| Flight Procedure Tracking Form | Action: FLIGHT CHECK | Task Type: STAR | Date Open: 03/10/2011 | Task #: 2009100822838103002 | Request #: 20091008228381 |
|---|---|---|---|---|---|
| Procedure: STAR FNCHR (RNAV) ONE MEMPHIS TN KMEM | | Airport ID: KMEM | Airport: MEMPHIS INTL | | Reimbursable #: |
| City: MEMPHIS | ST: TN | GPS #: | | Estimated Chart Date: 07/26/2012 | FICO #: |
| Fac ID: | Fac. Type: Proc D | Specialist: SEAN BARBEE | | | |

## Procedure Review

| | Rec'd | Rel'd | Full Name | Comments |
|---|---|---|---|---|
| Lead: | 01/30/2012 | 05/07/2012 | JAMES DUBOIS | DME / DME |
| QA: | 05/07/2012 | 05/07/2012 | STEVEN SZUKALA | |
| Liaison: | 05/07/2012 | | Alfonso | DME/DME |

P1

ESV REQUEST INCLUDED

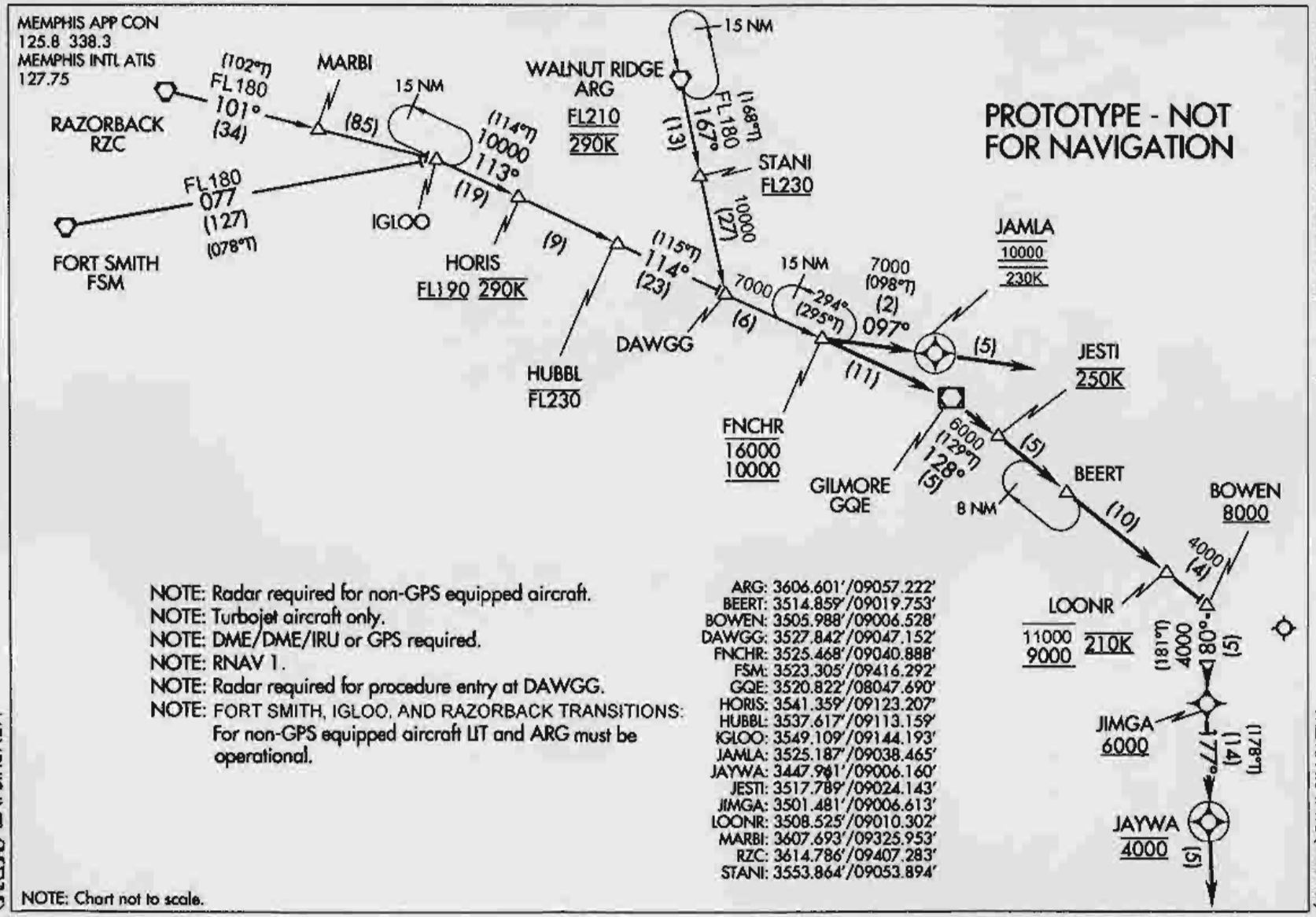
pg 3 of 11

**Procedure Comments:** ENROUTE **Remark Type:** INFORMATION

MEMPHIS, TN MEMPHIS INTL (KMEM) FNCHR ONE (RNAV) (STAR) ENROUTE-YES FC: 5.29.12 PUB: 7.26.12

ATTACHED FORMS: ESV REPORTS; 7100-4; 7100-3; 8260-2(S): BEERT-INT, REV 5; BOWEN-INT, REV 5; DAWGG-INT, ORIG; FNCHR-INT, ORIG; HORIS-INT, ORIG; HUBBL-INT, ORIG; IGLOO-INT, REV 6; JAMLA, ORIG; JAYWA, ORIG; JESTI-INT, ORIG; JIMGA, ORIG; LOONR-INT, ORIG; MARBI-INT, REV 5; RAZORBACK (RZC) VTAC, REV 17; STANI-INT, ORIG; WALNUT RIDGE (ARG) VTAC, REV 21; (INFO ONLY) FORT SMITH (FSM) VTAC, REV 14; GILMORE (GQE) VDME, REV 13.

CONTACT: DON SMITH, AJV-352 LEAD, 405.954.1036:




NOTE: Radar required for non-GPS equipped aircraft.
NOTE: Turbojet aircraft only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Radar required for procedure entry at DAWGG.
NOTE: FORT SMITH, IGLOO, AND RAZORBACK TRANSITIONS: For non-GPS equipped aircraft LIT and ARG must be operational.

ARG: 3606.601'/09057.222'
BEERT: 3514.859'/09019.753'
BOWEN: 3505.988'/09006.528'
DAWGG: 3527.842'/09047.152'
FNCHR: 3525.468'/09040.888'
FSM: 3523.305'/09416.292'
GQE: 3520.822'/08047.690'
HORIS: 3541.359'/09123.207'
HUBBL: 3537.617'/09113.159'
IGLOO: 3549.109'/09144.193'
JAMLA: 3525.187'/09038.465'
JAYWA: 3447.961'/09006.160'
JESTI: 3517.789'/09024.143'
JIMGA: 3501.481'/09006.613'
LOONR: 3508.525'/09010.302'
MARBI: 3607.693'/09325.953'
RZC: 3614.786'/09407.283'
STANI: 3553.864'/09053.894'

NOTE: Chart not to scale.

ARRIVAL DESCRIPTION

WALNUT RIDGE TRANSITION (ARG.FNCHR1): From over ARG on 167° track to DAWWG, then on 114° track to FNCHR, thence. . . .

DAWGG TRANSITION (DAWGG.FNCHR1): From over FNCHR on 114° track to FNCHR, thence. . . .

FORT SMITH TRANSITION (FSM.FNCHR1): From over FSM VORTAC on 077° track to IGLOO, then on 113° track to HUBBL, then on heading 114° to FNCHR, thence. . . .

IGLOO TRANSITION (IGLOO.FNCHR1): From over IGLOO on 113° track to HUBBL, then on 114° track to FNCHR, thence. . . .

RAZORBACK TRANSITION (RZC.FNCHR1): From over RZC VORTAC on 101° track to IGLOO, then on 113° track to HUBBL, then on heading 114° to FNCHR, thence. . . .

LANDING RWY 18L, 18C, 18R: From over FNCHR on 097° track to cross JAMLA at 10000 at 230K, then on 095° track, expect radar vectors to final approach course.

LANDING RWY 36L, 36C, 36R: From over FNCHR on 114° track to GQE VOR/DME then on 128° track to cross JESTI at 250K, then on 128° track to BEERT, then on 128° track to cross LOONR at/above 11000 and at/below 9000 at 210K, then on 128° track to cross BOWEN at/above 8000, then on 180° track to cross JIMGA at/above 6000, then on 177° track to cross JAYWA at 4000, then on 177° track, expect radar vectors to final approach course.

PROTOTYPE-NOT FOR NAVIGATION

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : JONESBORO | City : JONESBORO | Ident : JBR | State : AR |
| Type/Class : DME | Frequency : M984 | Reference No.: 10082257 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 795169-004 | 291 | 323 | 25 | 80 | 230 |

Requirement: DME COVERAGE FOR BEERT 5 RNAV STAR

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: | Date: 08/17/2010 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 795169-004 | 291 | 323 | 25 | 80 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: Meza Michael | Routing Symbol: | Date: 08/20/2010 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 795169-004 | 291 | 323 | 25 | 80 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/23/2010 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 795169-004 | 291 | 323 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : SOLLY SPRINGS | City : HOLLY SPRINGS | Ident : HLI | State : MS |
| Type/Class : TACR | Frequency : M1158 | Reference No.: 10082045 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 701415-010 | 277 | 306 | 50 | 30 | 180 |

Requirement: DME DME COVERAGE FOR THE BEERT RNAV STAR

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: AJV-E2 | Date: 08/02/2010 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 701415-010 | 277 | 306 | 50 | 30 | 180 | APPROVE |

Requirement/Remarks: DME DME COVERAGE FOR THE BEERT RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: Cassella Charles | Routing Symbol: | Date: 08/10/2010 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 701415-010 | 277 | 306 | 50 | 30 | 180 | APPROVE |

Requirement/Remarks: DME DME COVERAGE FOR THE BEERT RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/16/2010 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 701415-010 | 277 | 306 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : FOR CONDR ARRIVAL | City : WEST HELENA | Ident : UJM | State : AR |
| Type/Class : DME | Frequency : M994 | Reference No.: 12028928 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 960996-030 | 347 | 54 | 60 | 30 | 100 |

Requirement: DME COVERAGE FOR KMEM CONDR ARRIVAL

| Signature: Barbee Sean | Routing Symbol: AJV-352 | Date: 02/06/2012 |
|---|---|---|

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 960996-030 | 347 | 54 | 60 | 30 | 100 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR KMEM CONDR ARRIVALAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

| Signature: gazi abdullahil | Routing Symbol: | Date: 02/14/2012 |
|---|---|---|

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 960996-030 | 347 | 54 | 60 | 30 | 100 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR KMEM CONDR ARRIVALAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

| Signature: Hughes Dennis | Routing Symbol: | Date: 02/14/2012 |
|---|---|---|

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 960996-030 | 347 | 54 | | | | |

Requirement/Remarks:

| Signature: | Routing Symbol: | Date: |
|---|---|---|

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : LITTLE ROCK | City : LITTLE ROCK | Ident : LIT | State : AR |
| Type/Class : TACR | Frequency : M1173 | Reference No.: 10082254 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 704152-025 | 318 | 70 | 110 | 100 | 230 |

Requirement: DME COVERAGE FOR BEERT 5 RNAV STAR

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: | Date: 08/17/2010 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704152-025 | 318 | 70 | 110 | 100 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: Meza Michael | Routing Symbol: | Date: 08/19/2010 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704152-025 | 318 | 70 | 110 | 100 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/23/2010 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704152-025 | 318 | 70 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : 5 | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : WALNUT RIDGE | City : WALNUT RIDGE | Ident : ARG | State : AR |
| Type/Class : TACR | Frequency : M1179 | Reference No.: 10082255 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 698164-016 | 138 | 260 | 78 | 60 | 230 |

Requirement: DME COVERAGE FOR BEERT 5 RNAV STAR

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: | Date: 08/17/2010 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 698164-016 | 138 | 260 | 78 | 60 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: Meza Michael | Routing Symbol: | Date: 08/19/2010 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 698164-016 | 138 | 260 | 78 | 60 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/23/2010 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 698164-016 | 138 | 260 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : GILMORE | City : GILMORE | Ident : GQE | State : AR |
| Type/Class : DME | Frequency : M1164 | Reference No.: 10082259 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 780927-018 | 113 | 141 | 35 | 25 | 90 |

Requirement: DME COVERAGE FOR BEERT 5 RNAV STAR

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: | Date: 08/17/2010 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 780927-018 | 113 | 141 | 35 | 25 | 90 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: Meza Michael | Routing Symbol: | Date: 08/20/2010 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 780927-018 | 113 | 141 | 35 | 25 | 90 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/23/2010 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 780927-018 | 113 | 141 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : GILMORE | City : GILMORE | Ident : GQE | State : AR |
| Type/Class : DME | Frequency : M1164 | Reference No.: 10082260 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 780927-019 | 286 | 305 | 45 | 50 | 180 |

Requirement: DME COVERAGE FOR BEERT 5 RNAV STAR

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: | Date: 08/17/2010 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 780927-019 | 286 | 305 | 45 | 50 | 180 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: Meza Michael | Routing Symbol: | Date: 08/20/2010 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 780927-019 | 286 | 305 | 45 | 50 | 180 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/23/2010 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 780927-019 | 286 | 305 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : MEMPHIS | City : MEMPHIS | Ident : MEM | State : TN |
| Type/Class : TACR | Frequency : M1209 | Reference No.: 10051053 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 772982-015 | 40 | 56 | 85 | 50 | 180 |

Requirement: DME COVERAGE ON LTOWN RNAV STAR

| Signature: MILLER JERRY | Routing Symbol: | Date: 05/18/2010 |
|---|---|---|

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 772982-015 | 40 | 56 | 85 | 50 | 180 | APPROVE |

Requirement/Remarks: DME COVERAGE ON LTOWN RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| Signature: Cassella Charles | Routing Symbol: | Date: 05/19/2010 |
|---|---|---|

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 772982-015 | 40 | 56 | 85 | 50 | 180 | APPROVE |

Requirement/Remarks: DME COVERAGE ON LTOWN RNAV STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 05/19/2010 |
|---|---|---|

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 772982-015 | 40 | 56 | | | | |

Requirement/Remarks:

| Signature: | Routing Symbol: | Date: |
|---|---|---|

## ESV Details

| | | | |
|---|---|---|---|
| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
| **Facility Data** | | | |
| Chart Name : MALDEN | City : MALDEN | Ident : MAW | State : MO |
| Type/Class : TACR | Frequency : M1010 | Reference No.: 11075813 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 702703-010 | 184 | 204 | 86 | 40 | 160 |

Requirement: DME DME COVERAGE FOR AUTMN AZONE BBKING BINKY CASLN CHLDR CRSON DUCKZ GENEH GMBUD GOETZ GRIZZ HOTRD JERLE JTEEE OLEMS PIEPI SELPH RNAV SIDS

| | | |
|---|---|---|
| Signature: MILLER JERRY | Routing Symbol: AJV-E2 | Date: 07/12/2011 |

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 702703-010 | 184 | 204 | 86 | 40 | 160 | APPROVE |

Requirement/Remarks: DME DME COVERAGE FOR AUTMN AZONE BBKING BINKY CASLN CHLDR CRSON DUCKZ GEApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 07/19/2011 |

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 702703-010 | 184 | 204 | 86 | 40 | 160 | APPROVE |

Requirement/Remarks: DME DME COVERAGE FOR AUTMN AZONE BBKING BINKY CASLN CHLDR CRSON DUCKZ GEApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 07/19/2011 |

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 702703-010 | 184 | 204 | | | | |

Requirement/Remarks:

| | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

# ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : HARRISON | City : HARRISON | Ident : HRO | State : AR |
| Type/Class : DME | Frequency : M1159 | Reference No.: 10082261 | |

**Expanded Service Volume Data: (Requesting Officer)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 911140-005 | 149 | 193 | 52 | 90 | 230 |

Requirement: DME COVERAGE FOR BEERT 5 STAR

| Signature: MILLER JERRY | Routing Symbol: | Date: 08/17/2010 |
|---|---|---|

**Expanded Service Volume Data: (FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 911140-005 | 149 | 193 | 52 | 90 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| Signature: Meza Michael | Routing Symbol: | Date: 08/20/2010 |
|---|---|---|

**Expanded Service Volume Data: (Super FMO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 911140-005 | 149 | 193 | 52 | 90 | 230 | APPROVE |

Requirement/Remarks: DME COVERAGE FOR BEERT 5 STARApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 08/23/2010 |
|---|---|---|

**Expanded Service Volume Data: (FIFO)**

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 911140-005 | 149 | 193 | | | | |

Requirement/Remarks:

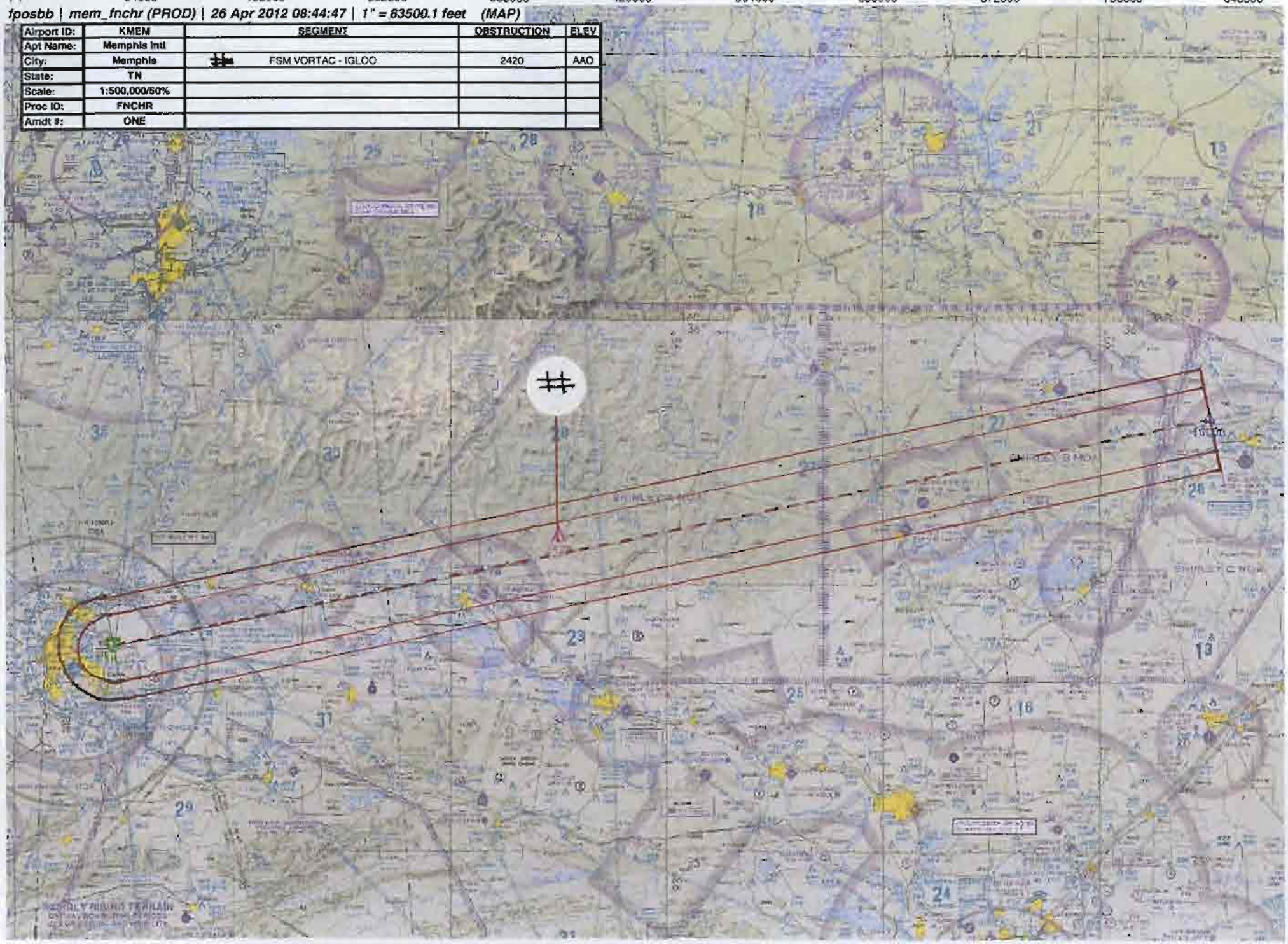
| Signature: | Routing Symbol: | Date: |
|---|---|---|

NM 14 28 42 56 70 84 98 112 126 140

FT 84000 168000 252000 336000 420000 504000 588000 672000 756000 840000

*fposbb | mem_fnchr (PROD) | 26 Apr 2012 08:44:47 | 1" = 83500.1 feet (MAP)*

| Airport ID: | KMEM | SEGMENT | OBSTRUCTION | ELEV |
|---|---|---|---|---|
| Apt Name: | Memphis Intl | | | |
| City: | Memphis | FSM VORTAC - IGLOO | 2420 | AAO |
| State: | TN | | | |
| Scale: | 1:500,000/50% | | | |
| Proc ID: | FNCHR | | | |
| Amdt #: | ONE | | | |

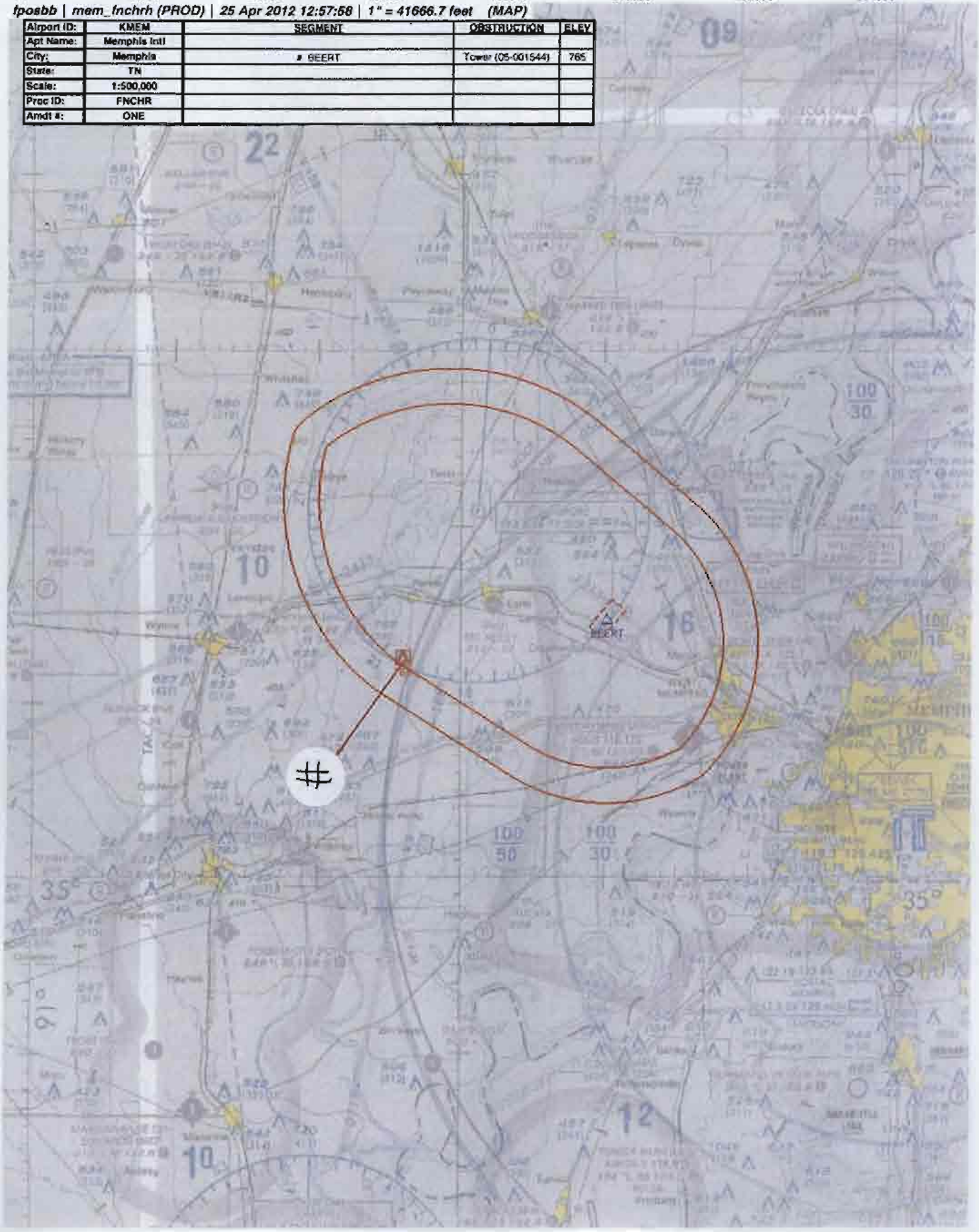


NM 7 14 21 28 35 42 49

FT 42000 84000 126000 168000 210000 252000 294000

*fposbb | mem_fnchrh (PROD) | 25 Apr 2012 12:57:58 | 1" = 41666.7 feet (MAP)*

| Airport ID: | KMEM | SEGMENT | OBSTRUCTION | ELEV |
|---|---|---|---|---|
| Apt Name: | Memphis Intl | | | |
| City: | Memphis | # BEERT | Tower (05-001544) | 765 |
| State: | TN | | | |
| Scale: | 1:500,000 | | | |
| Proc ID: | FNCHR | | | |
| Amdt #: | ONE | | | |

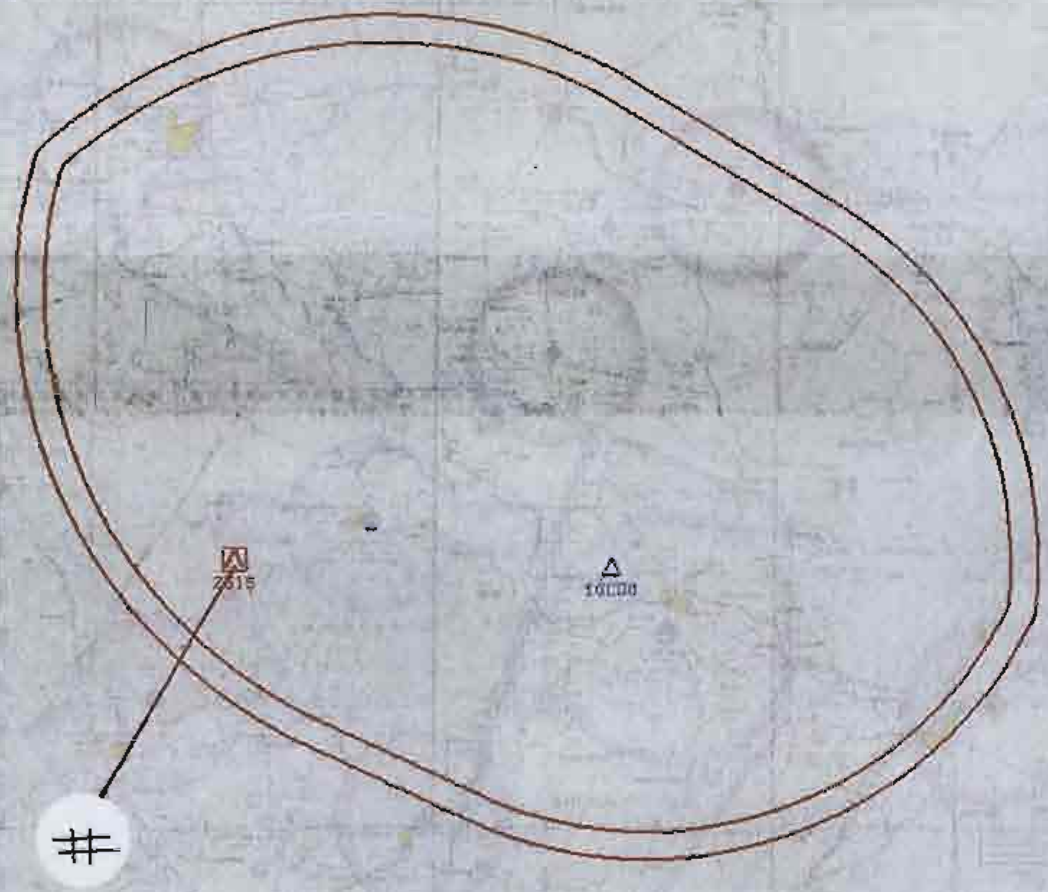


NM 14 28 42 56 70 84 98

FT 84000 168000 252000 336000 420000 504000 588000

*fposbb | mem_dawggh (PROD) | 20 Mar 2012 09:27:41 | 1" = 83500.1 feet (MAP)*

| Airport ID: | KMEM | SEGMENT | OBSTRUCTION | ELEV |
|---|---|---|---|---|
| Apt Name: | Memphis Intl | | | |
| City: | Memphis | * IGLOO | Tower (05-000563) | 2515 |
| State: | TN | | | |
| Scale: | 1:500,000/50% | | | |
| Proc ID: | FNCHR | | | |
| Amdt #: | ONE | | | |

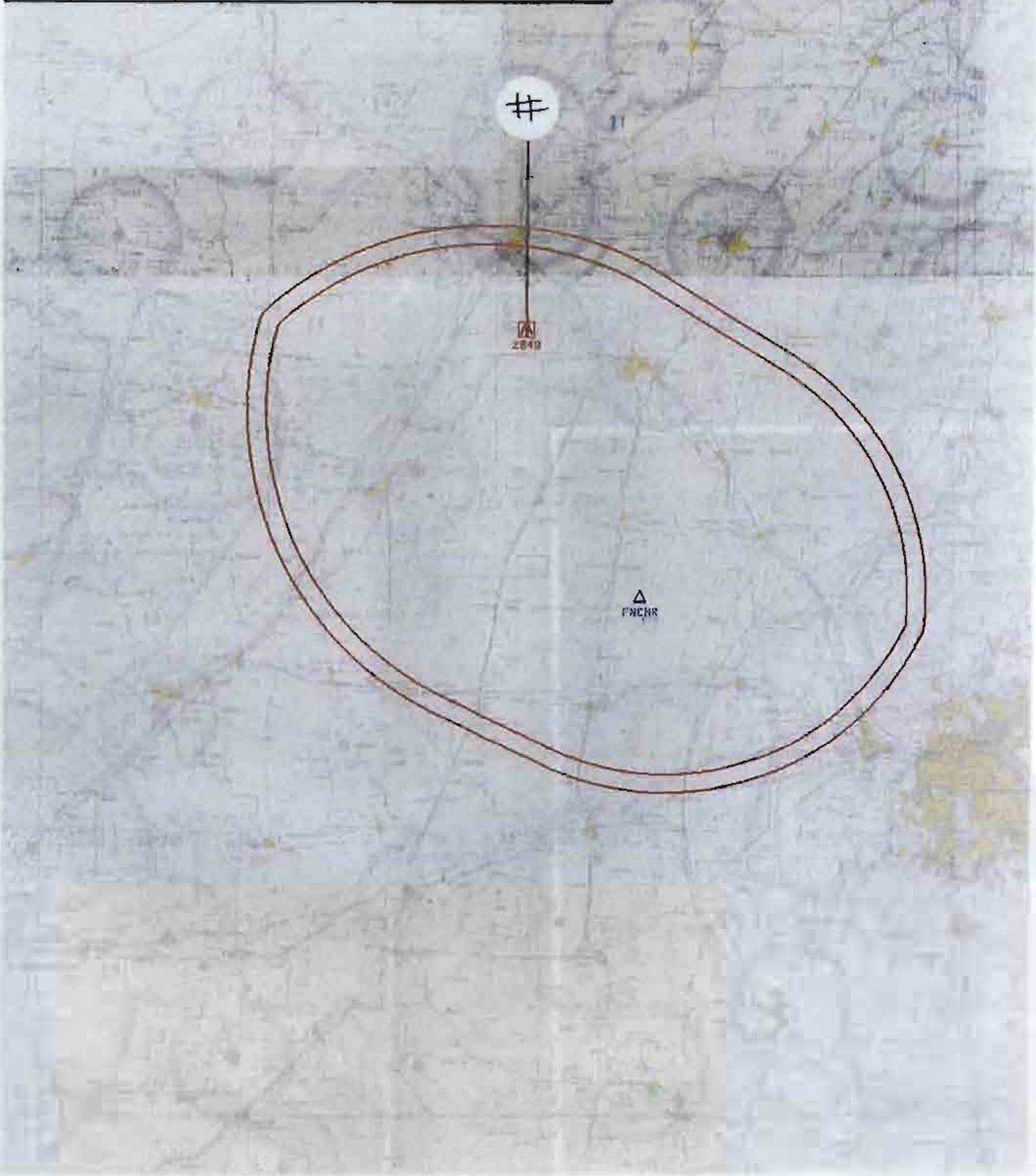


NM 14 28 42 98

FT 84000 168000 252000 18000

*fposbb | mem_dawggh (PROD) | 20 Mar 2012 08:52:03 | 1" = 83500.1 feet (m...*

| Airport ID: | KMEM | SEGMENT | OBSTRUCTION | ELEV |
|---|---|---|---|---|
| Apt Name: | Memphis Intl | | | |
| City: | Memphis | # FNCHR | Tower (05-000598) | 2049 |
| State: | TN | | | |
| Scale: | 1:500,000/50% | | | |
| Proc ID: | FNCHR | | | |
| Amdt #: | ONE | | | |

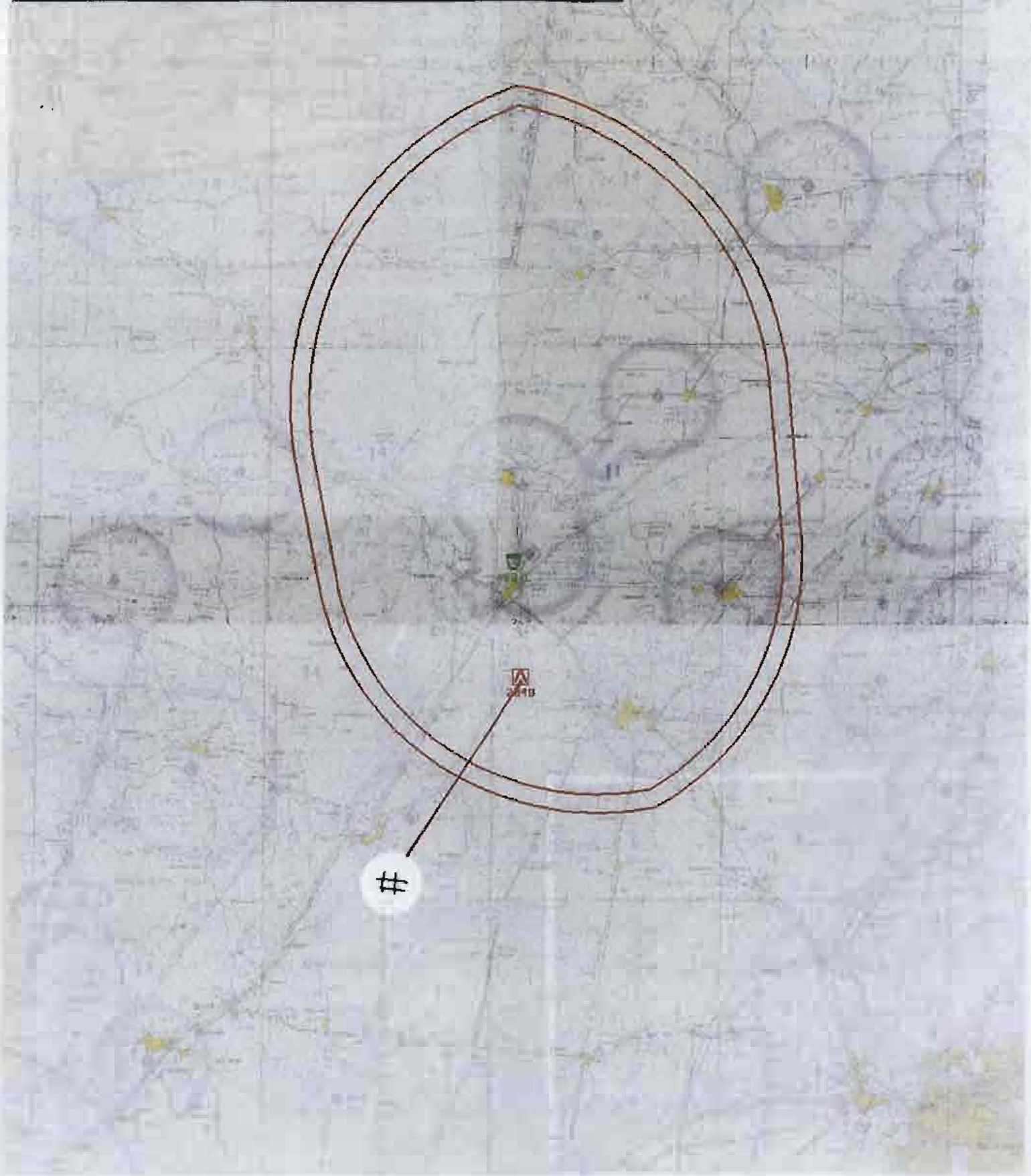


NM 14 28 42 56 70 84 98

FT 84000 168000 252000 336000 420000 504000 588000

*fposbb | mem_dawggh (PROD) | 20 Mar 2012 08:20:05 | 1" = 83500.1 feet (MAP)*

| Airport ID: | KMEM | SEGMENT | OBSTRUCTION | ELEV |
|---|---|---|---|---|
| Apt Name: | Memphis Intl | | | |
| City: | Memphis | * Walnut Ridge (ARG) VTAC | Tower (05-000598) | 2049 |
| State: | TN | | | |
| Scale: | 1:500,000/50% | | | |
| Proc ID: | FNCHR | | | |
| Amdt #: | ONE | | | |



US Department of Transportation
**Federal Aviation Administration**

# STAR - Standard Terminal Arrival

1. Bearings, headings, courses and radials are listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

**(1) Transition Routes**

| (a) Transition Name | (b) Transition Computer Codes | (c) From RNAV WP/ FIX/NAVAID | (d) To RNAV WP/ FIX/NAVAID | (e) Mag Course/ Distance | (f) MEA | (g) MOCA | (h) MAA | (i) Crossing Altitudes / Fixes |
|---|---|---|---|---|---|---|---|---|
| WALNUT RIDGE | ARG.FNCHR1 | ARG VORTAC | STANI | 167.00/13.00 | 18000 | | | AT/BELOW FL230 |
| | | STANI | DAWGG | 167.03/26.56 | 10000 | | | |
| | | DAWGG | FNCHR | 113.82/5.64 | 7000 | | | AT/BELOW 16000, AT/ABOVE 10000 |
| DAWGG | DAWGG.FNCHR1 | DAWGG | FNCHR | 113.82/5.64 | 7000 | | | AT/BELOW 16000, AT/ABOVE 10000 |
| FORT SMITH | FSM.FNCHR1 | FSM VORTAC | IGLOO | 076.53/126.67 | 18000 | | | |
| | | IGLOO | HORIS | 113.27/18.75 | 10000 | | | AT/ABOVE FL190 |
| | | HORIS | HUBBL | 113.48/9.00 | 10000 | | | AT/BELOW FL230 |
| | | HUBBL | DAWGG | 113.57/23.36 | 10000 | | | |
| | | DAWGG | FNCHR | 113.82/5.64 | 7000 | | | AT/BELOW 16000, AT/ABOVE 10000 |
| IGLOO | IGLOO.FNCHR1 | IGLOO | HORIS | 113.27/18.75 | 10000 | | | AT/ABOVE FL190 |
| | | HORIS | HUBBL | 113.48/9.00 | 10000 | | | AT/BELOW FL230 |
| | | HUBBL | DAWGG | 113.57/23.36 | 10000 | | | |
| | | DAWGG | FNCHR | 113.82/5.64 | 7000 | | | AT/BELOW 16000, AT/ABOVE 10000 |
| RAZORBACK | RZC.FNCHR1 | RZC VORTAC | MARBI | 100.75/34.20 | 18000 | | | |
| | | MARBI | IGLOO | 101.16/84.65 | 18000 | | | |
| | | IGLOO | HORIS | 113.27/18.75 | 10000 | | | AT/ABOVE FL190 |
| | | HORIS | HUBBL | 113.48/9.00 | 10000 | | | AT/BELOW FL230 |
| | | HUBBL | DAWGG | 113.57/23.36 | 10000 | | | |
| | | DAWGG | FNCHR | 113.82/5.64 | 7000 | | | AT/BELOW 16000, AT/ABOVE 10000 |

**(2) Arrival Route Description:**

**LANDING RWY 18L, 18C, 18R:** FROM OVER FNCHR ON 097.05 TRACK TO CROSS JAMLA AT 10000 AT 230 KIAS (MEA 7000), THEN ON 094.98 TRACK, EXPECT RADAR VECTORS TO FINAL APPROACH.

**LANDING RWY 36L, 36C, 36R:** FROM OVER FNCHR ON 113.88 TRACK TO GQE VOR/DME (MEA 6000), THEN ON 128.12 TRACK TO CROSS JESTI AT 250 KIAS (MEA 6000), THEN ON 128.12 TRACK TO BEERT (MEA 6000), THEN ON 128.19 TRACK TO CROSS LOONR AT OR BELOW 11000 AND AT OR ABOVE 9000 AT 210 KIAS (MEA 6000), THEN ON 128.28 TRACK TO CROSS BOWEN AT OR ABOVE 8000 (MEA 4000), THEN ON 179.89 TRACK TO CROSS JIMGA AT OR ABOVE 6000 (MEA 4000), THEN ON 177.42 TRACK TO CROSS JAYWA AT 4000 (MEA 4000), THEN ON 177.42 TRACK, EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

**(3) Procedural Data Notes:**

**NOTE:** RADAR REQUIRED; **NOTE:** TURBOJET AIRCRAFT ONLY; **NOTE:** DME/DME/IRU OR GPS REQUIRED; **NOTE:** RNAV 1; **NOTE:** RADAR REQUIRED FOR PROCEDURE ENTRY AT DAWGG; **NOTE:** FORT SMITH, IGLOO, AND RAZORBACK TRANSITIONS: FOR NON-GPS EQUIPPED AIRCRAFT LIT AND ARG DMES MUST BE OPERATIONAL; (CONTINUED BLOCK 16)

**(4) Fixes and/or Holding Patterns:**

**CHART HOLDING PATTERNS:** ARG VORTAC (HOLD N, LT, 167.00 INBOUND, 15 NM LEGS); FNCHR (HOLD N, LT, 113.82 INBOUND, 15 NM LEGS); IGLOO HOLD NW, LT, 113.27 INBOUND, 15 NM LEGS); BEERT (HOLD NW, RT, 128.12 INBOUND, 8 NM LEGS).

**(5) Communications:** MEMPHIS APP CON; MEMPHIS INTL ATIS.

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

| (12) Airports Served | | | |
|---|---|---|---|
| **Airport Name** | MEMPHIS INTL | **City/State** | MEMPHIS, TN |
| **Airport Name** | | **City/State** | |
| **Airport Name** | | **City/State** | |
| **Airport Name** | | **City/State** | |
| **Airport Name** | | **City/State** | |
| **Airport Name** | | **City/State** | |

**(13) Lost Communications Procedure:**

**(14) Remarks:**

**(15) Additional Flight Data:** REFERENCE MAGVAR: KMEM 01E/2000.
DME/DME ASSESSMENT: SAT (RNP 2.0).

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

**(16) Continuation:**
**(BLOCK 3) PROCEDURAL DATA NOTES:**
**CHART:** CROSS JESTI AT 250 KIAS; **NOTE:** CROSS HORIS AT 290 KIAS.
**CHART:** CROSS ARG VORTAC AT/ABOVE FL 210 AT 290 KIAS.

**(17) Changes:**
ORIGINAL

**(18) Reasons for Changes:**
EASTERN FPT REQUEST

| | Name *(Typed and Signed)*, Title and Organization | | DATE |
|---|---|---|---|
| **Developed By** | JOHN HENSLEY, SUPPORT SPECIALIST, ZME | | 07/28/2012 |
| **Approved** | **NFPO** | DARRYEL ADAMS, MANAGER, AJV-352 | |
| | **Reg. ATD** | | |

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

**(19) Graphic Depiction:**

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

**US Department of Transportation**
**Federal Aviation Administration**

## STAR (Data Record)

1. Bearings, headings, courses and radials are true and listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

| (1) FIX/NAVAID | (2) LAT/LONG | (3) C | (4) FO/FB | (5) LEG | (6) TC | (7) DIST | (8) ALTITUDE | (9) SPEED | (10) REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **EN ROUTE TRANSITION** | | | | | | | | | |
| ARG VORTAC | 360636.07N/ 0905713.30W | Y | | IF | | | AT/ABOVE FL210 | AT 290K | ARG.FNCHR1 |
| STANI | 355351.84N/ 0905353.62W | Y | FB | TF | 168.00 | 13.00 | AT/BELOW FL230 | | |
| DAWGG | 352750.50N/ 0904709.09W | Y | FB | TF | 168.03 | 26.56 | | | |
| FNCHR | 352528.06N/ 0904053.28W | Y | FB | TF | 114.82 | 5.64 | AT/BELOW 16000 AT/ABOVE 10000 | | |
| | | | | | | | | | |
| **EN ROUTE TRANSITION** | | | | | | | | | |
| DAWGG | 352750.50N/ 0904709.09W | Y | | IF | | | | | DAWGG.FNCHR1 |
| FNCHR | 352528.06N/ 0904053.28W | Y | FB | TF | 114.82 | 5.64 | AT/BELOW 16000 AT/ABOVE 10000 | | |
| | | | | | | | | | |
| **EN ROUTE TRANSITION** | | | | | | | | | |
| FSM VORTAC | 352318.30N/ 0941617.49W | Y | | IF | | | | | FSM.FNCHR1 |
| IGLOO | 354906.52N/ 0914411.55W | Y | FB | TF | 077.53 | 126.67 | | | |
| HORIS | 354121.54N/ 0912312.41W | Y | FB | TF | 114.27 | 18.75 | AT/ABOVE FL190 | AT 290K | |
| HUBBL | 353737.01N/ 0911309.55W | Y | FB | TF | 114.48 | 9.00 | AT/BELOW FL230 | | |
| DAWGG | 352750.50N/ 0904709.09W | Y | FB | TF | 114.57 | 23.36 | | | |
| FNCHR | 352528.06N/ 0904053.28W | Y | FB | TF | 114.82 | 5.64 | AT/BELOW 16000 AT/ABOVE 10000 | | |
| | | | | | | | | | |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

FAA Form 7100-3 (9/02)

**US Department of Transportation**
**Federal Aviation Administration**

## STAR (Data Record)

1. Bearings, headings, courses and radials are true and listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

| (1) FIX/NAVAID | (2) LAT/LONG | (3) C | (4) FO/FB | (5) LEG | (6) TC | (7) DIST | (8) ALTITUDE | (9) SPEED | (10) REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **EN ROUTE TRANSITION** | | | | | | | | | |
| IGLOO | 354906.52N/ 0914411.55W | Y | | IF | | | | | IGLOO.FNCHR1 |
| HORIS | 354121.54N/ 0912312.41W | Y | FB | TF | 114.27 | 18.75 | AT/ABOVE FL190 | AT 290K | |
| HUBBL | 353737.01N/ 0911309.55W | Y | FB | TF | 114.48 | 9.00 | AT/BELOW FL230 | | |
| DAWGG | 352750.50N/ 0904709.09W | Y | FB | TF | 114.57 | 23.36 | | | |
| FNCHR | 352528.06N/ 0904053.28W | Y | FB | TF | 114.82 | 5.64 | AT/BELOW 16000 AT/ABOVE 10000 | | |
| | | | | | | | | | |
| **EN ROUTE TRANSITION** | | | | | | | | | |
| RZC VORTAC | 361447.14N/ 0940717.01W | Y | | IF | | | | | RZC.FNCHR1 |
| MARBI | 360741.55N/ 0932557.20W | Y | FB | TF | 101.75 | 34.20 | | | |
| IGLOO | 354906.52N/ 0914411.55W | Y | FB | TF | 102.16 | 84.65 | | | |
| HORIS | 354121.54N/ 0912312.41W | Y | FB | TF | 114.27 | 18.75 | AT/ABOVE FL190 | AT 290K | |
| HUBBL | 353737.01N/ 0911309.55W | Y | FB | TF | 114.48 | 9.00 | AT/BELOW FL230 | | |
| DAWGG | 352750.50N/ 0904709.09W | Y | FB | TF | 114.57 | 23.36 | | | |
| FNCHR | 352528.06N/ 0904053.28W | Y | FB | TF | 114.82 | 5.64 | AT/BELOW 16000 AT/ABOVE 10000 | | |
| | | | | | | | | | |
| **RUNWAY TRANSITION** | | | | | | | | | |
| FNCHR | 352528.06N/ 0904053.28W | Y | | IF | | | | | |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

FAA Form 7100-3 (9/02)

**US Department of Transportation**
**Federal Aviation Administration**

## STAR (Data Record)

1. Bearings, headings, courses and radials are true and listed to the nearest hundredth (e.g. 360.00)
2. Distances are in nautical miles to nearest hundredth (e.g. 00.00)
3. Altitudes are minimum altitudes unless otherwise indicated

| (1) FIX/NAVAID | (2) LAT/LONG | (3) C | (4) FO/FB | (5) LEG | (6) TC | (7) DIST | (8) ALTITUDE | (9) SPEED | (10) REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| JAMLA | 352511.21N/ 0903827.90W | Y | FO | TF | 98.05 | 2.00 | AT 10000 | AT 230K | |
| RWY 18L, 18C,18R | | | | FM | ..95.98 | | | | |
| | | | | | | | | | |
| **RUNWAY TRANSITION** | | | | | | | | | |
| FNCHR | 352528.06N/ 0904053.28W | Y | | IF | | | | | |
| GQE VOR/DME | 352049.31N/ 0902841.37W | Y | FB | TF | 114.88 | 11.00 | | | |
| JESTI | 351747.35N/ 0902408.60W | Y | FB | TF | 129.12 | 4.80 | | AT 250K | |
| BEERT | 351451.55N/ 0901945.19W | Y | FB | TF | 129.12 | 4.63 | | | |
| LOONR | 350831.48N/ 0901018.11W | Y | FB | TF | 129.19 | 10.00 | AT/BELOW 11000 AT/ABOVE 9000 | AT 210K | |
| BOWEN | 350559.25N/ 0900631.69W | Y | FB | TF | 129.28 | 4.00 | AT/ABOVE 8000 | | |
| JIMGA | 350128.85N/ 0900636.79W | Y | FB | TF | 180.89 | 4.50 | AT/ABOVE 6000 | | |
| JAYWA | 344757.65N/ 0900609.62W | Y | FO | TF | 178.42 | 13.50 | AT 4000 | | |
| RWY 36L, 36C, 36R | | | | FM | 178.42 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

FAA Form 7100-3 (9/02)

**US Department of Transportation**
**Federal Aviation Administration**

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        ARG   K4011450VTHA N36063607W090571330    N36063607W090571330E0040003022     NARWALNUT RIDGE
        SUSAD        FSM   K4011040VTLA N35231830W094161749    N35231830W094161749E0070004301     NARFORT SMITH
        SUSAD        GQE   K4011300VDLW N35204931W090284137    N35204931W090284137E0040002111     NARGILMORE
        SUSAD        MEM   K7011750VTHW N35005442W089585955    N35005442W089585955E0010003602     NARMEMPHIS
        SUSAD        RZC   K4011640VTHW N36144714W094071701    N36144714W094071701E0040013322     NARRAZORBACK

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BEERT K40    C   L N35145155W090194519                    W0006     NAR           BEERT
        SUSAEAENRT   BOWEN K70    C     N35055925W090063169                    W0008     NAR           BOWEN
        SUSAEAENRT   DAWGG K40    C     N35275050W090470909                    W0003     NAR           DAWGG
        SUSAEAENRT   FNCHR K40    C     N35252806W090405328                    W0004     NAR           FNCHR
        SUSAEAENRT   HORIS K40    C     N35412154W091231241                    E0001     NAR           HORIS
        SUSAEAENRT   HUBBL K40    C     N35373701W091130955                    E0000     NAR           HUBBL
        SUSAEAENRT   IGLOO K40    C   H N35490652W091441155                    E0004     NAR           IGLOO
        SUSAEAENRT   JAMLA K40    W     N35251121W090382790                    W0004     NAR           JAMLA
        SUSAEAENRT   JAYWA K70    W     N34475765W090060962                    W0007     NAR           JAYWA
        SUSAEAENRT   JESTI K40    C     N35174735W090240860                    W0006     NAR           JESTI
        SUSAEAENRT   JIMGA K70    W     N35012885W090063679                    W0007     NAR           JIMGA
        SUSAEAENRT   LOONR K40    C     N35083148W090101811                    W0007     NAR           LOONR
        SUSAEAENRT   MARBI K40    C   L N36074155W093255720                    E0015     NAR           MARBI
        SUSAEAENRT   STANI K40    C     N35535184W090535362                    W0003     NAR           STANI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMEMK7AMEM     0     111YHN35023270W089583600E001000341         1800018000C    MNAR    MEMPHIS INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMEMK7EFNCHR14ARG   010ARG  K4D 0V  H    IF                                  + FL210     18000290
        SUSAP KMEMK7EFNCHR14ARG   020STANIK4EA0E    010TF                    16700130    - FL230
        SUSAP KMEMK7EFNCHR14ARG   030DAWGGK4EA0E    010TF                    16700266
        SUSAP KMEMK7EFNCHR14ARG   040FNCHRK4EA0EE H 010TF                    11380056    B 1600010000
        SUSAP KMEMK7EFNCHR14DAWGG 010DAWGGK4EA0E       IF                                                18000
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

**FAA Form 7100-3 (9/02)**

```
SUSAP KMEMK7EFNCHR14DAWGG 020FNCHRK4EA0EE H 010TF                    11380056    B 1600010000
SUSAP KMEMK7EFNCHR14FSM   010FSM  K4D 0V      IF                                                18000
SUSAP KMEMK7EFNCHR14FSM   020IGLOOK4EA0E  H 010TF                    07651267
SUSAP KMEMK7EFNCHR14FSM   030HORISK4EA0E    010TF                    11330188    + FL190          290
SUSAP KMEMK7EFNCHR14FSM   040HUBBLK4EA0E    010TF                    11350090    - FL230
SUSAP KMEMK7EFNCHR14FSM   050DAWGGK4EA0E    010TF                    11360234
SUSAP KMEMK7EFNCHR14FSM   060FNCHRK4EA0EE H 010TF                    11380056    B 1600010000
SUSAP KMEMK7EFNCHR14IGLOO 010IGLOOK4EA0E  H    IF                                                18000
SUSAP KMEMK7EFNCHR14IGLOO 020HORISK4EA0E    010TF                    11330188    + FL190          290
SUSAP KMEMK7EFNCHR14IGLOO 030HUBBLK4EA0E    010TF                    11350090    - FL230
SUSAP KMEMK7EFNCHR14IGLOO 040DAWGGK4EA0E    010TF                    11360234
SUSAP KMEMK7EFNCHR14IGLOO 050FNCHRK4EA0EE H 010TF                    11380056    B 1600010000
SUSAP KMEMK7EFNCHR14RZC   010RZC  K4D 0V      IF                                                18000
SUSAP KMEMK7EFNCHR14RZC   020MARBIK4EA0E    010TF                    10080342
SUSAP KMEMK7EFNCHR14RZC   030IGLOOK4EA0E  H 010TF                    10120847
SUSAP KMEMK7EFNCHR14RZC   040HORISK4EA0E    010TF                    11330188    + FL190          290
SUSAP KMEMK7EFNCHR14RZC   050HUBBLK4EA0E    010TF                    11350090    - FL230
SUSAP KMEMK7EFNCHR14RZC   060DAWGGK4EA0E    010TF                    11360234
SUSAP KMEMK7EFNCHR14RZC   070FNCHRK4EA0EE H 010TF                    11380056    B 1600010000
SUSAP KMEMK7EFNCHR16RW18B 010FNCHRK4EA0E  H    IF                                                18000
SUSAP KMEMK7EFNCHR16RW18B 020JAMLAK4EA0EY   010TF                    09710020      10000          230
SUSAP KMEMK7EFNCHR16RW18B 030JAMLAK4EA0EE      FM MEM K7      306004040950    D     10000          230
SUSAP KMEMK7EFNCHR16RW36B 010FNCHRK4EA0E  H    IF                                                18000
SUSAP KMEMK7EFNCHR16RW36B 020GQE  K4D 0V    010TF                    11390110
SUSAP KMEMK7EFNCHR16RW36B 030JESTIK4EA0E    010TF                    12810048                       250
SUSAP KMEMK7EFNCHR16RW36B 040BEERTK4EA0E  H 010TF                    12810046
SUSAP KMEMK7EFNCHR16RW36B 050LOONRK4EA0E    010TF                    12820100    B 1100009000     210
SUSAP KMEMK7EFNCHR16RW36B 060BOWENK7EA0E    010TF                    12830040    + 08000
SUSAP KMEMK7EFNCHR16RW36B 070JIMGAK7EA0E    010TF                    17990045    + 06000
SUSAP KMEMK7EFNCHR16RW36B 080JAYWAK7EA0EY   010TF                    17740135      04000
SUSAP KMEMK7EFNCHR16RW36B 090JAYWAK7EA0EE      FM MEM K7      203601421774    D     04000
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ---------------------------------------------------------------------------------------------------------------------------------
SUSAP KMEMK7GRW18C   0111201780 N35031654W089583421+0600    +0055100271000054150IISDU1
SUSAP KMEMK7GRW18L   0090001780 N35025574W089582263+0600    +0057200278000060150IIEXS1
SUSAP KMEMK7GRW18R   0093201780 N35025816W089591479+0300    +0060100288000052150IIOOI1
SUSAP KMEMK7GRW36C   0111203580 N35012658W089583190-0600    +0076500341000060150IITSE3
SUSAP KMEMK7GRW36L   0093203580 N35012598W089591281-0300    +0070300321000059150IIOHN3
SUSAP KMEMK7GRW36R   0090003580 N35012674W089582075-0600    +0074600335000058150IIMYO3
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

**US Department of Transportation**
**Federal Aviation Administration**

## STAR (Data Record)

ARINC SUMMARY - 424-18 - STAR

| ROUTES | TRANSITION | FIX | SEQ | USE | PATH | TURN | FO/FB | RNP | MAG(TRUE) | DISTANCE | ALTITUDE | SPEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ARG | ARG | 010 | | IF | | FB | | | | AA FL210 | AT 290 |
| | ARG | STANI | 020 | | TF | | FB | 1.0 | 167.0() | 013.0 | AB FL230 | |
| | ARG | DAWGG | 030 | | TF | | FB | 1.0 | 167.0() | 026.6 | | |
| | ARG | FNCHR | 040 | | TF | | FB | 1.0 | 113.8() | 005.6 | BT 1600010000 | |
| | DAWGG | DAWGG | 010 | | IF | | FB | | | | | |
| | DAWGG | FNCHR | 020 | | TF | | FB | 1.0 | 113.8() | 005.6 | BT 1600010000 | |
| | FSM | FSM | 010 | | IF | | FB | | | | | |
| | FSM | IGLOO | 020 | | TF | | FB | 1.0 | 076.5() | 126.7 | | |
| | FSM | HORIS | 030 | | TF | | FB | 1.0 | 113.3() | 018.8 | AA FL190 | AT 290 |
| | FSM | HUBBL | 040 | | TF | | FB | 1.0 | 113.5() | 009.0 | AB FL230 | |
| | FSM | DAWGG | 050 | | TF | | FB | 1.0 | 113.6() | 023.4 | | |
| | FSM | FNCHR | 060 | | TF | | FB | 1.0 | 113.8() | 005.6 | BT 1600010000 | |
| | IGLOO | IGLOO | 010 | | IF | | FB | | | | | |
| | IGLOO | HORIS | 020 | | TF | | FB | 1.0 | 113.3() | 018.8 | AA FL190 | AT 290 |
| | IGLOO | HUBBL | 030 | | TF | | FB | 1.0 | 113.5() | 009.0 | AB FL230 | |
| | IGLOO | DAWGG | 040 | | TF | | FB | 1.0 | 113.6() | 023.4 | | |
| | IGLOO | FNCHR | 050 | | TF | | FB | 1.0 | 113.8() | 005.6 | BT 1600010000 | |
| | RZC | RZC | 010 | | IF | | FB | | | | | |
| | RZC | MARBI | 020 | | TF | | FB | 1.0 | 100.8() | 034.2 | | |
| | RZC | IGLOO | 030 | | TF | | FB | 1.0 | 101.2() | 084.7 | | |
| | RZC | HORIS | 040 | | TF | | FB | 1.0 | 113.3() | 018.8 | AA FL190 | AT 290 |
| | RZC | HUBBL | 050 | | TF | | FB | 1.0 | 113.5() | 009.0 | AB FL230 | |
| | RZC | DAWGG | 060 | | TF | | FB | 1.0 | 113.6() | 023.4 | | |
| | RZC | FNCHR | 070 | | TF | | FB | 1.0 | 113.8() | 005.6 | BT 1600010000 | |
| | RW18B | FNCHR | 010 | | IF | | FB | | | | | |
| | RW18B | JAMLA | 020 | | TF | | FO | 1.0 | 097.1() | 002.0 | AT 10000 | AT 230 |
| | RW18B | JAMLA | 030 | | FM | | FB | | 095.0() | | AT 10000 | AT 230 |
| | RW36B | FNCHR | 010 | | IF | | FB | | | | | |
| | RW36B | GQE | 020 | | TF | | FB | 1.0 | 113.9() | 011.0 | | |
| | RW36B | JESTI | 030 | | TF | | FB | 1.0 | 128.1() | 004.8 | | AT 250 |
| | RW36B | BEERT | 040 | | TF | | FB | 1.0 | 128.1() | 004.6 | | |
| | RW36B | LOONR | 050 | | TF | | FB | 1.0 | 128.2() | 010.0 | BT 1100009000 | AT 210 |
| | RW36B | BOWEN | 060 | | TF | | FB | 1.0 | 128.3() | 004.0 | AA 08000 | |
| | RW36B | JIMGA | 070 | | TF | | FB | 1.0 | 179.9() | 004.5 | AA 06000 | |
| | RW36B | JAYWA | 080 | | TF | | FO | 1.0 | 177.4() | 013.5 | AT 04000 | |
| | RW36B | JAYWA | 090 | | FM | | FB | | 177.4() | | AT 04000 | |

| POINT DATA | WAYPOINT | LAT IN SECS | LONG IN SECS | LAT IN MINS | LONG IN MINS |
|---|---|---|---|---|---|

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

**FAA Form 7100-3 (9/02)**

| | | | | |
|---|---|---|---|---|
| ARG | N360636.07 | W0905713.30 | N3606.601 | W09057.222 |
| FSM | N352318.30 | W0941617.49 | N3523.305 | W09416.292 |
| GQE | N352049.31 | W0902841.37 | N3520.822 | W09028.690 |
| MEM | N350054.42 | W0895859.55 | N3500.907 | W08958.993 |
| RZC | N361447.14 | W0940717.01 | N3614.786 | W09407.284 |
| BEERT | N351451.55 | W0901945.19 | N3514.859 | W09019.753 |
| BOWEN | N350559.25 | W0900631.69 | N3505.988 | W09006.528 |
| DAWGG | N352750.50 | W0904709.09 | N3527.842 | W09047.152 |
| FNCHR | N352528.06 | W0904053.28 | N3525.468 | W09040.888 |
| HORIS | N354121.54 | W0912312.41 | N3541.359 | W09123.207 |
| HUBBL | N353737.01 | W0911309.55 | N3537.617 | W09113.159 |
| IGLOO | N354906.52 | W0914411.55 | N3549.109 | W09144.193 |
| JAMLA | N352511.21 | W0903827.90 | N3525.187 | W09038.465 |
| JAYWA | N344757.65 | W0900609.62 | N3447.961 | W09006.160 |
| JESTI | N351747.35 | W0902408.60 | N3517.789 | W09024.143 |
| JIMGA | N350128.85 | W0900636.79 | N3501.481 | W09006.613 |
| LOONR | N350831.48 | W0901018.11 | N3508.525 | W09010.302 |
| MARBI | N360741.55 | W0932557.20 | N3607.693 | W09325.953 |
| STANI | N355351.84 | W0905353.62 | N3553.864 | W09053.894 |
| RW18C | N350316.54 | W0895834.21 | N3503.276 | W08958.570 |
| RW18L | N350255.74 | W0895822.63 | N3502.929 | W08958.377 |
| RW18R | N350258.16 | W0895914.79 | N3502.969 | W08959.247 |
| RW36C | N350126.58 | W0895831.90 | N3501.443 | W08958.532 |
| RW36L | N350125.98 | W0895912.81 | N3501.433 | W08959.214 |
| RW36R | N350126.74 | W0895820.75 | N3501.446 | W08958.346 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW18C | 00271 | 54 |
| RW18L | 00278 | 60 |
| RW18R | 00288 | 52 |
| RW36C | 00341 | 60 |
| RW36L | 00321 | 59 |
| RW36R | 00335 | 58 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| FNCHR RNAV | ONE | FNCHR.FNCHR1 | NONE | | |

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** BEERT **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 351451.55N/0901945.19W **TYPE:** WP, DME

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

**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 | MEMPHIS | MEM | VORTAC | H | 308.38 | 309.38 | 22.00 | 22.00 | | 4000 | 16000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**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 | NW | MEM | VORTAC | 308.38 | 128.38 | L | | 8 | 4000 | 16000 | 11 | 16 |
| 2 | NW | | WP | 308.12 | 128.12 | R | | 8 | 7000 | 45000 | 11 | 30 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (05-001544) | 351211.00N/0903357.00W | 765 | 5D |
| 2 | 230 | TOWER (05-000947) | 352802.00N/0901127.00W | 1486 | 5D |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 ATC REQUEST.

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE.
8 NM LEG LENGTHS ATC REQUEST.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | 1 | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | 2 | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 5 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
DELETED INT FROM FIX TYPE.
DELETED MARVELL (UJM) VOR/DME AS FAC 2; DELETED UJM ESV DATA.
CHANGED PAT 1 HOLDING TURN FROM R TO L; DELETED LEG LENGTH TIME; ADDED 8 TO LEG LENGTH DME; CHANGED MIN TEMPLATE FROM 5 TO 11.
CHANGED PAT 1 CONTROLLING OBSTRUCTION FROM 564 MSL TOWER (05-001517) TO 686 MSL TOWER (05-00396).
ADDED NOTE TO REMARKS: 8 NM LEG LENGTHS ATC REQUEST.
ADDED EST FPO TO DISTRIBUTION.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 03/08/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** BOWEN **STATE:** TN **COUNTRY:** US

**LATITUDE/LONGITUDE:** 350559.25N/0900631.69W **TYPE:** WP, DME

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

**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 | MEMPHIS | MEM | VORTAC | H | 308.38 | 309.38 | 8.00 | 8.00 | | 4000 | 16000 |

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |
| STAR | TAMMY (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 5 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
DELETED INT FROM FIX TYPE; DELETED FAC 2; DELETED FAC 2 ESV DATA.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 03/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** EST
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** DAWGG **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 352750.50N/0904709.09W **TYPE:** WP, DME

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

**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 | GILMORE | GQE | VOR/DME | L | 291.00 | 295.00 | 16.64 | 16.64 | | 10000 | 18000 |
| 2 | WALNUT RIDGE | ARG | VORTAC | H | 164.00 | 168.00 | 39.56 | 39.56 | | 10000 | 45000 |

**REMARKS:**
GILMORE (FAC 1) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1, 2 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**REASON FOR REVISION:**
06/06/2012: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 02/07/2012.
ADDED FAC 2 TO SUPPORT WALNUT RIDGE TRANSITION PER FLIGHT CHECK REQUEST.

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

QUALITY CHECKED 1

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** FNCHR **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 352528.06N/0904053.28W **TYPE:** WP, INT, DME

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

**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 | GILMORE | GQE | VOR/DME | L | 291.00 | 295.00 | 11.00 | 11.00 | | 10000 | 16000 |

**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 | W | GQE | VOR/DME | 291.00 | 111.00 | L | | 15 | 10000 | 16000 | 28 | 28 |
| 2 | NW | | WP | 293.82 | 113.82 | L | | 15 | 7000 | 45000 | 28 | 30 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | TOWER (05-000598) | 355322.00N/0905608.00W | 2049 | 5E |
| 2 | 230 | TOWER (05-000598) | 355322.00N/0905608.00W | 2049 | 5E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 2 ATC REQUEST.
PAT 1 ATC REQUEST.

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE.
15 NM LEG LENGTHS ATC REQUEST.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | 1 | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | 2 | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR, CONTROLLER

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HORIS **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 354121.54N/0912312.41W **TYPE:** WP, DME

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

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | GILMORE | GQE | VOR/DME | L | 291.00 | 295.00 | 49.00 | 49.00 | | 18000 | 34000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| GQE | VOR/DME | R-291 | 49 | 18000 | 34000 |

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HUBBL **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 353737.01N/0911309.55W **TYPE:** WP, DME

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

**FIX MAKE-UP FACILITIES:**

| FAC | NAME | IDENT | TYPE | CLASS | MAG BRG | TRUE BRG | DME | DIST FROM FAC NM | FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | GILMORE | GQE | VOR/DME | L | 291.00 | 295.00 | 40.00 | 40.00 | | 18000 | 24000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| GQE | VOR/DME | R-291 | 40 | 18000 | 24000 |

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** IGLOO **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 354906.52N/0914411.55W **TYPE:** WP, INT, DME

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**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 | LITTLE ROCK | LIT | VORTAC | H | 012.58 | 017.58 | 71.74 | 71.74 | | 18000 | 45000 |
| 2 | RAZORBACK | RZC | VORTAC | H | 097.75 | 101.75 | 118.85 | 118.85 | | 18000 | 45000 |
| 3 | GILMORE | GQE | VOR/DME | L | 291.00 | 295.00 | 67.75 | 67.75 | | 18000 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| GQE | VOR/DME | R-291 | 68 | 18000 | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**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 | W | GQE | VOR/DME | 291.00 | 111.00 | L | | 15 | 18000 | 45000 | 28 | 30 |
| 2 | NW | | WP | 293.27 | 113.27 | L | | 15 | 10000 | 45000 | 28 | 30 |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 ATC REQUEST.
PAT 2 ATC REQUEST.

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
RAZORBACK (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | J101 | 1 | | | | (US) |
| EN ROUTE | Q33 (RNAV) | | | | | (US) |
| STAR | DAWGG | 2, 3 | 1 | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | 2 | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR, CONTROLLER, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 6 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
CHANGED FAC 3 MRA FROM 10000 TO 18000; CHANGED GQE VOR/DME ESV MIN ALTITUDE FROM 10000 TO 18000.
CHANGED PAT 1 HOLDING FROM RZC VORTAC TO GQE VOR/DME; CHANGED RAD/CRS/BRG FROM 277.75 TO 291.00; CHANGED CRS INBOUND FROM 097.75 TO 111.00; DELETED LEG TIME; ADDED 15 NM TO LENGTH DME; CHANGED MIN/MAX TEMPLATE FROM 18/29 TO 28/30.
ADDED PAT 2 HOLDING.
ADDED NOTE TO REMARKS: 15 NM LEG LENGTHS ATC REQUEST.
ADDED EST FPO TO DISTRIBUTION.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 03/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** JAMLA **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 352511.21N/0903827.90W **TYPE:** WP

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** JAYWA **STATE:** MS **COUNTRY:** US

**LATITUDE/LONGITUDE:** 344757.65N/0900609.62W **TYPE:** WP

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** JESTI **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 351747.35N/0902408.60W **TYPE:** WP, DME

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

**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 | MEMPHIS | MEM | VORTAC | H | 308.38 | 309.38 | 26.63 | 26.63 | | 4000 | 18000 |

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** JIMGA **STATE:** TN **COUNTRY:** US

**LATITUDE/LONGITUDE:** 350128.85N/0900636.79W **TYPE:** WP

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** EST
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** LOONR **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 350831.48N/0901018.11W **TYPE:** WP, DME

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

**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 | MEMPHIS | MEM | VORTAC | H | 308.38 | 309.38 | 26.63 | 26.63 | | 4000 | 16000 |

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** MARBI **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 360741.55N/0932557.20W **TYPE:** WP, INT, DME

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

**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 | HARRISON | HRO | VOR/DME | L | 219.13 | 223.13 | 15.59 | 15.59 | | 4000 | 17500 |
| 2 | RAZORBACK | RZC | VORTAC | H | 097.75 | 101.75 | 34.20 | 34.20 | | 4000 | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
HARRISON (FAC 1) AND RAZORBACK (FAC 2) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V289 | 1 | | | | (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 5 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
DELETE PATS 1 AND 2 HOLDING; DELETE HOLDING LIMITED NOTE FROM HOLDING RESTRICTIONS; DELETE PRECIPITOUS TERRAIN NOTE FROM REMARKS.
UPDATE FIX USE.

**DEVELOPED BY:** **DATE:** 03/12/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:**
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** RAZORBACK VORTAC **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 361447.14N/0940717.01W **TYPE:**

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

**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 | RAZORBACK | RZC | VORTAC | H | | | | | | | 45000 |

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

**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 | RZC | VORTAC | 354.00 | 174.00 | L | 1 | | 3000 | 14000 | 4 | 10 |
| 2 | S | RZC | VORTAC | 180.00 | 360.00 | R | 1 | | 3000 | 14000 | 4 | 10 |
| 3 | SE | RZC | VORTAC | 137.00 | 317.00 | R | 1 | | 3100 | 14000 | 4 | 10 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | AAO | 361236.00N/0940618.00W | 1870 | 4E |
| 2 | 200 | AAO | 361236.00N/0940618.00W | 1870 | 4E |
| 3 | 200 | TOWER (05-001326) | 360739.00N/0935923.00W | 2010 | 4E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 ATC REQUESTED

**HOLDING RESTRICTIONS:**
HOLDING LIMITEDTO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | BENTON | | | KVBT | BENTONVILLE | AR (US) |
| DP | RAZORBACK | | | KFYV | FAYETTEVILLE | AR (US) |
| DP | HIGHFILL | | | KXNA | FAYETTEVILLE/SPRINGDALE/ROGERS | AR (US) |
| DP | ROGERS | | | KROG | ROGERS | AR (US) |
| DP | SPRING | | | KASG | SPRINGDALE | AR (US) |
| DP | TULSA | | | KRVS | TULSA | OK (US) |
| DP | MEMPHIS | | | KMEM | MEMPHIS | TN (US) |
| EN ROUTE | J105 | | | | | (US) |
| EN ROUTE | J182 | | | | | (US) |
| EN ROUTE | Q128 | | | | | (US) |
| EN ROUTE | Q21 | | | | | (US) |
| EN ROUTE | Q23 | | | | | (US) |
| EN ROUTE | Q36 | | | | | (US) |
| EN ROUTE | V13 | | | | | (US) |
| EN ROUTE | V140 | | | | | (US) |
| EN ROUTE | V527 | | | | | (US) |
| EN ROUTE | V63 | | | | | (US) |
| EN ROUTE | V72 | | | | | (US) |
| IAP | VOR-A | | 3 | KVBT | BENTONVILLE | AR (US) |
| IAP | VOR/DME-B | | | KVBT | BENTONVILLE | AR (US) |
| IAP | RNAV (GPS) RWY 13 | | | K5M5 | DECATUR | AR (US) |
| IAP | VOR/DME RWY 13 | | | K5M5 | DECATUR | AR (US) |
| IAP | LDA/DME RWY 34 | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | LOC RWY 16 | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | VOR-A | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | ILS OR LOC/DME RWY 17 | | | KXNA | FAYETTEVILLE/SPRINGDALE/ROGERS | AR (US) |
| IAP | ILS OR LOC/DME RWY 35 | | | KXNA | FAYETTEVILLE/SPRINGDALE/ROGERS | AR (US) |
| IAP | VOR/DME OR GPS RWY 12 | | | KH34 | HUNTSVILLE | AR (US) |
| IAP | ILS OR LOC RWY 20 | | | KROG | ROGERS | AR (US) |
| IAP | VOR RWY 02 | | 2 | KROG | ROGERS | AR (US) |
| IAP | VOR/DME RWY 20 | | | KROG | ROGERS | AR (US) |
| IAP | RNAV (GPS) RWY 18 | | | KSLG | SILOAM SPRINGS | AR (US) |
| IAP | RNAV (GPS) RWY 36 | | | KSLG | SILOAM SPRINGS | AR (US) |
| IAP | VOR-A | | | KSLG | SILOAM SPRINGS | AR (US) |
| IAP | ILS OR LOC RWY 18 | | | KASG | SPRINGDALE | AR (US) |
| IAP | RNAV (GPS) RWY 18 | | | KASG | SPRINGDALE | AR (US) |
| IAP | RNAV (GPS) RWY 36 | | | KASG | SPRINGDALE | AR (US) |
| IAP | VOR RWY 18 | | | KASG | SPRINGDALE | AR (US) |
| IAP | VOR/DME RWY 36 | | 1 | KASG | SPRINGDALE | AR (US) |
| IAP | RNAV (GPS) RWY 9 | | | K94K | CASSVILLE | MO (US) |
| IAP | TULSA | | | KTUL | TULSA | OK (US) |
| STAR | DAWGG | | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 17 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
UPDATED FIX COORDINATES.

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 04/25/2012 | **OFFICE:** AJV-352 | **NAME:** SEAN BARBEE |
| **APPROVED BY:** | **DATE:** | **OFFICE:** | **NAME:** DARRYEL ADAMS |
| | **SIGNATURE:** | | |

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** RZC APCH
**OTHER:** ST AV DIR, EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** STANI **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 355351.84N/0905353.62W **TYPE:** WP, DME

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

**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 | WALNUT RIDGE | ARG | VORTAC | H | 164.00 | 168.00 | 13.00 | 13.00 | | 18000 | 45000 |

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | DAWGG | 1 | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

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

**DEVELOPED BY:** **DATE:** 02/07/2012 **OFFICE:** AJV-352 **NAME:** SEAN BARBEE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** WALNUT RIDGE VORTAC **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 360636.07N/0905713.30W **TYPE:**

**AIRSPACE DOCKET:** **FIX TYPE OF ACTION:** NO CHANGE

**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 | WALNUT RIDGE | ARG | VORTAC | H | | | | | | | 45000 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**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 | ARG | VORTAC | 175.45 | 355.45 | L | 1 | | 2000 | 6000 | 4 | 5 |
| 2 | SW | ARG | VORTAC | 232.90 | 052.90 | R | 1 | | 2000 | 6000 | 4 | 5 |
| 3 | SW | ARG | VORTAC | 236.00 | 056.00 | R | 1 | | 2000 | 6000 | 4 | 5 |
| 4 | N | ARG | VORTAC | 344.00 | 164.00 | L | | 15 | 18000 | 45000 | 28 | 29 |
| 5 | N | | WP | 347.00 | 167.00 | L | | 15 | 18000 | 45000 | 28 | 30 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (05-001341) | 360330.00N/0905636.00W | 688 | 1A |
| 2 | 200 | TOWER (05-001341) | 360330.00N/0905636.00W | 688 | 1A |
| 3 | 200 | TOWER (05-001341) | 360330.00N/0905636.00W | 688 | 1A |
| 5 | 230 | TOWER (05-000598) | 355322.00N/0905608.00W | 2049 | 5E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 4 ATC REQUEST.
PAT 1 ATC REQUEST
PAT 5 ATC REQUEST.

**HOLDING RESTRICTIONS:**
HOLDING LIMITED TO ESTABLISHED PATTERNS.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
15 NM LEG LENGTHS ATC REQUEST.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | LINDBERGH | | | KALN | ALTON/ST LOUIS | IL (US) |
| DP | LINDBERGH | | | KBLV | BELLEVILLE | IL (US) |
| DP | LINDBERGH | | | KCPS | CAHOKIA/ST LOUIS | IL (US) |
| DP | CHUUC (RNAV) | | | KSTL | ST LOUIS | MO (US) |
| DP | LINDBERGH | | | KSTL | ST LOUIS | MO (US) |
| DP | LINDBERGH | | | KSUS | ST LOUIS | MO (US) |
| DP | MEMPHIS | | | KMEM | MEMPHIS | TN (US) |
| DP | TITAN | | | KBNA | NASHVILLE | TN (US) |
| EN ROUTE | J137 | | | | | AR (US) |
| EN ROUTE | J46 | | | | | AR (US) |
| EN ROUTE | Q25 | | | | | AR (US) |
| EN ROUTE | Q26 | | | | | AR (US) |
| EN ROUTE | V140 | | | | | AR (US) |
| EN ROUTE | V159 | | | | | AR (US) |
| EN ROUTE | V305 | | | | | AR (US) |
| EN ROUTE | V69 | | | | | AR (US) |
| IAP | RNAV (GPS) RWY 22 | | | KCVK | ASH FLAT | AR (US) |
| IAP | RNAV (GPS) RWY 4 | | | KCVK | ASH FLAT | AR (US) |
| IAP | LOC RWY 8 | | | KBVX | BATESVILLE | AR (US) |
| IAP | RNAV (GPS) RWY 26 | | | KBVX | BATESVILLE | AR (US) |
| IAP | RNAV (GPS) RWY 18 | | | K4M9 | CORNING | AR (US) |
| IAP | VOR/DME-A | | 2 | K4M9 | CORNING | AR (US) |
| IAP | ILS OR LOC RWY 23 | | | KJBR | JONESBORO | AR (US) |
| IAP | RNAV (GPS) RWY 23 | | | KJBR | JONESBORO | AR (US) |
| IAP | VOR RWY 23 | | | KJBR | JONESBORO | AR (US) |
| IAP | RNAV (GPS) RWY 3 | | | K42A | MELBOURNE | AR (US) |
| IAP | VOR/DME RWY 18 | | | KM19 | NEWPORT | AR (US) |
| IAP | NDB RWY 22 | | | KPGR | PARAGOULD | AR (US) |
| IAP | RNAV (GPS) RWY 4 | | | KPGR | PARAGOULD | AR (US) |
| IAP | VOR RWY 4 | | | KPGR | PARAGOULD | AR (US) |
| IAP | VOR OR GPS RWY 36 | | 1 | KM70 | POCAHONTAS | AR (US) |
| IAP | LOC RWY 18 | | | KARG | WALNUT RIDGE | AR (US) |
| IAP | VOR-A | | 3 | KARG | WALNUT RIDGE | AR (US) |
| IAP | VOR/DME RWY 22 | | 3 | KARG | WALNUT RIDGE | AR (US) |
| IAP | RNAV (GPS) RWY 36 | | | KMAW | MALDEN | MO (US) |
| IAP | NDB OR GPS RWY 28 | | | KMNF | MOUNTAIN VIEW | MO (US) |
| STAR | DAWGG | | 4 | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | 5 | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 21 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
CHANGED PAT 4 HOLDING RAD/CRS/BRG FROM 358.00 TO 344.00; CHANGED CRS INBOUND FROM 178.00 TO 164.00; CHANGED TURN FROM R TO L; DELETED LEG LENGTH TIME; ADDED 15 TO LEG LENGTH DME; CHANGED MIN/MAX HOLDING FROM 4000/39000 TO 18000/45000; CHANGED MIN/MAX TEMPLATE FROM 4/27 TO 28/29.
CHANGED PAT 5 HOLDING RAD/CRS/BRG FROM 001.00 TO 347.00; CHANGED CRS INBOUND FROM 181.00 TO 167.00; CHANGED TURN FROM R TO L; CHANGED MIN/MAX HOLDING FROM 4000/39000 TO 7000/45000; CHANGED MAX TEMPLATE FROM 28 TO 30.
ADDED NOTE TO REMARKS: 15 NM LEG LENGTHS ATC REQUEST.
ADDED EST FPO TO OTHER FOR DISTRIBUTION.
UPDATE FIX USE.

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 03/08/2012 | **OFFICE:** AJV-352 | **NAME:** SEAN BARBEE |
| **APPROVED BY:** | **DATE:** | **OFFICE:** AJV-352 | **NAME:** DARRYEL ADAMS |
| | **SIGNATURE:** | | |

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP CON
**OTHER:** EST FPO

# INFO ONLY

## RADIO FIX AND HOLDING DATA RECORD

**NAME:** FORT SMITH VORTAC **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 352318.30N/0941617.49W **TYPE:**

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

**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 | FORT SMITH | FSM | VORTAC | L | | | | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**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 | NE | FSM | VORTAC | 046.00 | 226.00 | R | 1 | | 2100 | 8000 | 4 | 8 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | AAO | 353112.00N/0941018.00W | 1086 | 4E |

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | BENTON | | | KVBT | BENTONVILLE | AR (US) |
| DP | RAZORBACK | | | KFYV | FAYETTEVILLE | AR (US) |
| DP | HIGHFILL | | | KXNA | FAYETTEVILLE/SPRINGDALE/ROGERS | AR (US) |
| DP | TAKEOFF MINIMUMS | | | K7M5 | OZARK | AR (US) |
| DP | ROGERS | | | KROG | ROGERS | AR (US) |
| DP | SPRING | | | KASG | SPRINGDALE | AR (US) |
| DP | TULSA | | | KRVS | TULSA | OK (US) |
| DP | TULSA | | | KTUL | TULSA | OK (US) |
| DP | MEMPHIS | | | KMEM | MEMPHIS | TN (US) |
| EN ROUTE | V13 | | | | | (US) |
| EN ROUTE | Q23 | | | | | AR (US) |
| EN ROUTE | Q27 | | | | | AR (US) |
| EN ROUTE | V272 | | | | | AR (US) |
| EN ROUTE | V289 | | | | | AR (US) |
| EN ROUTE | V303-532 | | | | | AR (US) |
| EN ROUTE | V532 | | | | | AR (US) |
| EN ROUTE | V534 | | | | | AR (US) |
| EN ROUTE | V74 | | | | | AR (US) |
| IAP | NDB-A | | | KH35 | CLARKSVILLE | AR (US) |
| IAP | LDA/DME RWY 34 | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | LOC RWY 16 | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | VOR-A | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | VOR/DME-B | | | KFYV | FAYETTEVILLE | AR (US) |
| IAP | HI ILS OR LOC RWY 25 | | | KFSM | FORT SMITH | AR (US) |
| IAP | HI VOR/DME OR TACAN RWY 07 | | | KFSM | FORT SMITH | AR (US) |
| IAP | HI VOR/DME OR TACAN RWY 25 | | | KFSM | FORT SMITH | AR (US) |
| IAP | ILS OR LOC RWY 07 | | 1 | KFSM | FORT SMITH | AR (US) |
| IAP | ILS OR LOC RWY 25 | | | KFSM | FORT SMITH | AR (US) |
| IAP | NDB RWY 25 | | | KFSM | FORT SMITH | AR (US) |
| IAP | VOR OR TACAN RWY 25 | | | KFSM | FORT SMITH | AR (US) |
| IAP | VOR/DME OR TACAN RWY 07 | | 1 | KFSM | FORT SMITH | AR (US) |
| IAP | VOR/DME-A | | 1 | K7M5 | OZARK | AR (US) |
| IAP | ILS OR LOC RWY 18 | | | KASG | SPRINGDALE | AR (US) |
| IAP | VOR RWY 18 | | | KASG | SPRINGDALE | AR (US) |
| IAP | VOR/DME-A | | 1 | KRKR | POTEAU | OK (US) |
| IAP | NDB-A | | | KJSV | SALLISAW | OK (US) |
| IAP | RNAV (GPS) RWY 17 | | | KGZL | STIGLER | OK (US) |
| IAP | RNAV (GPS) RWY 35 | | | KGZL | STIGLER | OK (US) |
| OTHER | PITCH/CATCH POINT | | | KDFW | DALLAS-FORT WORTH | TX (US) |
| STAR | CONDR (RNAV) | | | KMEM | MEMPHIS | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |
| STAR | SASIE | | | KGKY | ARLINGTON | TX (US) |
| STAR | FINGR | | | KADS | DALLAS | TX (US) |
| STAR | FINGR | | | KDAL | DALLAS | TX (US) |
| STAR | FINGR | | | KRBD | DALLAS | TX (US) |
| STAR | BONHAM | | | KDFW | DALLAS-FORT WORTH | TX (US) |
| STAR | WILBR | | | KDFW | DALLAS-FORT WORTH | TX (US) |
| STAR | SASIE | | | KDTO | DENTON | TX (US) |
| STAR | SASIE | | | KAFW | FORT WORTH | TX (US) |
| STAR | SASIE | | | KFTW | FORT WORTH | TX (US) |
| STAR | SASIE | | | KFWS | FORT WORTH | TX (US) |
| STAR | SASIE | | | KNFW | FORT WORTH | TX (US) |
| STAR | SASIE | | | KGPM | GRAND PRAIRIE | TX (US) |
| STAR | FINGR | | | KLNC | LANCASTER | TX (US) |
| STAR | FINGR | | | KHQZ | MESQUITE | TX (US) |

**REQUIRED CHARTING:** SECTIONAL, DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 14 **DATE OF REVISION:** 05/05/2011

**REASON FOR REVISION:**
UPDATE COORDINATES.
UPDATED HOLDING CONTROLLING OBSTACLE (PAT 1).
MOVE "HOLDING LIMITED..." COMMENT TO HOLDING RESTRICTIONS.
UPDATE FIX USE.

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 11/17/2010 | **OFFICE:** AVN-120 | **NAME:** JOSE ALFONSO (ALLAN WILL) |
| **APPROVED BY:** | **DATE:** 03/21/2011 | **OFFICE:** AVN-120 | **NAME:** GREGORY YAMAMOTO |
| | **SIGNATURE:** | | |

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** RZC APP CON
**OTHER:** MEM APP CON

INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** GILMORE VOR/DME **STATE:** AR **COUNTRY:** US

**LATITUDE/LONGITUDE:** 352049.31N/0902841.37W **TYPE:**

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

**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 | GILMORE | GQE | VOR/DME | L | | | | | | | 17500 |

**HOLDING:** **HOLDING TYPE OF ACTION:** MODIFY

**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 | NW | GQE | VOR/DME | 302.00 | 122.00 | R | 1 | | 2000 | 6000 | 4 | 5 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 200 | TOWER (05-001544) | 351211.00N/0903357.00W | 765 | 5D |
| 1 | 200 | TOWER (05-001652) | 351659.36N/0902700.25W | 533 | 2C |

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED ABOVE 2000.

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | MEMPHIS | | | KMEM | MEMPHIS | TN (US) |
| EN ROUTE | V09 | | | | | (US) |
| EN ROUTE | V124 | | | | | (US) |
| EN ROUTE | V159 | | | | | (US) |
| EN ROUTE | V47 | | | | | (US) |
| IAP | ILS OR LOC RWY 23 | | | KJBR | JONESBORO | AR (US) |
| IAP | RNAV (GPS) RWY 23 | | | KJBR | JONESBORO | AR (US) |
| IAP | RNAV (GPS) RWY 31 | | | KJBR | JONESBORO | AR (US) |
| IAP | VOR RWY 23 | | | KJBR | JONESBORO | AR (US) |
| IAP | RNAV (GPS) RWY 18 | | | K6M7 | MARIANNA | AR (US) |
| IAP | RNAV (GPS) RWY 04 | | | KPGR | PARAGOULD | AR (US) |
| IAP | RNAV (GPS) RWY 22 | | | KPGR | PARAGOULD | AR (US) |
| IAP | VOR RWY 04 | | | KPGR | PARAGOULD | AR (US) |
| IAP | ILS OR LOC RWY 17 | | 1 | KAWM | WEST MEMPHIS | AR (US) |
| IAP | VOR/DME-A | | 1 | KAWM | WEST MEMPHIS | AR (US) |
| IAP | VOR/DME-A | | | KUTA | TUNICA | MS (US) |
| IAP | VOR RWY 17 | | | KM01 | MEMPHIS | TN (US) |
| IAP | ILS OR LOC RWY 09 | | | KMEM | MEMPHIS | TN (US) |
| IAP | ILS OR LOC RWY 18R | | | KMEM | MEMPHIS | TN (US) |
| IAP | ILS OR LOC RWY 27 | | | KMEM | MEMPHIS | TN (US) |
| IAP | ILS OR LOC RWY 36C | | | KMEM | MEMPHIS | TN (US) |
| IAP | ILS OR LOC RWY 36L | | | KMEM | MEMPHIS | TN (US) |
| IAP | ILS RWY 36C (CAT II, III) | | | KMEM | MEMPHIS | TN (US) |
| IAP | ILS RWY 36L (CAT II, III) | | | KMEM | MEMPHIS | TN (US) |
| IAP | RNAV (GPS) RWY 09 | | | KMEM | MEMPHIS | TN (US) |
| IAP | RNAV (GPS) Z RWY 18C | | | KMEM | MEMPHIS | TN (US) |
| IAP | RNAV (GPS) Z RWY 18L | | | KMEM | MEMPHIS | TN (US) |
| IAP | RNAV (GPS) Z RWY 18R | | | KMEM | MEMPHIS | TN (US) |
| IAP | RNAV (GPS) RWY 18 | | | K2M8 | MILLINGTON | TN (US) |
| IAP | ILS OR LOC RWY 22 | | | KNQA | MILLINGTON | TN (US) |
| IAP | RNAV (GPS) RWY 04 | | | KNQA | MILLINGTON | TN (US) |
| STAR | FNCHR (RNAV) | | | KMEM | MEMPHIS | TN (US) |
| STAR | MARVELL | | | KMEM | MEMPHIS | TN (US) |
| STAR | TAMMY (RNAV) | | | KMEM | MEMPHIS | TN (US) |
| STAR | WLDER | | | KMEM | MEMPHIS | TN (US) |

**REQUIRED CHARTING:** DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 13 **DATE OF REVISION:** 08/25/2011

**REASON FOR REVISION:**
UPDATE FIX MAKE-UP FAC MAA.
UPDATE HOLDING PATTERN 1 MAX ALTITUDE AND TEMPLATE.
REMOVE HOLD PATTERN 2 ALONG WITH CONTROLLING OBSTRUCTION.
UPDATE FIX USE.

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 03/31/2011 | **OFFICE:** AJV-352 | **NAME:** DONALD SMITH (ALLAN WILL) |
| **APPROVED BY:** | **DATE:** 06/13/2011 | **OFFICE:** AJV-352 | **NAME:** DARRYEL ADAMS |
| | **SIGNATURE:** | | |

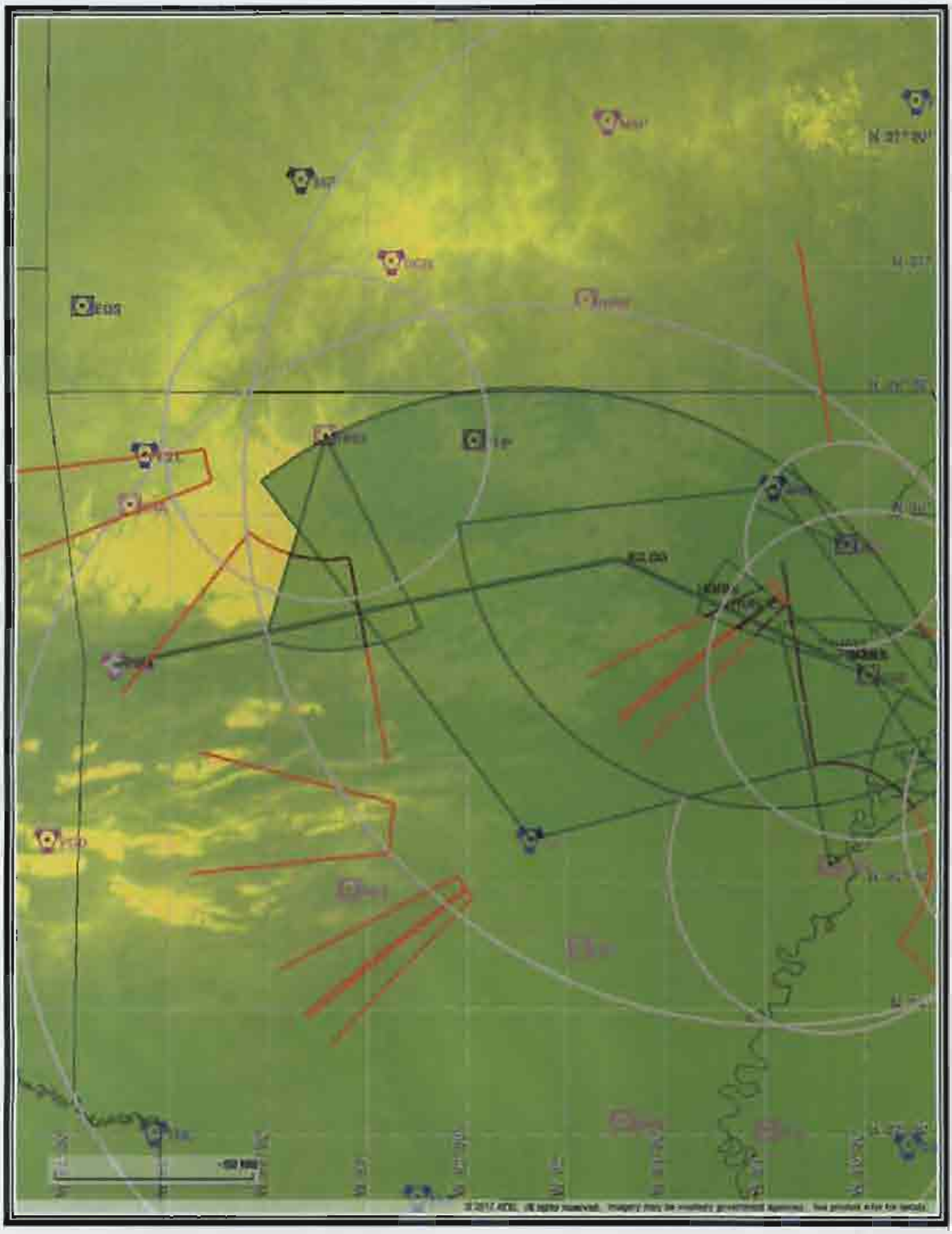
**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZME
**ATC FACILITY:** MEM APP, MEM ATCT
**OTHER:**

| | |
|---|---|
| **Name:** | MILLERJ |
| **Project Name:** | MEM FNCHR1 FSM JAMLA 20120125 |
| **Software:** | RNAV-Pro™ |
| **Version:** | 2.35 |
| **Date/Time:** | 1/25/2012 3:27:49 PM |
| **Input File:** | FNCHR FSM JAMLA 201... |
| **Databases:** | AVNIS Date: 08/26/2011 |
| | NFD Date: 07/02/2009 |
| | DTED® (MAX) Date: 2002 |

## Results Summary:

| | |
|---|---|
| **Flyability** | ✔ |
| **DME/DME** | ✔ |
| **Radars** | ✔ |
| **Comms** | ? |
| **TERPS** | ? |

© 1996-2012 Air Traffic Simulation, Inc. All rights reserved. RNAV-Pro, DrawSpace and the ATSI logo are trademarks of Air Traffic Simulation, Inc. DTED® courtesy U.S. Geological Survey. DTED is a registered trademark of the National Geospatial-Intelligence Agency. Blue Marble imagery in this program produced by NASA and the Earth Observatory (http://earthobservatory.nasa.gov.) This product has not been endorsed or otherwise approved by the National Geospatial-Intelligence Agency, United States Department of Defense, or the United States Federal Aviation Administration. Portions of this product sponsored by the United States Federal Aviation Administration, DTFA-02-01-D-12906, DTFAAC-05-D-00013. Sectional charts should not be used for actual flight navigation.



## Flight Plan

Return To Summary

| Name | Type | Lat/Lon | Alt [Ft] | VNAV Mode | IAS [Kts] | Turn Type | Leg Type |
|---|---|---|---|---|---|---|---|
| FSM | WP | N 35° 23' 18.30"<br>W 94° 16' 17.49" | 18000.0 | Step | 250.0 | Fly By | TF |
| IGLOO | WP | N 35° 49' 6.52"<br>W 91° 44' 11.55" | 18000.0 | Step | 250.0 | Fly By | TF |
| HORIS | WP | N 35° 41' 21.54"<br>W 91° 23' 12.41" | 10000.0 | Step | 250.0 | Fly By | TF |
| HUBBL | WP | N 35° 37' 37.01"<br>W 91° 13' 9.55" | 10000.0 | Step | 250.0 | Fly By | TF |
| DAWGG | WP | N 35° 27' 50.50"<br>W 90° 47' 9.09" | 10000.0 | Step | 210.0 | Fly By | TF |
| FNCHR | WP | N 35° 25' 28.06"<br>W 90° 40' 53.28" | 7000.0 | Step | 180.0 | Fly By | TF |
| JAMLA | WP | N 35° 25' 11.21"<br>W 90° 38' 27.90" | 7000.0 | Step | 180.0 | Fly Over | TF |

| Flyability | | Return To Summary |
|---|---|---|
| **Settings:** | **Flight Type:** Arrival/Approach<br>**Aircraft Category:** Cat D<br>**Climb Gradient:** *None assigned*<br>**Ground Speeds:**<br>Table:<br>**200.0 Kts** up to **11000.0 Ft.**<br>**240.0 Kts** up to **18000.0 Ft.**<br>**260.0 Kts** up to **24000.0 Ft.**<br>**340.0 Kts** up to **99900.0 Ft.**<br>**Wind Settings:** *None assigned*<br>**Descent During a Turn:** Allowed<br>**VNAV Mode:** Flight Plan | |
| Entire track is fly-able | | |

## DME/DME

Return To Summary

**Settings:**

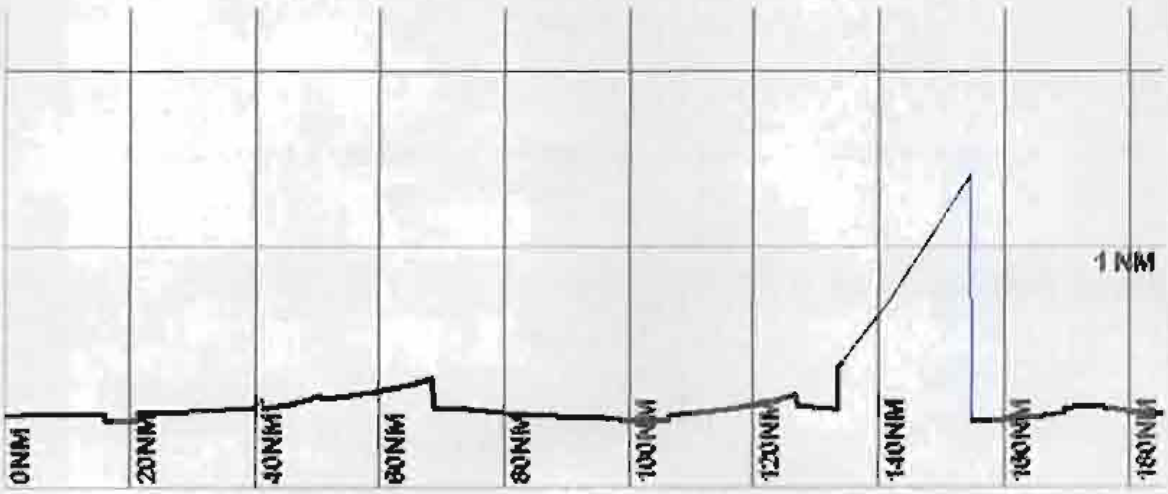
**RNP:** 2.0
**Flight Mode:** Manual
**Line of Sight (DTED Level 0 Max):** Evaluated
**DME Restrictions:** Evaluated
**Inertial Drift:** Enabled
**Initial Drift:** 0.558 NM
**INS Drift Rate:** 8.000 NM/Hour
**Range Mode:** OSV
**Co-Frequencies:** Evaluated
**RNP Edges:** Evaluated
**Min DME Range:** 3.0 NM
**Allowed Gap Length:** 4.0 NM
**DME Types:** VOR/DME , VORTAC , TACAN , and User
**DME Include Angles:** 30 to 150
**Critical DMEs:** Allowed
**DoD Facilities:** Not included
**Foreign Facilities:** Not included
**Low & Terminal DMEs:** Included
**Flight Check DMEs:** Selected
**Higher Altitudes:** Evaluated
**Near Maximum Altitude:** Evaluated

**Total Number of DMEs Used:** 11

Maximum DME Error: 1.296 NM.

No Critical DMEs were found.

**Available DMEs:** EOS, OKM, RZC, TUL, FSM, LIT, HRO, ARG, FLP, MEM, GQE, UJM



## DME/DME (Continued.)

Return To Summary

### DMEs Used

| # | Name | Lat/Lon | Range | Source | Critical | Err. [NM] | Status | Time | Distance |
|---|---|---|---|---|---|---|---|---|---|
| 1 | OKM | N 35° 41' 35.20" W 95° 51' 57.50" | H | Database | NO | 1.296 | Enabled | 2.8 % | 3.0 % |
| 2 | RZC | N 36° 14' 47.13" W 94° 7' 17.00" | H | Database | NO | 1.296 | Enabled | 14.5 % | 15.5 % |
| 3 | EOS | N 36° 50' 32.81" W 94° 26' 8.52" | H | Database | NO | 1.296 | Enabled | 14.5 % | 15.6 % |
| 4 | FSM | N 35° 23' 18.30" W 94° 16' 17.49" | L | Database | NO | 1.296 | Enabled | 17.1 % | 18.5 % |
| 5 | LIT | N 34° 40' 39.62" W 92° 10' 49.90" | H + ESV | User | NO | 1.163 | Enabled | 35.5 % | 36.7 % |
| 6 | HRO | N 36° 19' 5.91" W 93° 12' 47.80" | L + ESV | User | NO | 1.296 | Enabled | 15.9 % | 17.1 % |
| 7 | ARG | N 36° 6' 35.95" W 90° 57' 13.23" | H + ESV | User | NO | 1.125 | Enabled | 41.3 % | 41.6 % |
| 8 | FLP | N 36° 17' 58.74" W 92° 27' 30.18" | L | Database | NO | 1.296 | Enabled | 5.3 % | 5.7 % |
| 9 | MEM | N 35° 0' 54.42" W 89° 58' 59.55" | H | Database | NO | 1.296 | Enabled | 3.5 % | 3.5 % |
| 10 | GQE | N 35° 20' 49.31" W 90° 28' 41.37" | L + ESV | User | NO | 1.512 | Enabled | 17.2 % | 14.3 % |
| 11 | UJM | N 34° 34' 30.16" W 90° 40' 27.84" | L + ESV | User | NO | 1.296 | Enabled | 5.7 % | 4.8 % |

### Flight Check DME Selection

| Distance [NM] | Selected DMEs | | | | | Alternate |
|---|---|---|---|---|---|---|
| 0.0 | OKM | RZC | EOS | TUL | FSM | |
| 17.7 | OKM | RZC | EOS | LIT | FSM | |
| 41.2 | HRO | RZC | EOS | LIT | | |
| 53.1 | HRO | RZC | ARG | LIT | FLP | |
| 125.7 | MEM | LIT | ARG | | | |
| 145.3 | ARG | LIT | | | | |
| 154.4 | ARG | LIT | UJM | GQE | | |
| 177.7 | ARG | LIT | UJM | GQE | | |
| 182.9 | ARG | GQE | UJM | | | |

### Inertial Drift Segments

| # | Start Location | End Location | Length [NM] |
|---|---|---|---|
| 1 | N 35° 31' 46.51" W 93° 28' 35.73" | N 35° 32' 2.75" W 93° 27' 2.25" | 1.3 |

VOR: FSM

Available from N 35° 31' 46.51" W 93° 28' 35.73"
to N 35° 31' 47.41" W 93° 28' 30.53"

## DME/DME (Continued.)

Return To Summary

### *Inertial Drift Segments (Continued.)*

| # | Start Location | End Location | Length [NM] |
|---|---|---|---|
| 2 | N 35° 46' 4.61" W 91° 35' 56.67" | N 35° 37' 32.41" W 91° 12' 57.26" | 20.6 |
| | VOR: ARG | Available from N 35° 46' 4.61" W 91° 35' 56.67" to N 35° 37' 32.41" W 91° 12' 57.26" | |
| | VOR: JBR | Available from N 35° 41' 3.09" W 91° 22' 22.87" to N 35° 37' 32.41" W 91° 12' 57.26" | |
| | VOR: GQE | Available from N 35° 37' 36.59" W 91° 13' 8.41" to N 35° 37' 32.41" W 91° 12' 57.26" | |

### *User DMEs*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 1 | UJM | N 34° 34' 30.16" W 90° 40' 27.84" | L | 240.8 | 109.60 | UJM | Used |
| | Restriction: | Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0° | | | Distance: Beyond 25.0 NM Altitude: Below 2800.0 Ft. | | |
| | ESV: | Bearing [True]: 348.0° to 55.0° Bearing [Mag]: 347.0° to 54.0° | | | Arc Distance: Out to 60.0 NM Altitude: 3000.0 to 10000.0 Ft. | | |
| 2 | LIT | N 34° 40' 39.62" W 92° 10' 49.90" | H | 240.0 | 113.90 | LIT | Used |
| | Restriction: | Bearing [True]: 226.0° to 233.0° Bearing [Mag]: 221.0° to 228.0° | | | Distance: Beyond 20.0 NM Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 234.0° to 244.0° Bearing [Mag]: 229.0° to 239.0° | | | Distance: Beyond 20.0 NM Altitude: Below 2500.0 Ft. | | |
| | Restriction: | Bearing [True]: 265.0° to 285.0° Bearing [Mag]: 260.0° to 280.0° | | | Distance: Beyond 35.0 NM Altitude: Below 5000.0 Ft. | | |
| | ESV: | Bearing [True]: 323.0° to 75.0° Bearing [Mag]: 318.0° to 70.0° | | | Arc Distance: Out to 110.0 NM Altitude: 10000.0 to 23000.0 Ft. | | |
| 3 | ARG | N 36° 6' 35.95" W 90° 57' 13.23" | H | 260.0 | 114.50 | ARG | Used |
| | ESV: | Bearing [True]: 142.0° to 264.0° Bearing [Mag]: 138.0° to 260.0° | | | Arc Distance: Out to 78.0 NM Altitude: 6000.0 to 23000.0 Ft. | | |
| 4 | HLI | N 34° 46' 12.95" W 89° 29' 47.39" | L | 630.0 | 112.40 | HLI | Not Used |
| | ESV: | Bearing [True]: 280.0° to 309.0° Bearing [Mag]: 277.0° to 306.0° | | | Arc Distance: Out to 50.0 NM Altitude: 3000.0 to 18000.0 Ft. | | |

## DME/DME (Continued.)

Return To Summary

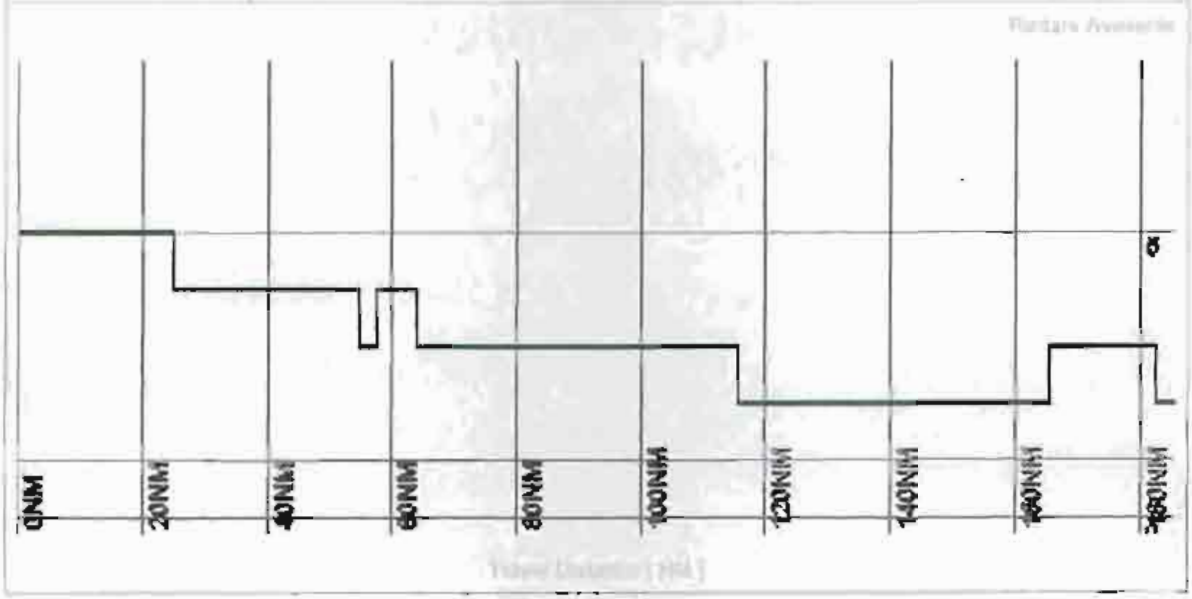
### *User DMEs (Continued.)*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 5 | JBR | N 35° 52' 29.69"<br>W 90° 35' 18.62" | T | 247.0 | 108.60 | JBR | Not Used |
| | | Restriction: | Bearing [True]: 351.0° to 136.0°<br>Bearing [Mag]: 349.0° to 134.0° | | Distance: Beyond 25.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | | Restriction: | Bearing [True]: 226.0° to 233.0°<br>Bearing [Mag]: 224.0° to 231.0° | | Distance: Beyond 20.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | | Restriction: | Bearing [True]: 234.0° to 244.0°<br>Bearing [Mag]: 232.0° to 242.0° | | Distance: Beyond 20.0 NM<br>Altitude: Below 2500.0 Ft. | | |
| | | ESV: | Bearing [True]: 293.0° to 325.0°<br>Bearing [Mag]: 291.0° to 323.0° | | Arc Distance: Out to 25.0 NM<br>Altitude: 8000.0 to 23000.0 Ft. | | |
| 6 | GQE | N 35° 20' 49.31"<br>W 90° 28' 41.37" | L | 211.0 | 113.00 | GQE | Used |
| | | ESV: | Bearing [True]: 117.0° to 145.0°<br>Bearing [Mag]: 113.0° to 141.0° | | Arc Distance: Out to 35.0 NM<br>Altitude: 2500.0 to 9000.0 Ft. | | |
| | | ESV: | Bearing [True]: 290.0° to 309.0°<br>Bearing [Mag]: 286.0° to 305.0° | | Arc Distance: Out to 45.0 NM<br>Altitude: 5000.0 to 18000.0 Ft. | | |
| 7 | HRO | N 36° 19' 5.91"<br>W 93° 12' 47.80" | L | 1400.4 | 112.50 | HRO | Used |
| | | Restriction: | Bearing [True]: 169.0° to 219.0°<br>Bearing [Mag]: 165.0° to 215.0° | | Distance: Beyond 30.0 NM<br>Altitude: Below 5000.0 Ft. | | |
| | | Restriction: | Bearing [True]: 249.0° to 264.0°<br>Bearing [Mag]: 245.0° to 260.0° | | Distance: Beyond 30.0 NM<br>Altitude: Below 4500.0 Ft. | | |
| | | ESV: | Bearing [True]: 153.0° to 197.0°<br>Bearing [Mag]: 149.0° to 193.0° | | Arc Distance: Out to 52.0 NM<br>Altitude: 9000.0 to 23000.0 Ft. | | |

## Radar Analysis

Return To Summary

**Settings:** **Radar Types:** ARSR and ASR



| | |
|---|---|
| **Name:** | MILLERJ |
| **Project Name:** | MEM FNCHR1 ARG JAYWA 20120125 |
| **Software:** | RNAV-Pro™ |
| **Version:** | 2.35 |
| **Date/Time:** | 1/25/2012 3:55:57 PM |
| **Input File:** | KMEM FNCHR ARG JAYW... |
| **Databases:** | AVNIS Date: 08/26/2011 |
| | NFD Date: 07/02/2009 |
| | DTED® (MAX) Date: 2002 |

## Results Summary:

| | | |
|---|---|---|
| **Flyability** | ✔ | **Please Check Flyability Results** |
| **DME/DME** | ✔ | |
| **Radars** | ✔ | |
| **Comms** | ? | |
| **TERPS** | ? | |

© 1996-2012 Air Traffic Simulation, Inc. All rights reserved. RNAV-Pro, DrawSpace and the ATSI logo are trademarks of Air Traffic Simulation, Inc. DTED® courtesy U.S. Geological Survey. DTED is a registered trademark of the National Geospatial-Intelligence Agency. Blue Marble imagery in this program produced by NASA and the Earth Observatory (http://earthobservatory.nasa.gov.) This product has not been endorsed or otherwise approved by the National Geospatial-Intelligence Agency, United States Department of Defense, or the United States Federal Aviation Administration. Portions of this product sponsored by the United States Federal Aviation Administration, DTFA-02-01-D-12906, DTFAAC-05-D-00013. Sectional charts should not be used for actual flight navigation.

## Flight Plan

Return To Summary

| Name | Type | Lat/Lon | Alt [Ft] | VNAV Mode | IAS [Kts] | Turn Type | Leg Type |
|---|---|---|---|---|---|---|---|
| ARG | WP | N 36° 6' 36.07"<br>W 90° 57' 13.30" | 18000.0 | Step | 290.0 | Fly By | TF |
| STANI | WP | N 35° 53' 51.84"<br>W 90° 53' 53.62" | 18000.0 | Step | 250.0 | Fly By | TF |
| DAWGG | WP | N 35° 27' 50.50"<br>W 90° 47' 9.09" | 10000.0 | Step | 250.0 | Fly By | TF |
| FNCHR | WP | N 35° 25' 28.06"<br>W 90° 40' 53.28" | 10000.0 | Step | 250.0 | Fly By | TF |
| GQE | WP | N 35° 20' 49.31"<br>W 90° 28' 41.37" | 6000.0 | Step | 210.0 | Fly By | TF |
| JESTI | WP | N 35° 17' 47.35"<br>W 90° 24' 8.60" | 6000.0 | Step | 210.0 | Fly By | TF |
| BEERT | WP | N 35° 14' 51.55"<br>W 90° 19' 45.19" | 6000.0 | Step | 210.0 | Fly By | TF |
| LOONR | WP | N 35° 8' 31.48"<br>W 90° 10' 18.11" | 6000.0 | Step | 210.0 | Fly By | TF |
| BOWEN | WP | N 35° 5' 59.25"<br>W 90° 6' 31.69" | 4000.0 | Step | 180.0 | Fly By | TF |
| JIMGA | WP | N 35° 1' 28.85"<br>W 90° 6' 36.79" | 4000.0 | Step | 180.0 | Fly By | TF |
| JAYWA | WP | N 34° 47' 57.65"<br>W 90° 6' 9.62" | 4000.0 | Step | 180.0 | Fly Over | TF |

## Flyability

Return To Summary

**Settings:**

**Flight Type:** Arrival/Approach
**Aircraft Category:** Cat D
**Climb Gradient:** *None assigned*
**Ground Speeds:**

Table:

**200.0 Kts** up to **11000.0 Ft.**
**240.0 Kts** up to **18000.0 Ft.**
**260.0 Kts** up to **24000.0 Ft.**
**340.0 Kts** up to **99900.0 Ft.**

**Wind Settings:** *None assigned*
**Descent During a Turn:** Allowed
**VNAV Mode:** Flight Plan

ALTITUDE at Fly-By WP BOWEN too high.

## DME/DME

Return To Summary

**Settings:**

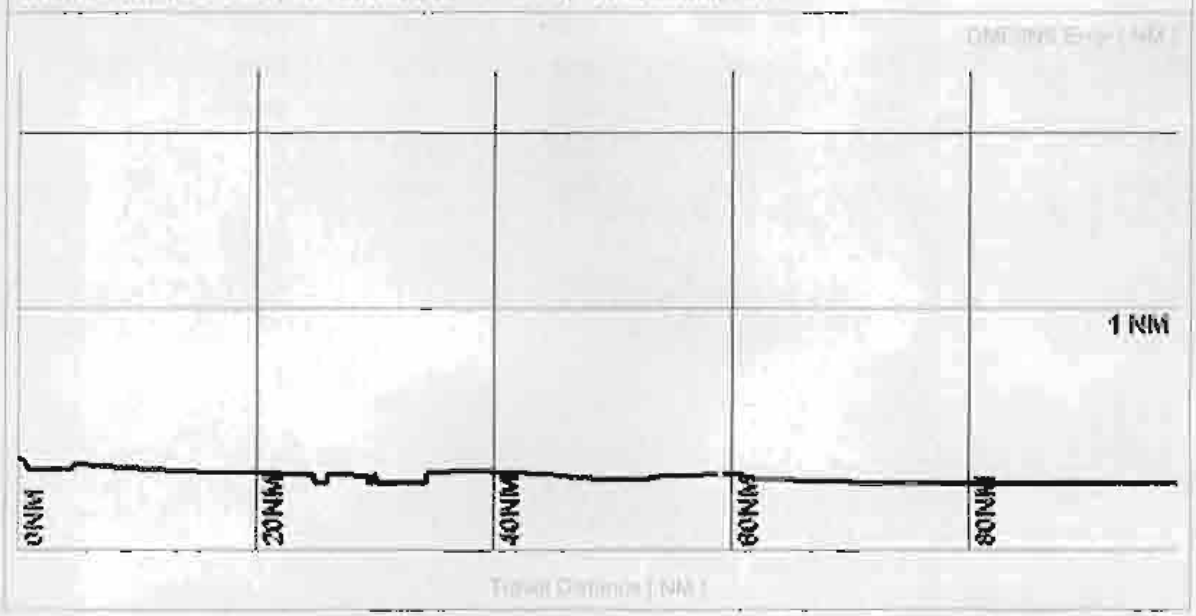
**RNP:** 2.0
**Flight Mode:** Manual
**Line of Sight (DTED Level 0 Max):** Evaluated
**DME Restrictions:** Evaluated
**Inertial Drift:** Enabled
**Initial Drift:** 0.558 NM
**INS Drift Rate:** 8.000 NM/Hour
**Range Mode:** OSV
**Co-Frequencies:** Evaluated
**RNP Edges:** Evaluated
**Min DME Range:** 3.0 NM
**Allowed Gap Length:** 4.0 NM
**DME Types:** VOR/DME , VORTAC , TACAN , and User
**DME Include Angles:** 30 to 150
**Critical DMEs:** Allowed
**DoD Facilities:** Not included
**Foreign Facilities:** Not included
**Low & Terminal DMEs:** Included
**Flight Check DMEs:** Selected
**Higher Altitudes:** Evaluated
**Near Maximum Altitude:** Evaluated

**Total Number of DMEs Used:** 8

Maximum DME Error: 0.379 NM.

No Critical DMEs were found.

**Available DMEs:** LIT, MEM, JBR, ARG, GQE, UJM, MAW, HLI



## DME/DME (Continued.)

Return To Summary

### DMEs Used

| # | Name | Lat/Lon | Range | Source | Critical | Err. [NM] | Status | Time | Distance |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LIT | N 34° 40' 39.62" W 92° 10' 49.90" | H + ESV | User | NO | 1.349 | Enabled | 37.2 % | 40.6 % |
| 2 | MEM | N 35° 0' 54.42" W 89° 58' 59.55" | H + ESV | User | NO | 0.576 | Enabled | 29.2 % | 30.8 % |
| 3 | JBR | N 35° 52' 29.69" W 90° 35' 18.62" | T + ESV | User | NO | 0.379 | Enabled | 9.1 % | 9.7 % |
| 4 | GQE | N 35° 20' 49.31" W 90° 28' 41.37" | L + ESV | User | NO | 0.442 | Enabled | 59.0 % | 57.1 % |
| 5 | ARG | N 36° 6' 35.95" W 90° 57' 13.23" | H + ESV | User | NO | 0.379 | Enabled | 8.5 % | 8.0 % |
| 6 | UJM | N 34° 34' 30.16" W 90° 40' 27.84" | L + ESV | User | NO | 1.176 | Enabled | 42.7 % | 40.3 % |
| 7 | MAW | N 36° 33' 18.41" W 89° 54' 41.12" | L + ESV | User | NO | 0.379 | Enabled | 13.9 % | 13.1 % |
| 8 | HLI | N 34° 46' 12.95" W 89° 29' 47.39" | L + ESV | User | NO | 0.379 | Enabled | 0.2 % | 0.2 % |

### Flight Check DME Selection

| Distance [NM] | Selected DMEs | | | | | Alternate |
|---|---|---|---|---|---|---|
| 0.0 | MEM | LIT | JBR | ARG | | |
| 13.0 | MEM | LIT | GQE | ARG | | |
| 23.1 | JBR | LIT | GQE | ARG | UJM | |
| 38.7 | UJM | LIT | GQE | ARG | | |
| 45.1 | UJM | MAW | GQE | ARG | MEM | LIT |
| 55.7 | UJM | MAW | GQE | ARG | MEM | |
| 60.9 | UJM | MAW | GQE | ARG | MEM | |
| 65.5 | UJM | HLI | GQE | ARG | MEM | MAW |
| 75.5 | UJM | HLI | GQE | ARG | MEM | |
| 78.7 | UJM | HLI | GQE | MEM | | |
| 83.8 | UJM | HLI | GQE | MEM | | |

## DME/DME (Continued.)

Return To Summary

### *User DMEs*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 1 | UJM | N 34° 34' 30.16"<br>W 90° 40' 27.84" | L | 240.8 | 109.60 | UJM | Used |
| | Restriction: | Bearing [True]: 351.0° to 136.0°<br>Bearing [Mag]: 350.0° to 135.0° | | | Distance: Beyond 25.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | ESV: | Bearing [True]: 348.0° to 55.0°<br>Bearing [Mag]: 347.0° to 54.0° | | | Arc Distance: Out to 60.0 NM<br>Altitude: 3000.0 to 10000.0 Ft. | | |
| 2 | LIT | N 34° 40' 39.62"<br>W 92° 10' 49.90" | H | 240.0 | 113.90 | LIT | Used |
| | Restriction: | Bearing [True]: 226.0° to 233.0°<br>Bearing [Mag]: 221.0° to 228.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 234.0° to 244.0°<br>Bearing [Mag]: 229.0° to 239.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2500.0 Ft. | | |
| | Restriction: | Bearing [True]: 265.0° to 285.0°<br>Bearing [Mag]: 260.0° to 280.0° | | | Distance: Beyond 35.0 NM<br>Altitude: Below 5000.0 Ft. | | |
| | ESV: | Bearing [True]: 323.0° to 75.0°<br>Bearing [Mag]: 318.0° to 70.0° | | | Arc Distance: Out to 110.0 NM<br>Altitude: 10000.0 to 23000.0 Ft. | | |
| 3 | ARG | N 36° 6' 35.95"<br>W 90° 57' 13.23" | H | 260.0 | 114.50 | ARG | Used |
| | ESV: | Bearing [True]: 142.0° to 264.0°<br>Bearing [Mag]: 138.0° to 260.0° | | | Arc Distance: Out to 78.0 NM<br>Altitude: 6000.0 to 23000.0 Ft. | | |
| 4 | HLI | N 34° 46' 12.95"<br>W 89° 29' 47.39" | L | 630.0 | 112.40 | HLI | Used |
| | ESV: | Bearing [True]: 280.0° to 309.0°<br>Bearing [Mag]: 277.0° to 306.0° | | | Arc Distance: Out to 50.0 NM<br>Altitude: 3000.0 to 18000.0 Ft. | | |
| 5 | JBR | N 35° 52' 29.69"<br>W 90° 35' 18.62" | T | 247.0 | 108.60 | JBR | Used |
| | Restriction: | Bearing [True]: 351.0° to 136.0°<br>Bearing [Mag]: 349.0° to 134.0° | | | Distance: Beyond 25.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 226.0° to 233.0°<br>Bearing [Mag]: 224.0° to 231.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 234.0° to 244.0°<br>Bearing [Mag]: 232.0° to 242.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2500.0 Ft. | | |
| | ESV: | Bearing [True]: 293.0° to 325.0°<br>Bearing [Mag]: 291.0° to 323.0° | | | Arc Distance: Out to 25.0 NM<br>Altitude: 8000.0 to 23000.0 Ft. | | |
| 6 | GQE | N 35° 20' 49.31"<br>W 90° 28' 41.37" | L | 211.0 | 113.00 | GQE | Used |
| | ESV: | Bearing [True]: 117.0° to 145.0°<br>Bearing [Mag]: 113.0° to 141.0° | | | Arc Distance: Out to 35.0 NM<br>Altitude: 2500.0 to 9000.0 Ft. | | |
| | ESV: | Bearing [True]: 290.0° to 309.0°<br>Bearing [Mag]: 286.0° to 305.0° | | | Arc Distance: Out to 45.0 NM<br>Altitude: 5000.0 to 18000.0 Ft. | | |

## DME/DME (Continued.)

Return To Summary

### *User DMEs (Continued.)*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 7 | GHM | N 35° 50' 2.24"<br>W 87° 27' 8.45" | L | 770.0 | 111.60 | GHM | Not Used |
| | | ESV: | Bearing [True]: 272.0° to 25.0°<br>Bearing [Mag]: 269.0° to 22.0° | | Arc Distance: Out to 64.0 NM<br>Altitude: 10000.0 to 18000.0 Ft. | | |
| 8 | BNA | N 36° 8' 13.06"<br>W 86° 41' 5.18" | H | 565.8 | 114.10 | BNA | Not Used |
| | | ESV: | Bearing [True]: 262.0° to 339.0°<br>Bearing [Mag]: 264.0° to 341.0° | | Arc Distance: Out to 104.0 NM<br>Altitude: 10000.0 to 18000.0 Ft. | | |
| 9 | MEM | N 35° 0' 54.42"<br>W 89° 58' 59.55" | H | 360.0 | 117.50 | MEM | Used |
| | | ESV: | Bearing [True]: 41.0° to 57.0°<br>Bearing [Mag]: 40.0° to 56.0° | | Arc Distance: Out to 85.0 NM<br>Altitude: 5000.0 to 18000.0 Ft. | | |
| 10 | GQO | N 34° 57' 40.54"<br>W 85° 9' 12.14" | H | 1014.5 | 115.80 | GQO | Not Used |
| | | ESV: | Bearing [True]: 301.0° to 315.0°<br>Bearing [Mag]: 300.0° to 314.0° | | Arc Distance: Out to 127.0 NM<br>Altitude: 0.0 to 24000.0 Ft. | | |
| 11 | DYR | N 36° 1' 6.78"<br>W 89° 19' 3.69" | L | 388.7 | 116.80 | DYR | Not Used |
| | | ESV: | Bearing [True]: 88.0° to 202.0°<br>Bearing [Mag]: 85.0° to 199.0° | | Arc Distance: Out to 75.0 NM<br>Altitude: 6000.0 to 18000.0 Ft. | | |
| 12 | CKV | N 36° 37' 19.17"<br>W 87° 24' 45.53" | T | 544.0 | 110.60 | CKV | Not Used |
| | | ESV: | Bearing [True]: 126.0° to 209.0°<br>Bearing [Mag]: 127.0° to 210.0° | | Arc Distance: Out to 55.0 NM<br>Altitude: 10000.0 to 18000.0 Ft. | | |
| 13 | SQS | N 33° 27' 49.90"<br>W 90° 16' 38.40" | H | 125.0 | 114.70 | SQS | Not Used |
| | | ESV: | Bearing [True]: 303.0° to 350.0°<br>Bearing [Mag]: 300.0° to 347.0° | | Arc Distance: Out to 77.0 NM<br>Altitude: 6500.0 to 23000.0 Ft. | | |
| | | ESV: | Bearing [True]: 110.0° to 200.0°<br>Bearing [Mag]: 107.0° to 197.0° | | Arc Distance: Out to 62.0 NM<br>Altitude: 3200.0 to 19000.0 Ft. | | |
| | | ESV: | Bearing [True]: 246.0° to 288.0°<br>Bearing [Mag]: 243.0° to 285.0° | | Arc Distance: Out to 96.0 NM<br>Altitude: 8500.0 to 19000.0 Ft. | | |
| 14 | OTB | N 34° 13' 25.88"<br>W 88° 47' 50.44" | L | 363.7 | 109.80 | OTB | Not Used |
| | | Restriction: | Bearing [True]: 351.0° to 136.0°<br>Bearing [Mag]: 347.0° to 132.0° | | Distance: Beyond 25.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | | ESV: | Bearing [True]: 291.0° to 298.0°<br>Bearing [Mag]: 287.0° to 294.0° | | Arc Distance: Out to 71.0 NM<br>Altitude: 3200.0 to 15000.0 Ft. | | |
| | | ESV: | Bearing [True]: 15.0° to 90.0°<br>Bearing [Mag]: 11.0° to 86.0° | | Arc Distance: Out to 60.0 NM<br>Altitude: 3500.0 to 18000.0 Ft. | | |

## DME/DME (Continued.)

Return To Summary

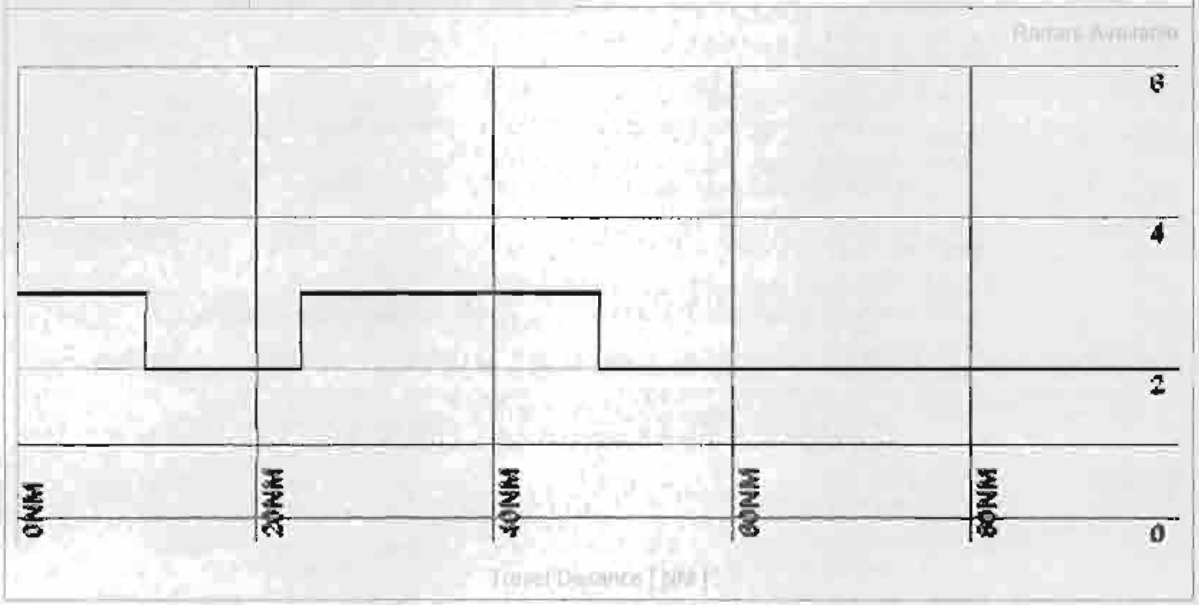
### *User DMEs (Continued.)*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 15 | IGB | N 33° 29' 7.75"<br>W 88° 30' 48.93" | L | 240.1 | 116.20 | IGB | Not Used |
| | | ESV: | Bearing [True]: 265.0° to 301.0°<br>Bearing [Mag]: 261.0° to 297.0° | | Arc Distance: Out to 96.0 NM<br>Altitude: 8500.0 to 23000.0 Ft. | | |
| | | ESV: | Bearing [True]: 260.0° to 319.0°<br>Bearing [Mag]: 256.0° to 315.0° | | Arc Distance: Out to 98.0 NM<br>Altitude: 8500.0 to 23000.0 Ft. | | |
| 16 | MEI | N 32° 22' 42.43"<br>W 88° 48' 15.31" | H | 578.1 | 117.00 | MEI | Not Used |
| | | ESV: | Bearing [True]: 305.0° to 318.0°<br>Bearing [Mag]: 300.0° to 313.0° | | Arc Distance: Out to 109.0 NM<br>Altitude: 12000.0 to 25000.0 Ft. | | |
| 17 | HAB | N 34° 11' 55.57"<br>W 88° 0' 41.83" | L | 802.1 | 110.40 | HAB | Not Used |
| | | ESV: | Bearing [True]: 315.0° to 358.0°<br>Bearing [Mag]: 313.0° to 356.0° | | Arc Distance: Out to 73.0 NM<br>Altitude: 10000.0 to 15000.0 Ft. | | |
| 18 | MSL | N 34° 42' 24.68"<br>W 87° 29' 29.70" | L | 579.7 | 116.50 | MSL | Not Used |
| | | Restriction: | Bearing [True]: 47.0° to 85.0°<br>Bearing [Mag]: 46.0° to 84.0° | | Distance: Beyond 25.0 NM<br>Altitude: Below 2000.0 Ft. | | |
| | | ESV: | Bearing [True]: 236.0° to 281.0°<br>Bearing [Mag]: 235.0° to 280.0° | | Arc Distance: Out to 90.0 NM<br>Altitude: 7500.0 to 21000.0 Ft. | | |
| | | ESV: | Bearing [True]: 296.0° to 350.0°<br>Bearing [Mag]: 295.0° to 349.0° | | Arc Distance: Out to 82.0 NM<br>Altitude: 12000.0 to 21000.0 Ft. | | |
| 19 | JKS | N 35° 35' 56.36"<br>W 88° 21' 31.96" | L | 630.0 | 109.40 | JKS | Not Used |
| | | ESV: | Bearing [True]: 236.0° to 245.0°<br>Bearing [Mag]: 234.0° to 243.0° | | Arc Distance: Out to 73.0 NM<br>Altitude: 4800.0 to 18000.0 Ft. | | |
| | | ESV: | Bearing [True]: 176.0° to 235.0°<br>Bearing [Mag]: 174.0° to 233.0° | | Arc Distance: Out to 84.0 NM<br>Altitude: 6200.0 to 19000.0 Ft. | | |
| 20 | MAW | N 36° 33' 18.41"<br>W 89° 54' 41.12" | L | 280.0 | 111.20 | MAW | Used |
| | | ESV: | Bearing [True]: 187.0° to 207.0°<br>Bearing [Mag]: 184.0° to 204.0° | | Arc Distance: Out to 86.0 NM<br>Altitude: 4000.0 to 16000.0 Ft. | | |

## Radar Analysis

Return To Summary

**Settings:** **Radar Types:** ARSR and ASR

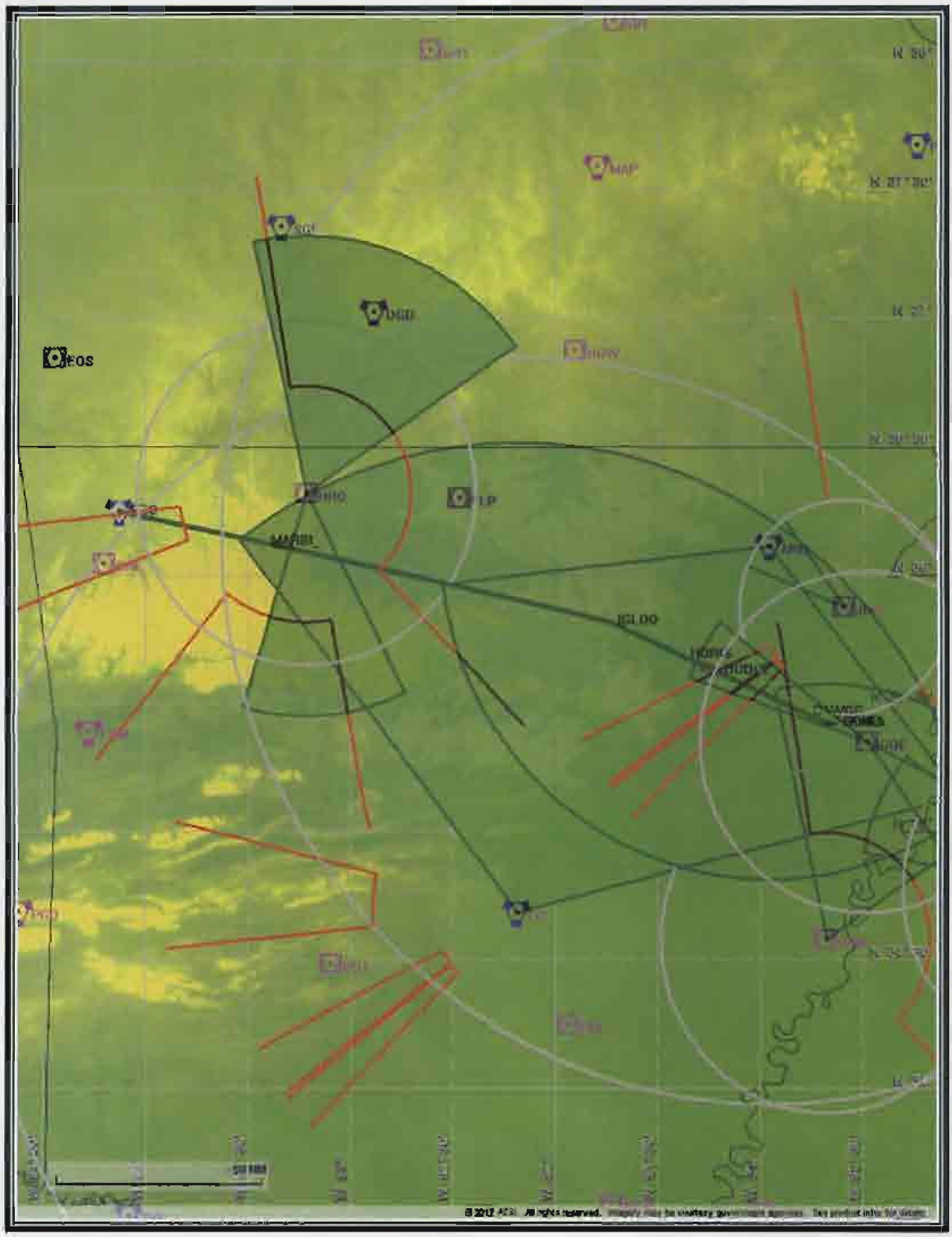


| | |
|---|---|
| **Name:** | MILLERJ |
| **Project Name:** | MEM FNCHR RZC JAMLA 2 CRITICALS 20120125 |
| **Software:** | RNAV-Pro™ |
| **Version:** | 2.35 |
| **Date/Time:** | 1/25/2012 2:53:42 PM |
| **Input File:** | KMEM FNCHR RZC JAMLA... |
| **Databases:** | AVNIS Date: 08/26/2011 |
| | NFD Date: 07/02/2009 |
| | DTED® (MAX) Date: 2002 |

## Results Summary:

| | |
|---|---|
| **Flyability** | ✔ |
| **DME/DME** | ✔ |
| **Radars** | ✔ |
| **Comms** | ? |
| **TERPS** | ? |

© 1996-2012 Air Traffic Simulation, Inc. All rights reserved. RNAV-Pro, DrawSpace and the ATSI logo are trademarks of Air Traffic Simulation, Inc. DTED® courtesy U.S. Geological Survey. DTED is a registered trademark of the National Geospatial-Intelligence Agency. Blue Marble imagery in this program produced by NASA and the Earth Observatory (http://earthobservatory.nasa.gov.) This product has not been endorsed or otherwise approved by the National Geospatial-Intelligence Agency, United States Department of Defense, or the United States Federal Aviation Administration. Portions of this product sponsored by the United States Federal Aviation Administration, DTFA-02-01-D-12906, DTFAAC-05-D-00013. Sectional charts should not be used for actual flight navigation.


EOS
MAP
LP
JGLOO
MARIN

## DME/DME

Return To Summary

**Settings:**

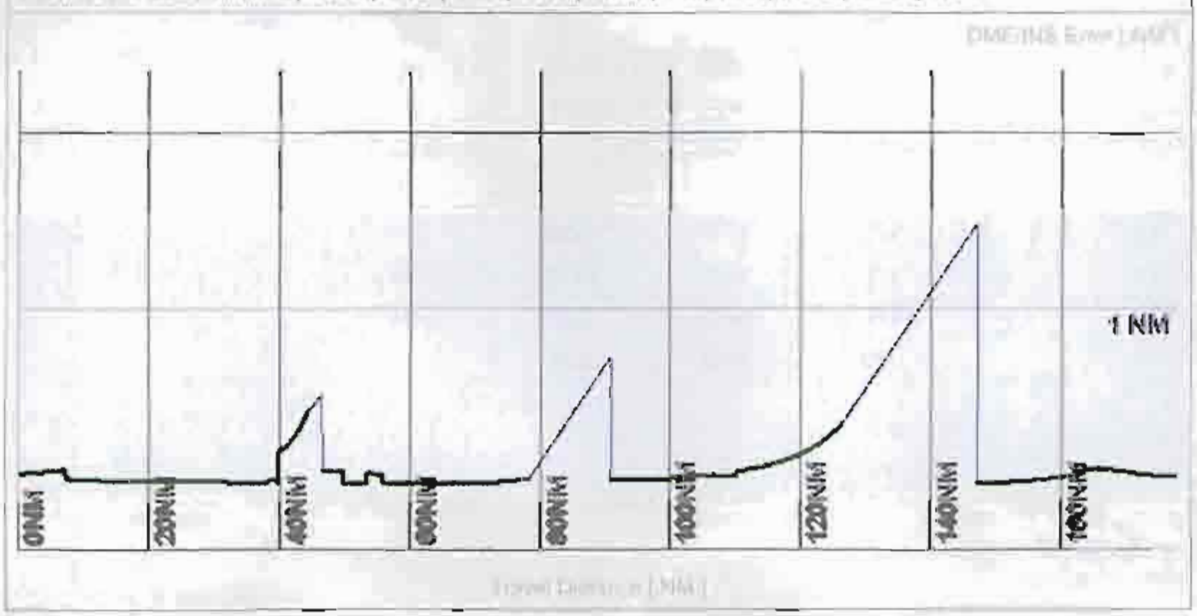
**RNP:** 2.0
**Flight Mode:** Manual
**Line of Sight (DTED Level 0 Max):** Evaluated
**DME Restrictions:** Evaluated
**Inertial Drift:** Enabled
**Initial Drift:** 0.558 NM
**INS Drift Rate:** 8.000 NM/Hour
**Range Mode:** OSV
**Co-Frequencies:** Evaluated
**RNP Edges:** Evaluated
**Min DME Range:** 3.0 NM
**Allowed Gap Length:** 4.0 NM
**DME Types:** VOR/DME , VORTAC , TACAN , and User
**DME Include Angles:** 30 to 150
**Critical DMEs:** Allowed
**DoD Facilities:** Not included
**Foreign Facilities:** Not included
**Low & Terminal DMEs:** Included
**Flight Check DMEs:** Selected
**Higher Altitudes:** Evaluated
**Near Maximum Altitude:** Evaluated

**Total Number of DMEs Used:** 10

Maximum DME Error: 1.346 NM

2 Critical DMEs were found.

**Available DMEs:** EOS, OKM, SGF, TUL, RZC, HRO, LIT, FLP, ARG, GQE, UJM



## DME/DME (Continued.)

Return To Summary

### *DMEs Used*

| # | Name | Lat/Lon | Range | Source | Critical | Err. [NM] | Status | Time | Distance |
|---|---|---|---|---|---|---|---|---|---|
| 1 | EOS | N 36° 50' 32.81" W 94° 26' 8.52" | H | Database | NO | 1.346 | Enabled | 6.4 % | 7.6 % |
| 2 | OKM | N 35° 41' 35.20" W 95° 51' 57.50" | H | Database | NO | 1.346 | Enabled | 3.4 % | 4.1 % |
| 3 | RZC | N 36° 14' 47.13" W 94° 7' 17.00" | H | Database | NO | 1.346 | Enabled | 12.1 % | 14.7 % |
| 4 | SGF | N 37° 21' 21.41" W 93° 20' 2.54" | H | Database | NO | 1.346 | Enabled | 11.7 % | 14.3 % |
| 5 | HRO | N 36° 19' 5.91" W 93° 12' 47.80" | L + ESV | User | NO | 1.346 | Enabled | 21.3 % | 21.2 % |
| 6 | LIT | N 34° 40' 39.62" W 92° 10' 49.90" | H + ESV | User | YES | **1.783** | Enabled | 29.7 % | 28.7 % |
| 7 | FLP | N 36° 17' 58.74" W 92° 27' 30.18" | L | Database | NO | 1.695 | Enabled | 20.6 % | 19.7 % |
| 8 | ARG | N 36° 6' 35.95" W 90° 57' 13.23" | H + ESV | User | YES | **1.820** | Enabled | 32.0 % | 30.1 % |
| 9 | GQE | N 35° 20' 49.31" W 90° 28' 41.37" | L + ESV | User | NO | 1.562 | Enabled | 15.9 % | 15.0 % |
| 10 | UJM | N 34° 34' 30.16" W 90° 40' 27.84" | L + ESV | User | NO | 1.346 | Enabled | 5.3 % | 5.0 % |

### *Flight Check DME Selection*

| Distance [NM] | Selected DMEs | | | | | Alternate |
|---|---|---|---|---|---|---|
| 0.0 | EOS | OKM | RZC | SGF | TUL | HRO |
| 10.1 | EOS | HRO | RZC | SGF | TUL | |
| 24.0 | EOS | HRO | RZC | SGF | LIT | |
| 34.2 | EOS | HRO | RZC | SGF | LIT | |
| 44.3 | LIT | HRO | FLP | | | |
| 78.2 | LIT | ARG | FLP | | | |
| 118.5 | LIT | ARG | | | | |
| 137.6 | LIT | ARG | | | | |
| 146.6 | LIT | ARG | GQE | | | |
| 156.6 | LIT | ARG | GQE | UJM | | |
| 170.0 | LIT | ARG | GQE | UJM | | |
| 175.1 | UJM | ARG | GQE | | | |

## DME/DME (Continued.)

Return To Summary

### *Inertial Drift Segments*

| # | Start Location | End Location | Length [NM] |
|---|---|---|---|
| 1 | N 36° 5' 33.45" W 93° 13' 47.66" | N 36° 5' 7.89" W 93° 11' 23.00" | 2.0 |
| | VOR: FLP | Available from N 36° 5' 33.45" W 93° 13' 47.66" to N 36° 5' 7.89" W 93° 11' 23.00" | |
| | VOR: HRO | Available from N 36° 5' 33.45" W 93° 13' 47.66" to N 36° 5' 7.89" W 93° 11' 23.00" | |
| 2 | N 35° 58' 12.31" W 92° 32' 54.53" | N 35° 55' 27.18" W 92° 17' 57.63" | 12.4 |
| | VOR: FLP | Available from N 35° 58' 12.31" W 92° 32' 54.53" to N 35° 55' 27.18" W 92° 17' 57.63" | |
| | VOR: HRO | Available from N 35° 58' 12.31" W 92° 32' 54.53" to N 35° 57' 51.04" W 92° 30' 58.35" | |
| 3 | N 35° 46' 3.84" W 91° 35' 54.62" | N 35° 37' 32.12" W 91° 12' 56.46" | 20.6 |
| | VOR: ARG | Available from N 35° 46' 3.84" W 91° 35' 54.62" to N 35° 37' 32.12" W 91° 12' 56.46" | |
| | VOR: JBR | Available from N 35° 41' 2.80" W 91° 22' 22.07" to N 35° 37' 32.12" W 91° 12' 56.46" | |
| | VOR: GQE | Available from N 35° 37' 36.29" W 91° 13' 7.62" to N 35° 37' 32.12" W 91° 12' 56.46" | |

### *User DMEs*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 1 | UJM | N 34° 34' 30.16" W 90° 40' 27.84" | L | 240.8 | 109.60 | UJM | Used |
| | Restriction: | Bearing [True]: 351.0° to 136.0° Bearing [Mag]: 350.0° to 135.0° | | | Distance: Beyond 25.0 NM Altitude: Below 2800.0 Ft. | | |
| | ESV: | Bearing [True]: 348.0° to 55.0° Bearing [Mag]: 347.0° to 54.0° | | | Arc Distance: Out to 60.0 NM Altitude: 3000.0 to 10000.0 Ft. | | |

## DME/DME (Continued.)

Return To Summary

### *User DMEs (Continued.)*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 2 | LIT | N 34° 40' 39.62"<br>W 92° 10' 49.90" | H | 240.0 | 113.90 | LIT | Used |
| | Restriction: | Bearing [True]: 226.0° to 233.0°<br>Bearing [Mag]: 221.0° to 228.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 234.0° to 244.0°<br>Bearing [Mag]: 229.0° to 239.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2500.0 Ft. | | |
| | Restriction: | Bearing [True]: 265.0° to 285.0°<br>Bearing [Mag]: 260.0° to 280.0° | | | Distance: Beyond 35.0 NM<br>Altitude: Below 5000.0 Ft. | | |
| | ESV: | Bearing [True]: 323.0° to 75.0°<br>Bearing [Mag]: 318.0° to 70.0° | | | Arc Distance: Out to 110.0 NM<br>Altitude: 10000.0 to 23000.0 Ft. | | |
| 3 | ARG | N 36° 6' 35.95"<br>W 90° 57' 13.23" | H | 260.0 | 114.50 | ARG | Used |
| | ESV: | Bearing [True]: 142.0° to 264.0°<br>Bearing [Mag]: 138.0° to 260.0° | | | Arc Distance: Out to 78.0 NM<br>Altitude: 6000.0 to 23000.0 Ft. | | |
| 4 | HLI | N 34° 46' 12.95"<br>W 89° 29' 47.39" | L | 630.0 | 112.40 | HLI | Not Used |
| | ESV: | Bearing [True]: 280.0° to 309.0°<br>Bearing [Mag]: 277.0° to 306.0° | | | Arc Distance: Out to 50.0 NM<br>Altitude: 3000.0 to 18000.0 Ft. | | |
| 5 | JBR | N 35° 52' 29.69"<br>W 90° 35' 18.62" | T | 247.0 | 108.60 | JBR | Not Used |
| | Restriction: | Bearing [True]: 351.0° to 136.0°<br>Bearing [Mag]: 349.0° to 134.0° | | | Distance: Beyond 25.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 226.0° to 233.0°<br>Bearing [Mag]: 224.0° to 231.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2800.0 Ft. | | |
| | Restriction: | Bearing [True]: 234.0° to 244.0°<br>Bearing [Mag]: 232.0° to 242.0° | | | Distance: Beyond 20.0 NM<br>Altitude: Below 2500.0 Ft. | | |
| | ESV: | Bearing [True]: 293.0° to 325.0°<br>Bearing [Mag]: 291.0° to 323.0° | | | Arc Distance: Out to 25.0 NM<br>Altitude: 8000.0 to 23000.0 Ft. | | |
| 6 | GQE | N 35° 20' 49.31"<br>W 90° 28' 41.37" | L | 211.0 | 113.00 | GQE | Used |
| | ESV: | Bearing [True]: 117.0° to 145.0°<br>Bearing [Mag]: 113.0° to 141.0° | | | Arc Distance: Out to 35.0 NM<br>Altitude: 2500.0 to 9000.0 Ft. | | |
| | ESV: | Bearing [True]: 290.0° to 309.0°<br>Bearing [Mag]: 286.0° to 305.0° | | | Arc Distance: Out to 45.0 NM<br>Altitude: 5000.0 to 18000.0 Ft. | | |

## DME/DME (Continued.)

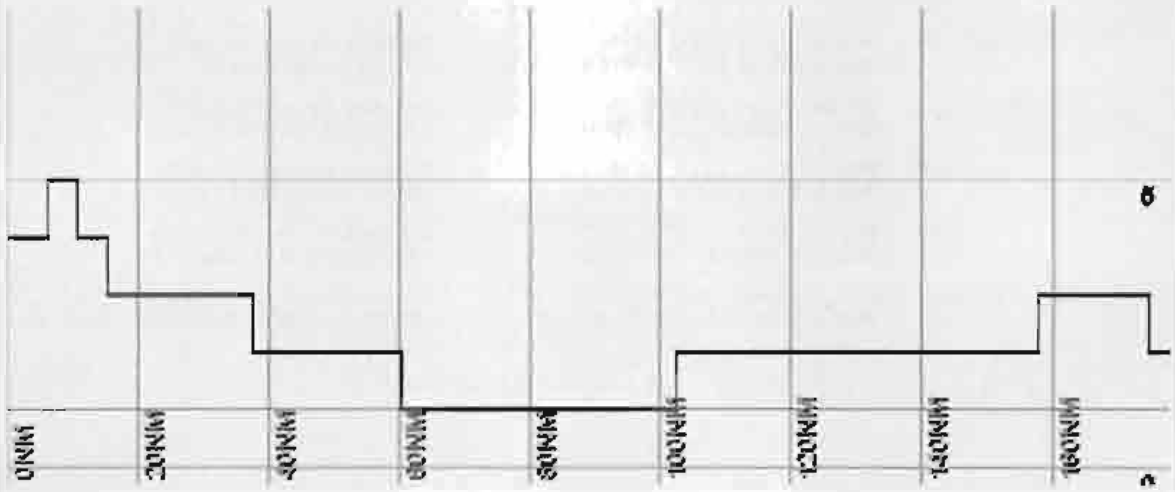
Return To Summary

### *User DMEs (Continued.)*

| # | Name | Lat/Lon | Range | Elevation [Ft] | Frequency | Replaces: | Status |
|---|---|---|---|---|---|---|---|
| 7 | HRO | N 36° 19' 5.91"<br>W 93° 12' 47.80" | L | 1400.4 | 112.50 | HRO | Used |

| | | |
|---|---|---|
| Restriction: | Bearing [True]: 169.0° to 219.0°<br>Bearing [Mag]: 165.0° to 215.0° | Distance: Beyond 30.0 NM<br>Altitude: Below 5000.0 Ft. |
| Restriction: | Bearing [True]: 249.0° to 264.0°<br>Bearing [Mag]: 245.0° to 260.0° | Distance: Beyond 30.0 NM<br>Altitude: Below 4500.0 Ft. |
| Restriction: | Bearing [True]: 351.0° to 136.0°<br>Bearing [Mag]: 347.0° to 132.0° | Distance: Beyond 25.0 NM<br>Altitude: Below 2800.0 Ft. |
| ESV: | Bearing [True]: 153.0° to 197.0°<br>Bearing [Mag]: 149.0° to 193.0° | Arc Distance: Out to 52.0 NM<br>Altitude: 9000.0 to 23000.0 Ft. |
| ESV: | Bearing [True]: 348.0° to 55.0°<br>Bearing [Mag]: 344.0° to 51.0° | Arc Distance: Out to 60.0 NM<br>Altitude: 3000.0 to 10000.0 Ft. |

## Radar Analysis

Return To Summary

**Settings:** **Radar Types:** ARSR and ASR