 20 | 2C | 250 | | | | XP61 | 1300 |

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

SEGMENT REMARKS:
XP61: 61FT ADJUSTMENT ADDED TO MAINTAIN CURRENT MDA.
HOLD-IN-LIEU OF PT

FROM
VAQOL

TO
P-5

| RNP | DISTANCE | PAT P-5 | MAP | HAT | | | HMAS | | | | | |
|----------------------|------------------------|------------|-------------|------|------|----|------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| 10.TOWER (26-000724) | 422522.00N/0832739.00W | | 1250 | 500 | 50 | 5D | 1000 | | | | AT750 | 3000 |
| 11.TERRAIN | 422403.00N/0833315.00W | | 1018 (1000) | | | | | | | | AS1500 | 2500 |

| 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
YACNU

| RNP | DISTANCE | PAT | MAP | HAT | | | HMAS 920 | | | | | |
|-------------------------------|------------------------|-----|-------------|------|------|----|-------------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| TRANSMISSION_LINE (26-128998) | 421351.84N/0834347.81W | | 911 | 50 | 20 | 2C | | ASC | | | | 3000 |
| 12.AAO | 420715.00N/0840036.00W | | 1214 | 164 | 98 | 4E | 1000 | | | | | 2300 |
| 13.TERRAIN | 420715.00N/0840036.00W | | 1014 (1000) | | | | | | | | AS1500 | 2500 |

| 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
YACNU

| RNP | DISTANCE | PAT | MAP | HAT | | | HMAS 1009 | | | | | |
|-------------|------------------------|-----|-------------|------|------|----|--------------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| | | | | | | | | ASC | | | | 3000 |
| 12.AAO | 420715.00N/0840036.00W | | 1214 | 164 | 98 | 4E | 1000 | | | | | 2300 |
| 13.TERRAIN | 420715.00N/0840036.00W | | 1014 (1000) | | | | | | | | AS1500 | 2500 |

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

SEGMENT REMARKS:



MISSED APPROACH : LNAV

FROM

RW24

TO

YACNU

| RNP | DISTANCE | PAT | MAP | HAT | | | HMAS 1200 | | | | | |
|-------------|------------------------|-----|-------------|------|------|----|--------------|-----|----|------|-------------|---------|
| OBSTRUCTION | COORDINATES | | ELEV MSL | HORZ | VERT | AC | ROC | OCS | CG | CGTA | ADJUSTMENTS | MIN ALT |
| | | | | | | | | ASC | | | | 3000 |
| 12.AAO | 420715.00N/0840036.00W | | 1214 | 164 | 98 | 4E | 1000 | | | | | 2300 |
| 13.TERRAIN | 420715.00N/0840036.00W | | 1014 (1000) | | | | | | | | AS1500 | 2500 |

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

CENTER

RADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
DTW APP CON, ARB TOWER, ZOB ARTCC

| | | | | | | |
|---------------------------|-----------------|----------------------|-------------------------|-----------------|------------------|--------------------|
| <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 | KARB | 24 | KARB | 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 | KYIP | 24 | KYIP | 10.06 | Y | 41.7 |

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KARB 839.0, KYIP 715.8
RA = 41.7

| | | | |
|--|----------------------|------------------------|----------------------------|
| <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> |
| RW06 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL) | | NPI-G | |
| RW24 - MIRL (PCL), VASI-2L (PCL) | | NPI-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> |
| 3.00 | 826 | 40.0 | | | 3.00 | 20.0 |

| | | | |
|-------------------------------------|-------------------------------------|--------------------|------------------------------|
| <u>FINAL APPROACH COURSE AIMING</u> | | | |
| RUNWAY THRESHOLD | <input checked="" type="checkbox"/> | FT FROM THRESHOLD | DISPLACED THRESHOLD DISTANCE |
| ON CENTERLINE | <input checked="" type="checkbox"/> | FT FROM CENTERLINE | |

| | | | |
|------------------------------|----------------------|------------|----------------|
| <u>CRITICAL TEMPERATURES</u> | | | |
| <u>CRITICAL LOW</u> | <u>CRITICAL HIGH</u> | <u>ACT</u> | <u>APT ISA</u> |
| -16C | +54C | -16C | +13.34C |

CRITICAL TEMPERATURE REMARKS:
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 966 HIGH TEMP 1274.



"VISUAL PORTION OF FINAL" PENETRATIONS

| | | | |
|---|----------------------|--|--|
| Final Type | LPV, LNAV/VNAV, LNAV | | |
| 34:1 | | | |
| 887 TREE 26-029750 421338.94N/ 0924404.05W 23.41 | | 866 TREE 26-029874 421342.45N/ 0834411.74W 10.21 | |
| 867 TREE 26-029875 421338.98N/ 0834407.76W 10.03 | | 879 TREE 26-029752 421343.25N/ 0834407.22W 13.68 | |
| 884 TREE 26-029757 421342.00N/0834403.13W 13.47 | | 875 TREE 26-029753 421344.02N/0834407.17W 8.26 | |
| 879 TREE 26-029754 421342.23N/0834403.89W 9.44 | | 899 TREE 26-029762 421343.30N/0834357.72W 16.47 | |
| 899 TREE 26-029764 421342.57N/0834355.15W 13.1 | | 873 TREE 26-092869 421345.71N/0834406.47W 2.08 | |
| 888 TREE 26-029761 421343.20N/0834358.96W 7.88 | | 898 TREE 26-029738 421344.82N/0834356.63W 10.86 | |
| 912 TRANSMISSION_LINE 26-128997 421347.33N/0834347.00W 3.19 | | | |

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.

CONTINGENCY NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE WILLOW RUN ALTIMETER SETTING: INCREASE LPV DA TO 1174 FEET, INCREASE LNAV/VNAV DA TO 1212 FEET AND ALL VISIBILITIES 1/8 SM; INCREASE ALL MDAS 60 FEET AND VISIBILITY CATS C AND D 1/8 SM.

USED 100 FT VEGETATION.

INITIALS NOT DEVELOPED. LEG LENGTHS EXCEED 10NM TO ACCOMMODATE 90 DEGREE TURNS TO THE IAF. TAA DEVELOPED IAW CLARIFICATION OF APPLICATION OF TAA MEMO DATED 09/03/10.

| | | | | | | |
|---------------------------|--|-----------------------|--------------------------|--------------------|---------------------------------|-------------------------|
| AIRPORT ID KARB | PROCEDURE NAME RNAV (GPS) RWY 24 | AMDT NO. 2F | CITY ANN ARBOR | STATE MI | AIRPORT ELEVATION 839 | FACILITY RNAV |
|---------------------------|--|-----------------------|--------------------------|--------------------|---------------------------------|-------------------------|

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 | 3.25 |
| WIDTH OF | FINAL | SEGMENT AT 1000FT POINT | 1.20 |
| TRUE COURSE OF | FINAL | SEGMENT CONTAINING 1000FT POINT | 234.53 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1000FT POINT | 900 |
| DISTANCE FROM | THLD | TO 1500FT POINT | 4.93 |
| WIDTH OF | FINAL | SEGMENT AT 1500FT POINT | 1.95 |
| TRUE COURSE OF | FINAL | SEGMENT CONTAINING 1500FT POINT | 234.53 |
| HIGH TERRAIN IN | FINAL | SEGMENT CONTAINING 1500FT POINT | 900 |

THRESHOLD
COORDINATES
(IF STR-IN)

421332.97N/0834422.45W

ARP COORDINATES

421322.53N/0834444.37W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 24 DISTANCE 0.32 NM

FAF
COORDINATES

421631.54N/0833844.72W

FIX NAME
COORDINATES

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED

QUALITY
18
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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PART E: PREPARED BY

| | | | |
|------------------------------|---------------------------|---------------------------|---|
| <u>NAME</u> KARLIE BUNTIN | <u>OFFICE</u> AJV-A432 | <u>DATE</u> 03/18/2022 | <u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST |
|------------------------------|---------------------------|---------------------------|---|

