US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

# RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

## TERMINAL ROUTES

| FROM | TO | COURSE AND DISTANCE | ALTITUDE |
|---|---|---|---|
| ICORO (IF/IAF) | DAPCA (FB) | 346.05 / 7.28 | 4500 |
| DAPCA (FAF) | RW34L (MAP) (FO) | 346.04 / 5.02 | |
| RW34L (MAP) | 3051 MSL | 346.04 | |
| 3051 MSL | PERAE (FO) | | 5100 |

## MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW34L

CLIMB TO 5100 DIRECT PERAE AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. HOLD S ICORO, RT, 346.05 INBOUND, 4700 FT. IN LIEU OF PT (IAF)
3. FAC: 346.04 FAF: DAPCA DIST FAF TO MAP: 5.02 THLD: 5.02
4. MIN. ALT: ICORO 4700, DAPCA 4500
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 4500 GS ALT AT: DAPCA 4500 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 50.1 34:1 IS CLEAR
8. MSA FROM:

ADDITIONAL FLIGHT DATA:
HOLD N, RT, 166.03 INBOUND.
CHART FAS OBST: 3025 TANK 315614N/1021239W
CHART: ASR
DISTANCE TO THLD FROM 200 HATH: 0.47 NM.
CHART VDP AT 1.19 MILES TO RW34L*
*LNAV ONLY.
WAAS CHANNEL # 66029
REFERENCE PATH ID: W34A
LTP HAE: 844.7 M

MAG VAR: 9E EPOCH YEAR: 1985

## MINIMUMS

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

ALTERNATE: N A

STANDARD

| CATEGORY =====> | A | | | B | | | C | | | D | | | E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA | DH/MDA | VIS | HAT/HAA |
| LPV DA | 3051 | 3/4 | 200 | 3051 | 3/4 | 200 | 3051 | 3/4 | 200 | 3051 | 3/4 | 200 | | | |
| LNAV/VNAV DA | 3196 | 1 1/8 | 345 | 3196 | 1 1/8 | 345 | 3196 | 1 1/8 | 345 | 3196 | 1 1/8 | 345 | | | |
| LNAV MDA | 3280 | 1 | 429 | 3280 | 1 | 429 | 3280 | 1 1/4 | 429 | 3280 | 1 1/4 | 429 | | | |
| CIRCLING | 3440 | 1 | 568 | 3440 | 1 | 568 | 3440 | 1 1/2 | 568 | 3520 | 2 | 648 | | | |

NOTES:
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11C (13F) OR ABOVE 26C (78F).
CHART NOTE: DME/DME RNP-0.3 NA.
CHART NOTE: CIRCLING TO RWY16L NA AT NIGHT

| CITY AND STATE | ELEVATION: 2872 THRE: 2851 | FACILITY IDENTIFIER: | PROCEDURE NO./AMDT NO./EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|
| MIDLAND, TX | AIRPORT NAME: MIDLAND INTL | RNAV | RNAV (GPS) RWY 34L, AMDT 1 | AMDT: ORIG |
| | | | | DATED 09/10/2003 |

| ALL AFFECTED PROCEDURES REVIEWED? | COORDINATES OF FACILITIES | REQUIRED EFFECTIVE DATE |
|---|---|---|
| [X] YES [ ] NO | | **ROUTINE** |

COORDINATED WITH:

| ATA | AAT | ALPA | APA | AOPA | NBAA | OTHER (specify) |
|---|---|---|---|---|---|---|
| [X] | [ ] | [X] | [X] | [X] | [X] | [X] **ZFW, MAF APCH CON, CEN FPT, AMGR** |

| FLIGHT CHECKED BY | | |
|---|---|---|
| NAME: | FIFO | DATE: |

| DEVELOPED BY | | |
|---|---|---|
| NAME: **JILL OLSON (BRIAN BERUBEE)** | FIFO **AJV-353** | DATE: **03/19/2012** |

| APPROVED BY | | |
|---|---|---|
| NAME: **LARRY H STROUT** **MANAGER** | FIFO **AJV-353** | DATE: |

CHANGES:

**1. ADDED LPV AND VNAV MINIMA AND ASSOCIATED DATA**
**2. CHANGED FAF TO MAP DIST FROM 4.95 TO 5.02**
**3. CHANGED TCH FROM 52 TO 50.1**
**4. RAISED CMDA FROM 3340 TO 3440 AND 3520**
**5. CHANGED INTERMEDIATE DIST FROM 6.00 TO 7.28**
**6. CHANGED IF NAME FROM HEVGO TO ICORO**
**7. DELETED OPAYU AND CEPTA INITIALS**
**8. UPDATED EQUIPMENT NOTES**
**9. CHANGED TDZE TO THRE**
**10. ADDED ALTERNATE MINIMUMS**
**11. CHANGED MISSED APPROACH CLEARANCE FROM ADAYA TO PERAE**

REASONS:

**1/7. FPT REQUEST**
**2. PFAF LOCATION**
**3. AVNIS**
**4. OBSTACLE STUDY**
**5. LEG LENGTH CRITERIA**
**6/8. CRITERIA**
**9. SURVEY**
**10. AIRPORT QUALIFIES**
**11. FIX MOVEMENT CRITERIA**

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TAA

| | FROM | TO | ALT |
|---|---|---|---|
| 1. | 256/30 CW 076/30 (NOPT) | ICORO (IF/IAF) (FB) | 4700 |
| 2. | 076/30 CW 256/30 | ICORO (IF/IAF) (FO) | 5100 |

| CITY AND STATE | ELEVATION: 2872 THRE: 2851 | FACILITY IDENTIFIER: | PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|
| MIDLAND, TX | AIRPORT NAME: MIDLAND INTL | RNAV | RNAV (GPS) RWY 34L, AMDT 1 | AMDT: ORIG |
| | | | | DATED: 09/10/2003 |

| ALL AFFECTED PROCEDURES REVIEWED? | COORDINATES OF FACILITIES | REQUIRED EFFECTIVE DATE |
|---|---|---|
| ☐ YES ☐ NO | | |

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

| FLIGHT CHECKED BY | | |
|---|---|---|
| NAME: | FIFO | DATE: |
| **DEVELOPED BY** | | |
| NAME: | FIFO | DATE: |
| **APPROVED BY** | | |
| NAME: | FIFO | DATE: |

CHANGES:

REASONS:

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## FAS DATA BLOCK INFORMATION

| DATA FIELD | DATA |
|---|---|
| OPERATION TYPE | 0 |
| SBAS SERVICE PROVIDER IDENTIFIER | 0 |
| AIRPORT IDENTIFIER | KMAF |
| RUNWAY | RW34L |
| APPROACH PERFORMANCE DESIGNATOR | 0 |
| ROUTE INDICATOR | |
| REFERENCE PATH DATA SELECTOR | 0 |
| REFERENCE PATH IDENTIFIER (APPROACH ID) | W34A |
| LTP/FTP LATITUDE | 315600.2040N |
| LTP/FTP LONGITUDE | 1021210.3305W |
| LTP/FTP ELLIPSOIDAL HEIGHT | +08447 |
| FPAP LATITUDE | 315733.8600N |
| FPAP LONGITUDE | 1021219.8600W |
| THRESHOLD CROSSING HEIGHT (TCH) | 00050.1 |
| TCH UNITS SELECTOR (METERS OR FEET USED) | F |
| GLIDEPATH ANGLE (GPA) | 03.00 |
| COURSE WIDTH AT THRESHOLD | 106.75 |
| LENGTH OFFSET | 0000 |
| HORIZONTAL ALERT LIMIT (HAL) | 40.0 |
| VERTICAL ALERT LIMIT (VAL) | 35.0 |
| CRC REMAINDER | F87D527E |

## ADDITIONAL PATH POINT RECORD INFORMATION

| | |
|---|---|
| ICAO CODE | K4 |
| LTP ORTHOMETRIC HEIGHT | +08690 |
| FPAP ORTHOMETRIC HEIGHT | +08690 |

| CITY AND STATE | ELEVATION: 2872 THRE: 2851 | FACILITY IDENTIFIER: | PROCEDURE NO./ AMDT NO./EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|
| MIDLAND, TX | AIRPORT NAME: MIDLAND INTL | RNAV | RNAV (GPS) RWY 34L, AMDT 1 | AMDT: ORIG |
| | | | | DATED: 09/10/2003 |

| ALL AFFECTED PROCEDURES REVIEWED? | COORDINATES OF FACILITIES | REQUIRED EFFECTIVE DATE |
|---|---|---|
| ☐ YES ☐ NO | | |

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

| FLIGHT CHECKED BY | | |
|---|---|---|
| NAME: | FIFO | DATE: |
| **DEVELOPED BY** | | |
| NAME: | FIFO | DATE: |
| **APPROVED BY** | | |
| NAME: | FIFO | DATE: |

CHANGES:

REASONS:

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ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   DAPCA K40    W     N31505948W102113975                      E0068     NAR           DAPCA
        SUSAEAENRT   ICORO K40    W     N31434339W102105551                      E0068     NAR           ICORO
        SUSAEAENRT   PERAE K40    W     N32100800W102133681                      E0068     NAR           PERAE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4AMAF     0     095YHN31563310W102120690E009002872         1800018000C    MNAR    MIDLAND INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4FR34L  AICORO 010ICOROK4EA0EE AR   HF                    34610050    + 04700     18000                A JS
        SUSAP KMAFK4FR34L  R      010ICOROK4EA0E  I    IF                                + 04700     18000                A JS
        SUSAP KMAFK4FR34L  R      020DAPCAK4EA1E  F 051TF                    34610073    + 04500                          A JS
        SUSAP KMAFK4FR34L  R      020DAPCAK4EA2WALPV       ALNAV/VNAV ALNAV                                                 JS
        SUSAP KMAFK4FR34L  R      030RW34LK4PG0GY M 031TF                    34600050      02901             -300          A JS
        SUSAP KMAFK4FR34L  R      040         0  M     CA                    3460        + 03051                          A JS
        SUSAP KMAFK4FR34L  R      050PERAEK4EA0EY      DF                                + 05100                          A JS
        SUSAP KMAFK4FR34L  R      060PERAEK4EA0EE  R   HM                    16600050    + 05100                          A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4GRW34L   0095013460 N31560020W102121033+0200    +0844702851000050150R

                 1         2         3         4         5         6         7         8         9         0         1         2         3
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        --------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4PR34L  RW34L001 0000W34A0N3156002040W10212103305+084470300N3157338600W102121986001067500000005 01F400350F87D527E
        SUSAP KMAFK4PR34L  RW34L002E      +08690+08690LPV       66029
```

| CITY AND STATE | ELEVATION: 2872 THRE: 2851 | FACILITY IDENTIFIER: | PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|
| MIDLAND, TX | AIRPORT NAME: MIDLAND INTL | RNAV | RNAV (GPS) RWY 34L, AMDT 1 | AMDT: ORIG |
| | | | | DATED: 9/10/2003 |

| ALL AFFECTED PROCEDURES REVIEWED? ☐ YES ☐ NO | COORDINATES OF FACILITIES | REQUIRED EFFECTIVE DATE |
|---|---|---|

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

| FLIGHT CHECKED BY | | |
|---|---|---|
| NAME: | FIFO | DATE: |
| **DEVELOPED BY** | | |
| NAME: | NFPG | DATE: |
| **APPROVED BY** | | |
| NAME: | NFPG | DATE: |

CHANGES:

REASONS:

**U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION**

# RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (GPS)

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ICORO | ICORO | 010 | IAF | HF | R | FO | | 346.1(355.1T) | 005.0 | AA 04700 | |
| | | ICORO | 010 | FACF | IF | | FB | | | | AA 04700 | |
| | | DAPCA | 020 | FAF | TF | | FB | 0.5 | 346.1(355.1T) | 007.3 | AA 04500 | |
| | | RW34L | 030 | MAP | TF | | FO | 0.3 | 346.0(355.0T) | 005.0 | AT 02901 | |

| MISSED APPROACH | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 040 | | CA | | FB | | 346.0(355.0T) | | AA 03051 | |
| | PERAE | 050 | | DF | | FO | | | | AA 05100 | |
| | PERAE | 060 | | HM | R | FO | | 166.0(175.0T) | 005.0 | AA 05100 | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|
| | DAPCA | N315059.48 | W1021139.75 | N3150.991 | W10211.663 |
| | ICORO | N314343.39 | W1021055.51 | N3143.723 | W10210.925 |
| | PERAE | N321008.00 | W1021336.81 | N3210.133 | W10213.614 |
| | RW34L | N315600.20 | W1021210.33 | N3156.003 | W10212.172 |

| RUNWAY DATA | RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|---|
| | RW34L | 02851 | 50 |

| CITY AND STATE | ELEVATION: **2872** | **THRE: 2851** | FACILITY IDENTIFIER: | PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: | SUP: |
|---|---|---|---|---|---|
| **MIDLAND, TX** | AIRPORT NAME: **MIDLAND INTL** | | **RNAV** | **RNAV (GPS) RWY 34L, AMDT 1** | AMDT: **ORIG** |
| | | | | | DATED: **9/10/2003** |

| ALL AFFECTED PROCEDURES REVIEWED? | COORDINATES OF FACILITIES | REQUIRED EFFECTIVE DATE |
|---|---|---|
| ☐ YES ☐ NO | | |

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

| FLIGHT CHECKED BY | | |
|---|---|---|
| NAME: | FIFO | DATE: |
| **DEVELOPED BY** | | |
| NAME: | NFPG | DATE: |
| **APPROVED BY** | | |
| NAME: | NFPG | DATE: |

CHANGES:

REASONS:

# STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

| 1. APP SEGMENT | FROM | TO | OBSTRUCTION | COORDINATES | ELEV. MSL | ROC | ALT. ADJUSTMENTS | MIN. ALT. |
|---|---|---|---|---|---|---|---|---|
| STRAIGHT-IN AREA | 256/30 CW 076/30 | ICORO | 1. TOWER (48-003896) | 311243.00N/1021631.00W | 3624 (3C) | 1000 | | 4700 |
| | | | 2. TERRAIN | 311557.00N/1021318.00W | 3160 (3200) | | AS1500 | 4700 |
| STRAIGHT-IN AREA | 076/30 CW 256/30 | ICORO | 3. TOWER (48-005355) | 320551.00N/1021723.00W | 4048 (1A) | 1000 | | 5100 |
| | | | 4. TERRAIN | 315609.00N/1024536.00W | 3304 (3300) | | AS1500 | 4800 |
| INTERMEDIATE | ICORO (IF/IAF) | DAPCA | 5. TOWER (48-003969) | 314740.00N/1021044.00W | 3246 (5D) | 500 | DG754 | 4500 |
| | | | 6. TERRAIN | 314630.00N/1021157.00W | 2897 (2900) | | AS1000 | 3900 |
| FINAL: LPV | DAPCA | RW34L | | | | ASC | | 3051/200 |
| FINAL: LNAV/VNAV | DAPCA | RW34L | 7. TANK (48-004320) | 315614.00N/1021239.00W | 3025 (1B) | 22.43:1 | AC10 | 3196/345 |
| FINAL: LNAV | DAPCA | RW34L | 7. TANK (48-004320) | 315614.00N/1021239.00W | 3025 (1B) | 250 | | 3280 |
| 2. HOLD-IN-LIEU-OF-PT | ICORO | P-6 | 5. TOWER (48-003969) | 314740.00N/1021044.00W | 3246 (5D) | 1000 | AT454 | 4700 |
| | | | 8. TERRAIN | 313748.00N/1021212.00W | 2907 (2900) | | AS1500 | 4400 |
| 3. MISSED APPROACH — MAP: | DA / DA / RW34L | PERAE | | | | ASC | | 5100 |
| | | | 9. TOWER (48-008997) | 320405.00N/1021353.00W | 3549 (2C) | 1000 | | 4600 |
| ELEV: | 2886/3035/3180 | | 10. TERRAIN | 320900.00N/1021248.00W | 2976 (3000) | | AS1000 | 4000 |
| | | | 11. DRILLING RIG | 315830.43N/1021316.38W | 3071 (4D) | 300 | AC50 | 3440 |
| | | | 11. DRILLING RIG | 315830.43N/1021316.38W | 3071 (4D) | 300 | AC50 | 3440 |
| | | | 12. DRILLING RIG | 315839.59N/1021335.15W | 3078 (4D) | 300 | AC50 | 3440 |
| | | | 13. DRILLING RIG | 315812.53N/1021447.92W | 3163 (4D) | 300 | AC50 | 3520 |

| 4. CIRCLING AREA | DISTANCE | HT. ABV. ARPT. REQUIRED | HT. ABV. ARPT. ACTUAL |
|---|---|---|---|
| CATEGORY A | 1.3 NM | 350 | 568 |
| CATEGORY B | 1.5 NM | 450 | 568 |
| CATEGORY C | 1.7 NM | 450 | 568 |
| CATEGORY D | 2.3 NM | 550 | 648 |
| CATEGORY E | 4.5 NM | 550 | |

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

| SECTOR | OBSTRUCTION | BRG/DIST | ELEVATION (MSL) | M S A | SECTOR | OBSTRUCTION | BRG/DIST | ELEVATION (MSL) | M S A |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |

| CITY AND STATE | | FACILITY | PROCEDURE AND AMENDMENT NO: | REGION |
|---|---|---|---|---|
| MIDLAND, TX | ELEVATION: 2872<br>AIRPORT NAME: MIDLAND INTL | RNAV | RNAV (GPS) RWY 34L, AMDT 1 | ASW |

## PART B - SUPPLEMENTAL DATA

| 1. COMMUNICATIONS WITH: | 2. WEATHER SERVICE | | | 3. ALTIMETER SETTING |
|---|---|---|---|---|
| ZFW ARTCC<br>MAF APP CON<br>MAF TOWER | | N W S | OTHER:<br>ASOS | SOURCE: KMAF |
| | | F A A | | DISTANCE: 0 |
| SATISFACTORY ON: | | A / C | | HOURS REMOTE OPERATION: |
| X V H F X U H F H F | LOCATION: KMAF | | | ADJUSTMENT: 0 |

| | | |
|---|---|---|
| 4. MONITOR STATUS | PRIMARY NAVAID: | |
| | MONITOR POINT: | |
| | HRS OPTN: | CAT 1 |
| | | CAT 3 |

| | | |
|---|---|---|
| 5. APPROACH & RUNWAY LIGHTING | | ALS |
| | | (S) SALS |
| | X | MALS 28 (PCL) MALSR 10 (PCL) |
| | X | HIRL 10, 28, 34L, 16R |
| | X | MIRL 16L, 22, 04, 34R |
| | X | REIL 34L |
| | | TDZ |
| | | C/LINE |
| | X | OTHER (SPECIFY)<br>PAPI-4L 34L, 16R VASI-4L 10, 28 |

| | | |
|---|---|---|
| 6. RUNWAY MARKINGS | BASIC | BSC-G 16L, 34R |
| | ALL WEATHER | PIR-G 10, 28, 34L, 16R |
| | INSTRUMENT | NPI-G 22, 04 |
| 7. RUNWAY VISUAL RANGE | APPROACH | 10 |
| | MIDFIELD | |
| | ROLL OUT | |

| | | |
|---|---|---|
| 8. GLIDE PATH | GP ANGLE: 3.00 | ELEV RWY THRESHOLD: 2851.0 |
| | DISTANCE FROM RWY: | ELEV GP ANTENNA: |
| | | THRESHOLD CROSSING HEIGHT: 50.1 |

| | | | |
|---|---|---|---|
| 9. FINAL APPROACH COURSE AIMING | X | RUNWAY THRESHOLD | FT. FROM THRESHOLD |
| | X | ON CENTERLINE | FT. FROM CENTERLINE |

10. WAIVERS: NONE

| | |
|---|---|
| PART D - PREPARED BY:<br>JILL OLSON (BRIAN BERUBEE) | DATE:<br>03/19/2012 |
| TITLE:<br>AERONAUTICAL INFORMATION SPECIALIST | OFFICE:<br>AJV-353 |

## PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

SEE ATTACHED AIRSPACE LETTER.

40' VEGETATION APPLIED PER FPT

KMAF ASOS ON SVC A
REDUNDANT WEATHER REPORTING SOURCES ON APT

LPV SLOPE: 34:1
VNAV SLOPE: 22.43:1

AVERAGE COLD TEMPERATURE (-11) BASED ON 5-YEAR HISTORY (2006-2010)

VGSI DATA: 3.00/50.1

TERPS VOL 1, VISUAL PORTION OF FINAL PENETRATIONS
RW16L
20:1
2875 TREE (KMAF0047) 315649.00N/1021150.07W (7.70)
2880 ROAD (KMAF0035) 315650.86N/1021151.00W (3.12)

FPT NOTIFIED OF PENETRATIONS

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** DAPCA **STATE:** TX **COUNTRY:** US

**LATITUDE/LONGITUDE:** 315059.48N/1021139.75W **TYPE:** WP

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** MODIFY

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | RNAV (GPS) RWY 34L | | | KMAF | MIDLAND | TX (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
REPOSITIONED FIX 448 FT SOUTH
DELETED FAC 1 AND ASSOCIATED DATA
UPDATED FIX USE

**DEVELOPED BY:** **DATE:** 03/06/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZFW
**ATC FACILITY:** MAF APP CON/ATCT
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** ICORO **STATE:** TX **COUNTRY:** US

**LATITUDE/LONGITUDE:** 314343.39N/1021055.51W **TYPE:** WP

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** ESTABLISH

**HOLDING:** **HOLDING TYPE OF ACTION:** ESTABLISH

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S | | WP | 166.05 | 346.05 | R | | 5 | 4700 | 8000 | 6 | 9 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (48-003969) | 314740.00N/1021044.00W | 3246 | 5D |

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERN

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | RNAV (GPS) RWY 16R | | 1 | KMAF | MIDLAND | TX (US) |
| IAP | RNAV (GPS) RWY 34L | | 1 | KMAF | MIDLAND | TX (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG **DATE OF REVISION:** 07/26/2012

**DEVELOPED BY:** **DATE:** 03/05/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZFW
**ATC FACILITY:** MAF APP CON/ATCT
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** PERAE **STATE:** TX **COUNTRY:** US

**LATITUDE/LONGITUDE:** 321008.00N/1021336.81W **TYPE:** WP

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** ESTABLISH

**HOLDING:** **HOLDING TYPE OF ACTION:** ESTABLISH

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | | WP | 346.03 | 166.03 | R | | 5 | 5100 | 8000 | 6 | 9 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (48-005355) | 320551.00N/1021723.00W | 4048 | 1A |

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERN

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE
OBST LIES 920 INSIDE SECONDARY

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | RNAV (GPS) RWY 16R | | 1 | KMAF | MIDLAND | TX (US) |
| IAP | RNAV (GPS) RWY 34L | | 1 | KMAF | MIDLAND | TX (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG **DATE OF REVISION:** 07/26/2012

**DEVELOPED BY:** **DATE:** 03/05/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** CEN
**ARTCC:** ZFW
**ATC FACILITY:** MAF APP CON/ATCT
**OTHER:**

# TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **MIDLAND** STATE: **TX**

AIRPORT NAME: **MIDLAND INTL** ID: **KMAF**

PROCEDURE: **RNAV (GPS) RWY 34L** AMDT: **AMDT 1**

DOCKET # :
(96-AXX-X/Required/Not Required)

**ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.**

1. Distance from **THLD** to 1000' point **3.14**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **355.04**
4. High Terrain in **FINAL** segment containing 1000' point **2862**
5. Distance from **THLD** to 1500' point **4.82**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.95**
7. True Course of **FINAL** segment containing 1500' point **355.04**
8. High Terrain in **FINAL** segment containing 1500' point **2862**
9. Threshold Coordinates (if straight-in) ... **315600.20N** / **1021210.33W**
10. ARP Coordinates ..... **315633.10N** / **1021206.90W**
11. Runway Approach End and distance furthest from ARP.....RWY **16R**
    Distance **1.03** NM
12. FAF Coordinates ..... **315059.48N** / **1021139.75W**
    (Click to Select)

**REMARKS: Approach/Drawing attached.**
**ICORO: 314343.39N/1021055.51W**
**TAA UTILIZES 30 NM RADIUS. LEFT AND RIGHT BASE AREAS NOT USED**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** CEPTA **STATE:** TX **COUNTRY:** US

**LATITUDE/LONGITUDE:** 314431.75N/1021822.31W **TYPE:** WP

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** CANCEL

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HEVGO | | | | | 265.04 | 6.26 | | | | 17500 |

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | MIDLAND INTERNATIONAL - RNAV (GPS) RWY 4, RNAV (GPS) RWY 34L. | | | KMAF | MIDLAND | TX (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG **DATE OF REVISION:** 05/01/2003

**DEVELOPED BY:** **DATE:** 01/09/2003 **OFFICE:** AVN-140 **NAME:** RONALD COLLINS

**APPROVED BY:** **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** FTW
**ARTCC:** ZFW
**ATC FACILITY:** MAF APP CON
**OTHER:**

CANCELLED

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HEVGO **STATE:** TX **COUNTRY:** US

**LATITUDE/LONGITUDE:** 314504.48N/1021103.70W **TYPE:** WP

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** CANCEL

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | KMAF R34L | | | | | 175.04 | 10.95 | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** CANCEL

**PATTERNS:**

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | LEG LENGTH DME | HOLDING ALTITUDES MIN | HOLDING ALTITUDES MAX | TEMPLATES MIN | TEMPLATES MAX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S | | WP | 166.05 | 346.05 | R | | 4 | 4300 | 14000 | 5 | 8 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | TOWER (44-3969) | 314740.00N/1021044.00W | 3246 | 5D |

**REMARKS:**
HOLDING LIMITED TO ESTABLISHED PATTERN.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | MIDLAND INTERNATIONAL - RNAV (GPS) RWY 16R, RNAV (GPS) RWY 34L. | | | KMAF | MIDLAND | TX (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** ORIG **DATE OF REVISION:** 12/04/1995

**DEVELOPED BY:** **DATE:** 03/25/2003 **OFFICE:** AVN-140 **NAME:** RONALD COLLINS

**APPROVED BY:** **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** FTW
**ARTCC:** ZFW
**ATC FACILITY:** MAF APP CON
**OTHER:**

CANCELLED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** OPAYU **STATE:** TX **COUNTRY:** US

**LATITUDE/LONGITUDE:** 314543.25N/1020216.76W **TYPE:** WP

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** CANCEL

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | DIST FROM FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | GORBE | | | | | 203.68 | 6.53 | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** NO CHANGE

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | MIDLAND INTERNATIONAL - RNAV (GPS) RWY 28; RNAV (GPS) RWY 34L | | | KMAF | MIDLAND | TX (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 1 **DATE OF REVISION:** 09/01/2005

**REASON FOR REVISION:**
UPDATED FIX BEARING FROM GORBE.

**DEVELOPED BY:** **DATE:** 05/31/2005 **OFFICE:** AVN-120 **NAME:** JAMES BOARD

**APPROVED BY:** **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** FTW
**ARTCC:** ZFW
**ATC FACILITY:** MAF APP CON
**OTHER:** ST AV DIR, AMGR

CANCELLED