| Flight Procedure Tracking Form | Action: FLIGHT CHECK | Task Type: IAP | Date Open: 04/12/2012 | Task #: 2012022710170601003 | Request #: 20120227101706 |
|---|---|---|---|---|---|
| Procedure: VOR-A AMDT 5 | | Airport ID: KH21 | Airport: CAMDENTON MEMORIAL | | Reimbursable #: |
| City: CAMDENTON | ST: MO | GPS #: | | Estimated Chart Date: 05/02/2013 | FICO #: |
| Fac ID: SHY | Fac. Type: VDME | Specialist: AUSTIN GOTCHER | | | |

## Procedure Review

| | Rec'd | Rel'd | Full Name | Comments |
|---|---|---|---|---|
| Lead: | 10/23/2012 | 01/22/2013 | JEFF RAWDON | |
| QA: | 01/22/2013 | 01/22/2013 | CASIMIR TABAKA | |
| Liaison: | 01/22/2013 | | Spurlin | MAGVAR |

MAG VAR P1

**Procedure Comments:** ENROUTE-NON

**Remark Type:** INFORMATION

pg 4 of 4

CAMDENTON, MO CAMDENTON MEMORIAL (KH21) VOR-A, AMDT 5 ENROUTE-NO FC: 3.19.13 PUB: 5.2.13

ATTACHED FORMS: 8260-5; 8260-9; 8260-2(S): MAGYU-INT, REV 2; (INFO ONLY) SUNSHINE (SHY) VDME, REV 8; FORNEY (TBN) VOR, REV 7; ROACH-INT, REV 7; SPRINGFIELD (SGF) VTAC, REV 16; VICHY (VIH) VDME, REV 11.

CONTACT: JILL OLSON/STEVE BARNETT -AVJ-353 LEADS, 405.954.4014 / 405.954.9307.

New



# VOR-A
## CAMDENTON MEMORIAL (H21)

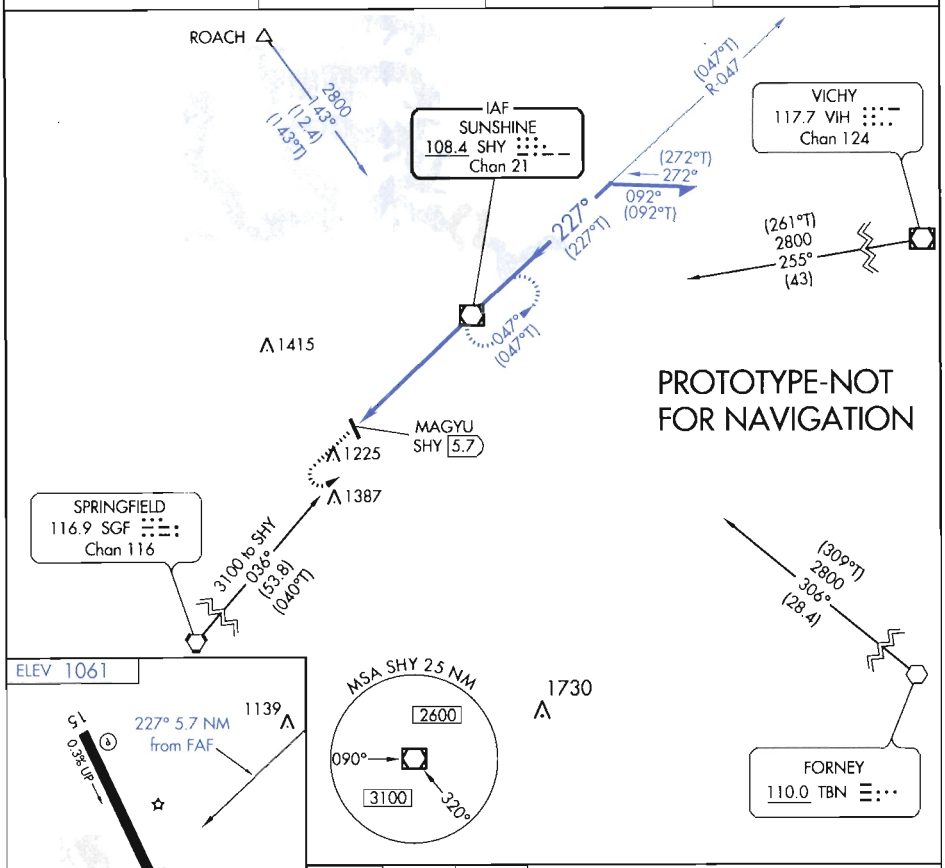
| VOR/DME SHY 108.4 Chan 21 | APP CRS 227° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1061 |
|---|---|---|

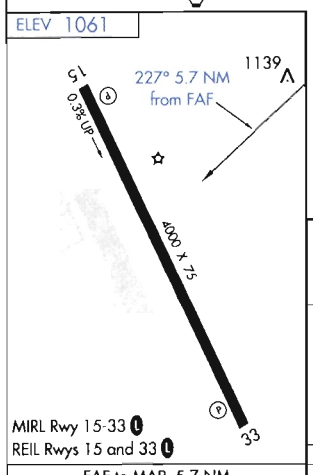
When local altimeter setting not received, use Lee C Fine Memorial altimeter setting and increase all MDA 60 feet.

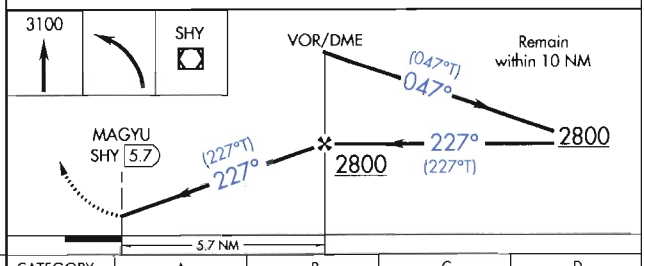
NA

MISSED APPROACH: Climb to 3100 then left turn direct SHY VOR/DME and hold.

| LEE C FINE MEMORIAL AWOS-3 | AWOS-3 | MIZZU APP CON | UNICOM |
|---|---|---|---|
| 135.325 | 120.225 | 124.1 353.7 | 122.8 (CTAF) |




| FAF to MAP 5.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:42 | 3:48 | 2:51 | 2:17 | 1:54 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 1540-1 479 (500-1) | | NA | |

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

## TERMINAL ROUTES

| FROM | TO | COURSE AND DISTANCE | ALTITUDE |
|---|---|---|---|
| ROACH INT | SHY VOR/DME | 143.36 / 12.40 | 2800 |
| SGF VORTAC | SHY VOR/DME | 036.11 / 53.83 | 3100 |
| TBN VOR | SHY VOR/DME | 306.22 / 28.35 | 2800 |
| VIH VOR/DME | SHY VOR/DME | 255.17 / 42.96 | 2800 |

## MISSED APPROACH

MAP: 5.70 MILES AFTER SHY VOR/DME OR AT MAGYU/5.70 DME FIX.

CLIMB TO 3100 THEN LEFT TURN DIRECT SHY VOR/DME AND HOLD.

ADDITIONAL FLIGHT DATA:

HOLD NE, LT, 226.53 INBOUND.
FAS OBST: 1219 AAO 380000N/0923747W
FAC CROSSES MID POINT RWY 15-33

1. PT R SIDE OF COURSE 046.53 OUTBOUND 2800 FT WITHIN 10 MILES OF SHY VOR/DME (IAF)
2.
3. FAC 226.53 FAF SHY VOR/DME DIST FAF TO MAP 5.70 THLD
4. MIN. ALT SHY VOR/DME 2800
8. MSA FROM: SHY VOR/DME 270-140 2600, 140-270 3100

MAG VAR: 0E EPOCH YEAR:2015

## MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A STANDARD @

| CATEGORY =====> | A | | | B | | | C | | | D | | | E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MDA | VIS | HAT/HAA | MDA | VIS | HAT/HAA | MDA | VIS | HAT/HAA | MDA | VIS | HAT/HAA | MDA | VIS | HAT/HAA |
| CIRCLING | 1540 | 1 | 479 | 1540 | 1 | 479 | | NA | | | NA | | | | |

NOTES:

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LEE C FINE MEMORIAL ALTIMETER SETTING AND INCREASE ALL MDA 60FT.

@ NA WHEN LOCAL WEATHER NOT AVAILABLE.

QUALITY CHECKED

| CITY AND STATE | ELEVATION: 1061 TDZE: AIRPORT NAME: | FACILITY IDENTIFIER: | PROCEDURE NO./AMDT NO./EFFECTIVE DATE: | SUP |
|---|---|---|---|---|
| CAMDENTON, MO | CAMDENTON MEMORIAL | SHY | VOR-A, AMDT 5 05/02/2013 | AMDT 4 |
| | | | | DATE 09/23/2010 |

FAA FORM 8260-5 / April 2006 (computer generated)

| ALL AFFECTED PROCEDURES REVIEWED? | COORDINATES OF FACILITIES | REQUIRED EFFECTIVE DATE |
|---|---|---|
| [ ] YES [X] NO | | 5/2/2013 |

COORDINATED WITH:

| ATA | AAT | ALPA | APA | AOPA | NBAA | OTHER (specify) |
|---|---|---|---|---|---|---|
| [ ] | [ ] | [X] | [ ] | [X] | [X] | [X] ZKC, MIZZU APP CON |

| FLIGHT CHECKED BY | | |
|---|---|---|
| NAME: PENDING | FIFO | DATE: |
| **DEVELOPED BY** | | |
| NAME: JILL OLSON (AUSTIN GOTCHER) | FIFO AJV-353 | DATE: 12/07/2012 |
| **APPROVED BY** | | |
| NAME: LARRY H STROUT | FIFO AJV-353 | DATE: |

CHANGES:

1. MAGVAR UPDATED FROM 3E/1995 TO 0/2015.
2. COURSE FROM ROACH INT TO SHY VOR/DME CHANGED FROM 138.36 TO 143.36.
3. CIRCLING CAT A/B MDA/HAA CHANGED FROM 1600/538 TO 1540/479.
4. CHANGED 'CHART NOTE: USE LEE C FINE MEMORIAL ALTIMETER SETTING; WHEN NOT RECEIVED, USE FORT LEONARD WOOD ALTIMETER SETTING AND INCREASE ALL MDA 40 FT.' TO: 'WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LEE C FINE MEMORIAL ALTIMETER SETTING AND INCREASE ALL MDA 60 FEET.
5. ADDED ALTERNATE MINIMUMS.

REASONS:

1. FPT REQUEST
2. UPDATED RUNWAY DATA; MAG VAR.
3. REEVALUATION OF CONTROLLING OBSTRUCTIONS.
4. UPDATED B /U ALTIMETER.
5. IAW 8260.19E PARA 8-53B.

03/02/13: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/07/2012.
CHANGED FROM ROUTINE TO HARD DATE - SHY VOR/DME MAGVAR ROTATION.

QUALITY CHECKED

# STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

| 1. APP SEGMENT | FROM | TO | OBSTRUCTION | COORDINATES | ELEV. MSL | ROC | ALT. ADJUSTMENTS | MIN. ALT. |
|---|---|---|---|---|---|---|---|---|
| FEEDER | ROACH INT | SHY VOR/DME | 1. TOWER (29-001973) | 381204.00N/0924804.00W | 1342 (5D) | 1000 | AT458 | 2800 |
| | | | 2. TERRAIN | 380109.00N/0923906.00W | 1018 (1000) | | AS1500 | 2500 |
| | | | | | | | | |
| FEEDER | SGF VORTAC | SHY VOR/DME | 3. TOWER (29-001182) | 374909.65N/0924452.12W | 2083 (1A) | 1000 | | 3100 |
| | | | 4. TERRAIN | 372918.00N/0930851.00W | 1359 (1400) | | AS1500 | 2900 |
| | | | | | | | | |
| FEEDER | TBN VOR | SHY VOR/DME | 5. TOWER (29-004009) | 374623.00N/0921844.00W | 1507 (2C) | 1000 | AT293 | 2800 |
| | | | 6. TERRAIN | 375436.00N/0922154.00W | 1201 (1200) | | AS1500 | 2700 |
| | | | | | | | | |
| FEEDER | VIH VOR/DME | SHY VOR/DME | 7. TOWER (29-000905) | 380416.00N/0920647.00W | 1445 (4D) | 1000 | AT355 | 2800 |
| | | | 8. TERRAIN | 380254.00N/0920545.00W | 1198 (1200) | | AS1500 | 2700 |
| | | | | | | | | |
| INTERMEDIATE: PT | 10 NM | SHY VOR/DME | 9. AAO | 380731.10N/0922759.62W | 1219 (2C) | 500 | AT1081 | 2800 |
| | | | 10. TERRAIN | 380731.10N/0922759.62W | 1019 (1000) | | AS1500 | 2500 |
| | | | | | | | | |
| FINAL | SHY VOR/DME | 5.70 MILES AFTER | 11. AAO | 380000.35N/0923747.46W | 1219 (2C) | 250 | | 1480 |
| | | SHY VOR/DME OR | | | | | | |
| | | AT MAGYU FIX | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| 2. PROCEDURE TURN | SHY VOR/DME | 10 NM | 12. TOWER (29-002019) | 380952.00N/0923613.00W | 1371 (5C) | 1000 | AT429 | 2800 |
| | | | 13. TERRAIN | 375951.00N/0922306.00W | 1135 (1100) | | AS1500 | 2600 |
| 3. MISSED APPROACH — MAP: | 5.70 MILES AFTER | SHY VOR/DME | | | | ASC | | 3100 |
| | SHY VOR/DME OR | | 3. TOWER (29-001182) | 374909.65N/0924452.12W | 2083 (2C) | 1000 | | 3100 |
| ELEV: | 1230 | | 14. TERRAIN | 375017.01N/0924605.67W | 1212 (1200) | | AS1500 | 2700 |

| 4. CIRCLING AREA | DISTANCE | HT. ABV. ARPT. REQUIRED | ACTUAL | OBSTRUCTION | COORDINATES | ELEV. MSL | ROC | ALT. ADJUSTMENTS | MIN. ALT. |
|---|---|---|---|---|---|---|---|---|---|
| CATEGORY A | 1.3 NM | 350 | 479 | 15. TREE | 375733.08N/0924220.59W | 1239 (2C) | 300 | | 1540 |
| CATEGORY B | 1.5 NM | 450 | 479 | 15. TREE | 375733.08N/0924220.59W | 1239 (2C) | 300 | | 1540 |
| CATEGORY C | 1.7 NM | 450 | | | | | | | |
| CATEGORY D | 2.3 NM | 550 | | | | | | | |
| CATEGORY E | 4.5 NM | 550 | | | | | | | |

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: SHY VOR/DME

| SECTOR | OBSTRUCTION | BRG/DIST | ELEVATION (MSL) | M S A | SECTOR | OBSTRUCTION | BRG/DIST | ELEVATION (MSL) | M S A |
|---|---|---|---|---|---|---|---|---|---|
| 270-140 | TWR (29-000521) | 097/ 21.1 | 1578 (5D) | 2600 | | | | | |
| 140-270 | TWR (29-001182) | 208/ 15.0 | 2083 (1A) | 3100 | | | | | |

CHECKED

| CITY AND STATE | ELEVATION: 1061 / AIRPORT NAME: | FACILITY | PROCEDURE AND AMENDMENT NO: | REGION |
|---|---|---|---|---|
| CAMDENTON, MO | CAMDENTON MEMORIAL | SHY | VOR-A, AMDT 5 05/02/13 | ACE |

## PART B - SUPPLEMENTAL DATA

| 1. COMMUNICATIONS WITH: | 2. WEATHER SERVICE | | | 3. ALTIMETER SETTING |
|---|---|---|---|---|
| ZKC ARTCC<br>MIZZU APP CON<br>COU FSS | | N W S | OTHER:<br>AWOS-1 | SOURCE: KH21 / KAIZ |
| | | F A A | | DISTANCE: 0 / 9.93 |
| | | A / C | | HOURS REMOTE OPERATION:<br>24 / BACKUP |
| SATISFACTORY ON: | | | | |
| X V H F  X U H F  H F | LOCATION: | | | ADJUSTMENT: 0 / 0 |

| 4. MONITOR STATUS | | |
|---|---|---|
| PRIMARY NAVAID: | SHY VOR/DME | |
| MONITOR POINT: | MOCC | |
| HRS OPTN: | CAT 1 | 24 |
| | CAT 3 | |

| 5. APPROACH & RUNWAY LIGHTING | |
|---|---|
| | ALS |
| | (S) SALS |
| | MALS |
| | HIRL |
| X | MIRL 33 (PCL), 15 (PCL) |
| X | REIL 33 (PCL), 15 (PCL) |
| | TDZ |
| | C/LINE |
| X | OTHER (SPECIFY)<br>PAPI-4L 33, 15 |

| 6. RUNWAY MARKINGS | |
|---|---|
| BASIC | |
| ALL WEATHER | |
| INSTRUMENT | NPI-G 33, 15 |

| 7. RUNWAY VISUAL RANGE | |
|---|---|
| APPROACH | |
| MIDFIELD | |
| ROLL OUT | |

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

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

10. WAIVERS: **NONE**

| PART D - PREPARED BY: | DATE: |
|---|---|
| JILL OLSON (AUSTIN GOTCHER) | 12/07/2012 |
| TITLE: AERONAUTICAL INFORMATION SPECIALIST | OFFICE: AJV-353 |

## PART C - REMARKS:

VDP NOT ESTABLISHED - FINAL IS CIRCLING ONLY.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

100' VEGETATION USED PER FPT.

CATS A-B ONLY DEVELOPED PER FPT.

SERVICE A: KH21:YES / KAIZ:YES
VDA NA: FINAL IS ALIGNED FOR CIRCLING ONLY

FAC CROSSES MID POINT OF RWY 15-33

MINIMUM VISIBILITY AUTHORIZED IS 3/4 NM PER MODOT.

SEE ATTACHED AIRSPACE LETTER.

RASS: PRESSURE PATTERNS SAME
KH21 1061.3, KAIZ 868.9
RA=49.78

QUALITY 1 CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** MAGYU **STATE:** MO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 375830.82N/0924122.82W **TYPE:** 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 | SUNSHINE | SHY | VOR/DME | L | 226.58 | 226.58 | 5.70 | 5.70 | | 1440 | 17500 |

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | VOR-A | 1 | | KH21 | CAMDENTON | MO (US) |

**REQUIRED CHARTING:** IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 05/02/2013

**REASON FOR REVISION:**
CHANGED FAC 1, SHY VOR/DME MAG BRG FROM 221.58 TO 226.58.
CHANGED FAC 1 MRA FROM 1500 TO 1440.

**DEVELOPED BY:** **DATE:** 12/11/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (AUSTIN GOTCHER)

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

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZKC
**ATC FACILITY:** MIZZU APP CON
**OTHER:**

QUALITY 2 CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** SUNSHINE VOR/DME **STATE:** MO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 380226.24N/0923608.68W **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 | SUNSHINE | SHY | 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 | SW | SHY | VOR/DME | 217.04 | 037.04 | R | 1 | | 3100 | 12000 | 4 | 9 |
| 2 | SE | SHY | VOR/DME | 138.33 | 318.33 | L | 1 | | 2700 | 12000 | 4 | 9 |
| 3 | NE | SHY | VOR/DME | 046.53 | 226.53 | L | 1 | | 3100 | 12000 | 4 | 9 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | AAO | 375442.00N/0923800.00W | 1391 | 4E |
| 1 | 310 | TOWER (29-001182) | 374909.65N/0924452.12W | 2083 | 1A |
| 2 | 200 | AAO | 375554.00N/0923633.00W | 1323 | 4E |
| 3 | 200 | AAO | 375806.00N/0923733.00W | 1267 | 4E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST

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

**PROCEDURES REQUIRING CLIMB-IN-HOLD:**

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | LOC/DME RWY 22 | KAIZ | KAISER/LAKE OZARK | MO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| IAP | VOR-A | | 3 | KH21 | CAMDENTON | MO (US) |
| IAP | ILS OR LOC RWY 14 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | LOC/DME RWY 22 | | 1 | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | VOR RWY 4 | | 1 | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | VOR RWY 32 | | 2 | KK15 | OSAGE BEACH | MO (US) |

**REQUIRED CHARTING:** MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 8 **DATE OF REVISION:** 05/02/2013

**REASON FOR REVISION:**
1. REVISE PAT 1, 2, AND 3 HOLDING INBOUND COURSE (MAG VAR CHANGE FROM 5E TO 0.)
2. REVISED PAT 1 AND 2 CONTROLLING OBSTACLE.
3. REMOVED PAT 4 AND PROCEDURE REQUIRING CLIMB-IN-HOLD EVALUATION.
4. ADDED CLIMB-IN-HOLD EVALUATION FOR PAT 1 KAIZ LOC/DME RWY 22.
5. UPDATE FIX USE.

**DEVELOPED BY:** **DATE:** 11/08/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (ROSS BARTO)

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

**SIGNATURE:**

**DISTRIBUTION:** **NFDC**
**FPO:** CEN
**ARTCC:** ZKC
**ATC FACILITY:** MIZZU APP CON
**OTHER:**

**INFO ONLY**

QUALITY 2 CHECKED

INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** FORNEY VOR **STATE:** MO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 374432.80N/0920820.40W **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 | FAC FEET | MRA | MAA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | FORNEY | TBN | VOR | L | | | | | | | 17500 |

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V132 | | | | | (US) |
| EN ROUTE | V239 | | | | | (US) |
| IAP | VOR-A | | | KH21 | CAMDENTON | MO (US) |
| IAP | ILS OR LOC RWY 14 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | VOR RWY 14 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | VOR RWY 32 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | VOR RWY 3 | | | KAIZ | KAISER/LAKE OZARK | MO (US) |

**REQUIRED CHARTING:** MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 7 **DATE OF REVISION:** 04/13/2006

**REASON FOR REVISION:**
UPDATED FIX USE.
RAISED AIR/GROUND COMM. FROM 1400 TO 2000.

**DEVELOPED BY:** **DATE:** 05/19/2005 **OFFICE:** AVN-120 **NAME:** WILLIAM DUHAME

**APPROVED BY:** **DATE:** 04/13/2006 **OFFICE:** AVN-120 **NAME:** JOHN BICKERSTAFF

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** MKC
**ARTCC:** ZKC
**ATC FACILITY:** TBN
**OTHER:** MOARNG (SAAO)

QUALITY 2 CHECKED

INFO ONLY

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** ROACH **STATE:** MO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 381223.49N/0924531.95W **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 | VICHY | VIH | VOR/DME | L | 267.94 | 273.94 | 49.87 | 49.87 | | 3200 | 17500 |
| 2 | SPRINGFIELD | SGF | VORTAC | H | 024.05 | 028.05 | 57.85 | 57.85 | | 6000 | 17500 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| VIH | VOR/DME | R-268 | 50 | 3200 | 17500 |
| SGF | VORTAC | R-024 | 58 | 6000 | 17500 |

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

**REMARKS:**
VICHY (FAC 1) AND SPRINGFIELD (FAC 2) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V234 | 1, 2 | | | | (US) |
| EN ROUTE | V63 | 1, 2 | | | | (US) |
| IAP | VOR-A | 1, 2 | | KH21 | CAMDENTON | MO (US) |
| IAP | VOR RWY 4 | 1, 2 | | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | VOR RWY 32 | 1, 2 | | KK15 | OSAGE BEACH | MO (US) |
| IAP | NDB RWY 18 | 1, 2 | | KDMO | SEDALIA | MO (US) |
| IAP | NDB RWY 36 | 1, 2 | | KDMO | SEDALIA | MO (US) |
| IAP | RNAV (GPS) RWY 36 | | | KDMO | SEDALIA | MO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 7 **DATE OF REVISION:** 07/26/2012

**REASON FOR REVISION:**
REFRESH DATA ON FAC 1 AND 2, CHANGE FAC 1 MRA FROM 4000 TO 6000.
ADD FACILITIES USED TO DETERMINE FIX POSITION.
CHANGE SGF ESV ALTITUDE FROM 3000 TO 6000.

**DEVELOPED BY:** **DATE:** **OFFICE:** AJV-311 **NAME:** LEE STUCKEY

**APPROVED BY:** **DATE:** 04/30/2012 **OFFICE:** AJV-311 **NAME:** RAY NUSSEAR

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZKC
**ATC FACILITY:** MIZZU APP CON
**OTHER:**

QUALITY 2 CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** SPRINGFIELD VORTAC **STATE:** MO

**INFO ONLY**

**LATITUDE/LONGITUDE:** 372121.41N/0932002.55W **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 | SPRINGFIELD | SGF | 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 | SGF | VORTAC | 016.00 | 196.00 | R | 1-1 1/2 | | 2900 | 17500 | 4 | 16 |
| 2 | SE | | WP | 156.02 | 336.02 | R | | 5 | 3000 | 17500 | 4 | 16 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | TOWER (29-001455) | 372552.00N/0931605.00W | 1670 | 3C |
| 2 | 200 | TOWER (29-000186) | 371325.00N/0931431.00W | 1983 | 2C |

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

**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/R | AR (US) |
| DP | ROGERS | | | KROG | ROGERS | AR (US) |
| DP | SPRING | | | KASG | SPRINGDALE | AR (US) |
| DP | RACER | | | KFLV | FORT LEAVENWORTH | KS (US) |
| DP | RACER | | | KIXD | OLATHE | KS (US) |
| DP | RACER | | | KOJC | OLATHE | KS (US) |
| DP | RACER | | | KMCI | KANSAS CITY | MO (US) |
| DP | RACER | | | KMKC | KANSAS CITY | MO (US) |
| DP | RACER | | | KLXT | LEE'S SUMMIT | MO (US) |
| DP | RACER | | | KGPH | MOSBY | MO (US) |
| DP | RACER | | | KSTJ | ST JOSEPH | MO (US) |
| DP | TULSA | | | KRVS | TULSA | OK (US) |
| DP | TULSA | | | KTUL | TULSA | OK (US) |
| DP | MEMPHIS | | | KMEM | MEMPHIS | TN (US) |
| EN ROUTE | J105 | | | | | (US) |
| EN ROUTE | J41 | | | | | (US) |
| EN ROUTE | J8 | | | | | (US) |
| EN ROUTE | J98 | | | | | (US) |
| EN ROUTE | V132 | | | | | (US) |
| EN ROUTE | V14 | | | | | (US) |
| EN ROUTE | V14-88-132 | | | | | (US) |
| EN ROUTE | V159 | | | | | (US) |
| EN ROUTE | V190 | | | | | (US) |
| EN ROUTE | V506 | | | | | (US) |
| EN ROUTE | V527 | | | | | (US) |
| EN ROUTE | V63 | | | | | (US) |
| EN ROUTE | V63-506-527 | | | | | (US) |
| EN ROUTE | V71 | | | | | (US) |
| EN ROUTE | V88-190 | | | | | (US) |
| IAP | VOR/DME-A | 1 | | K2H2 | AURORA | MO (US) |
| IAP | RNAV (GPS) RWY 18 | | 2 | KM17 | BOLIVAR | MO (US) |
| IAP | RNAV (GPS) RWY 36 | | 2 | KM17 | BOLIVAR | MO (US) |
| IAP | VOR/DME RWY 36 | | | KM17 | BOLIVAR | MO (US) |
| IAP | VOR-A | | | KH21 | CAMDENTON | MO (US) |
| IAP | LOC/DME RWY 21 | | | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | VOR RWY 3 | | | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | SDF RWY 36 | | | KLBO | LEBANON | MO (US) |
| IAP | VOR RWY 32 | | | KK15 | OSAGE BEACH | MO (US) |
| IAP | ILS OR LOC RWY 14 | | 1 | KSGF | SPRINGFIELD | MO (US) |
| IAP | ILS OR LOC RWY 2 | | 1 | KSGF | SPRINGFIELD | MO (US) |
| IAP | RNAV (GPS) RWY 14 | 1 | | KSGF | SPRINGFIELD | MO (US) |
| IAP | VOR OR TACAN RWY 20 | | | KSGF | SPRINGFIELD | MO (US) |
| IAP | VOR/DME OR TACAN RWY 2 | | 1 | KSGF | SPRINGFIELD | MO (US) |
| IAP | VOR/DME-A | | | KMO3 | STOCKTON | MO (US) |
| STAR | TYGER | | | KMCI | KANSAS CITY | MO (US) |
| STAR | KAYLA (RNAV) | | | KSTL | ST LOUIS | MO (US) |
| STAR | TRAKE | | | KSTL | ST LOUIS | MO (US) |
| STAR | GULLI | | | KCHK | CHICKASHA | OK (US) |

QUALITY CHECKED 2

| | | | | |
|---|---|---|---|---|
| STAR | GULLI | KRQO | EL RENO | OK (US) |
| STAR | GULLI | K1K4 | GOLDSBY | OK (US) |
| STAR | GULLI | KGOK | GUTHRIE | OK (US) |
| STAR | GULLI | KOUN | NORMAN | OK (US) |
| STAR | GULLI | KHSD | OKLAHOMA CITY | OK (US) |
| STAR | GULLI | KOKC | OKLAHOMA CITY | OK (US) |
| STAR | GULLI | KPWA | OKLAHOMA CITY | OK (US) |
| STAR | GULLI | KRCE | OKLAHOMA CITY | OK (US) |
| STAR | GULLI | KTIK | OKLAHOMA CITY | OK (US) |
| STAR | GULLI | KSNL | SHAWNEE | OK (US) |
| STAR | VINTA | KTUL | TULSA | OK (US) |

INFO ONLY

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 16 **DATE OF REVISION:**

**REASON FOR REVISION:**
FACILITY COORDINATES CHANGED FROM 372121.41N/0932002.54W TO 372121.41N/0932002.55W, SURVEY DATED 9/11/2010. UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 07/13/2012 **OFFICE:** AJV-353 **NAME:** JON DENTON

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

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZKC
**ATC FACILITY:** MIZZU APP CON
**OTHER:**

QUALITY 2 CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**INFO ONLY**

**NAME:** VICHY VOR/DME **STATE:** MO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 380914.66N/0914224.38W **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 | VICHY | VIH | 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 | NE | VIH | VOR/DME | 063.00 | 243.00 | R | 1 | | 2700 | 6000 | 4 | 5 |
| 2 | NE | VIH | VOR/DME | 061.00 | 241.00 | R | 1 | | 2700 | 6000 | 4 | 5 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 200 | AAO | 380706.00N/0914627.00W | 1359 | 4E |
| 2 | 200 | AAO | 380706.00N/0914627.00W | 1359 | 4E |

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

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**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 | BGOOD (RNAV) | | | KSTL | ST LOUIS | MO (US) |
| DP | LINDBERGH | | | KSTL | ST LOUIS | MO (US) |
| DP | LINDBERGH | | | KSUS | ST LOUIS | MO (US) |
| EN ROUTE | V14-88 | | | | | (US) |
| EN ROUTE | V175 | | | | | (US) |
| EN ROUTE | V178 | | | | | (US) |
| EN ROUTE | V234 | | | | | (US) |
| EN ROUTE | V289 | | | | | (US) |
| IAP | VOR-A | | | KH21 | CAMDENTON | MO (US) |
| IAP | RNAV (GPS) RWY 18 | | | KUBX | CUBA | MO (US) |
| IAP | ILS OR LOC RWY 14 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | NDB RWY 32 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | NDB/DME RWY 14 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | VOR RWY 14 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | VOR RWY 32 | | | KTBN | FORT LEONARD WOOD | MO (US) |
| IAP | ILS OR LOC RWY 30 | | 2 | KJEF | JEFFERSON CITY | MO (US) |
| IAP | LOC/DME RWY 21 | | | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | VOR RWY 3 | | | KAIZ | KAISER/LAKE OZARK | MO (US) |
| IAP | VOR RWY 32 | | | KK15 | OSAGE BEACH | MO (US) |
| IAP | VOR/DME OR GPS-A | | 1 | KK07 | ROLLA | MO (US) |
| IAP | RNAV (GPS) RWY 22 | | | KVIH | ROLLA/VICHY | MO (US) |
| IAP | RNAV (GPS) RWY 4 | | | KVIH | ROLLA/VICHY | MO (US) |
| IAP | VOR RWY 22 | | 2 | KVIH | ROLLA/VICHY | MO (US) |
| IAP | VOR/DME RWY 4 | | 2 | KVIH | ROLLA/VICHY | MO (US) |
| IAP | NDB RWY 24 | | | KUUV | SULLIVAN | MO (US) |
| STAR | TRAKE | | | KSTL | ST LOUIS | MO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 11 **DATE OF REVISION:** 09/23/2010

**REASON FOR REVISION:**
REMOVED ESV DATA (UPDATED ON TRAKE 8260-2).
UPDATED HOLDING PAT 1 AND 2 CONTROLLING OBSTRUCTION ID.
MOVED HOLDING LIMITED NOTE FROM REMARKS TO HOLDING RESTRICTIONS.
CONDUCTED/DOCUMENTED PRECIPITOUS TERRAIN EVALUATION.
REMOVED MILITARY IAP FROM REQUIRED CHARTING.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 03/31/2010 **OFFICE:** AVN-120 **NAME:** LARRY STROUT (SCOTT CORY)

QUALITY 2 CHECKED

**APPROVED BY:** **DATE:** 07/20/2010 **OFFICE:** AVN-120 **NAME:** SUE CRUMB

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** CEN
**ARTCC:** ZKC
**ATC FACILITY:** JEF ATCT
**OTHER:** MOARNG (SAAO)

QUALITY 2 CHECKED

# TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **CAMDENTON** STATE: **MO**

AIRPORT NAME: **CAMDENTON MEMORIAL** ID:KH21

PROCEDURE: **VOR-A** AMDT: **5**

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

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

1. Distance from **MAP** to 1000' point **3.37**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **2.23**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **226.53**
4. High Terrain in **FINAL** segment containing 1000' point **1070**
5. Distance from **MAP** to 1500' point **5.30**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **2.53**
7. True Course of **FINAL** segment containing 1500' point **2.04**
8. High Terrain in **FINAL** segment containing 1500' point **1070**
9. Threshold Coordinates (if straight-in) ... _____ / _____
10. ARP Coordinates ..... **375826.30N** / **0924128.30W**
11. Runway Approach End and distance furthest from ARP.....RWY **33**
    Distance **.33** NM
12. FAF Coordinates ..... **380226.24N** / **0923608.68W**
    (Click to Select)

**REMARKS: Approach/Drawing attached.**

# Federal Aviation Administration

# Memorandum

Date:

To: Dick Powell Manager, National Flight Data Center, AJV-21

From: Larry H. Strout, Manager, Central Products Team, AJV-353

Subject: **ACTION:** Magnetic Variation Change for Camdenton Memorial, Camdenton, MO (KH21)

The Magnetic Variation (MV) data for the airport(s) and/or facility(s) listed under the 'Airport/Facility" column will be revised effective concurrent with the publication of the procedure(s) listed below.

RNAV (GPS) RWY 15, AMDT 1
RNAV (GPS) RWY 33, AMDT 1
TAKEOFF MINIMUMS AND OBSTACLE DP, AMDT 2
VOR-A, AMDT 5

Estimated Chart Date: 05/02/2013

Please publish these changes in the National Flight Data Digest.

**MISSOURI**

| Location | Name | Airport /Facility | Identifier | Assigned Magnetic Variation Is | Epoch Year |
|---|---|---|---|---|---|
| Camdenton | Camdenton Memorial | Airport | KH21 / H21 | Old 3° East<br>New 0° East | 2015 |

If you have any questions please notify Larry H. Strout, larry.h.strout@faa.gov (405-954-5070).