| Flight Procedure Tracking Form | Action: FLIGHT CHECK | Task Type: STAR | Date Open: 05/23/2012 | Task #: 2012052328731001001 | Request #: 20120523287310 |
|---|---|---|---|---|---|
| Procedure: STAR LARKS SEVEN DENVER CO KDEN | | Airport ID: KDEN | Airport: DENVER INTL | | Reimbursable #: |
| City: DENVER | ST: CO | GPS #: | | Estimated Chart Date: 11/15/2012 | FICO #: |
| Fac ID: | Fac. Type: PROC-TR | Specialist: ROY CURRIE | | | |

P1

## Procedure Review

| | Rec'd | Rel'd | Full Name | Comments |
|---|---|---|---|---|
| Lead: | 05/23/2012 | 07/11/2012 | LONNIE EVERHART | |
| QA: | 06/22/2012 | | | |
| Liaison: | | | K. Spurlin | P1; ESV INCLUDED |

ESV REQUEST INCLUDED

**Procedure Comments:**

**Remark Type:** INFORMATION

PAGE 1 of 1

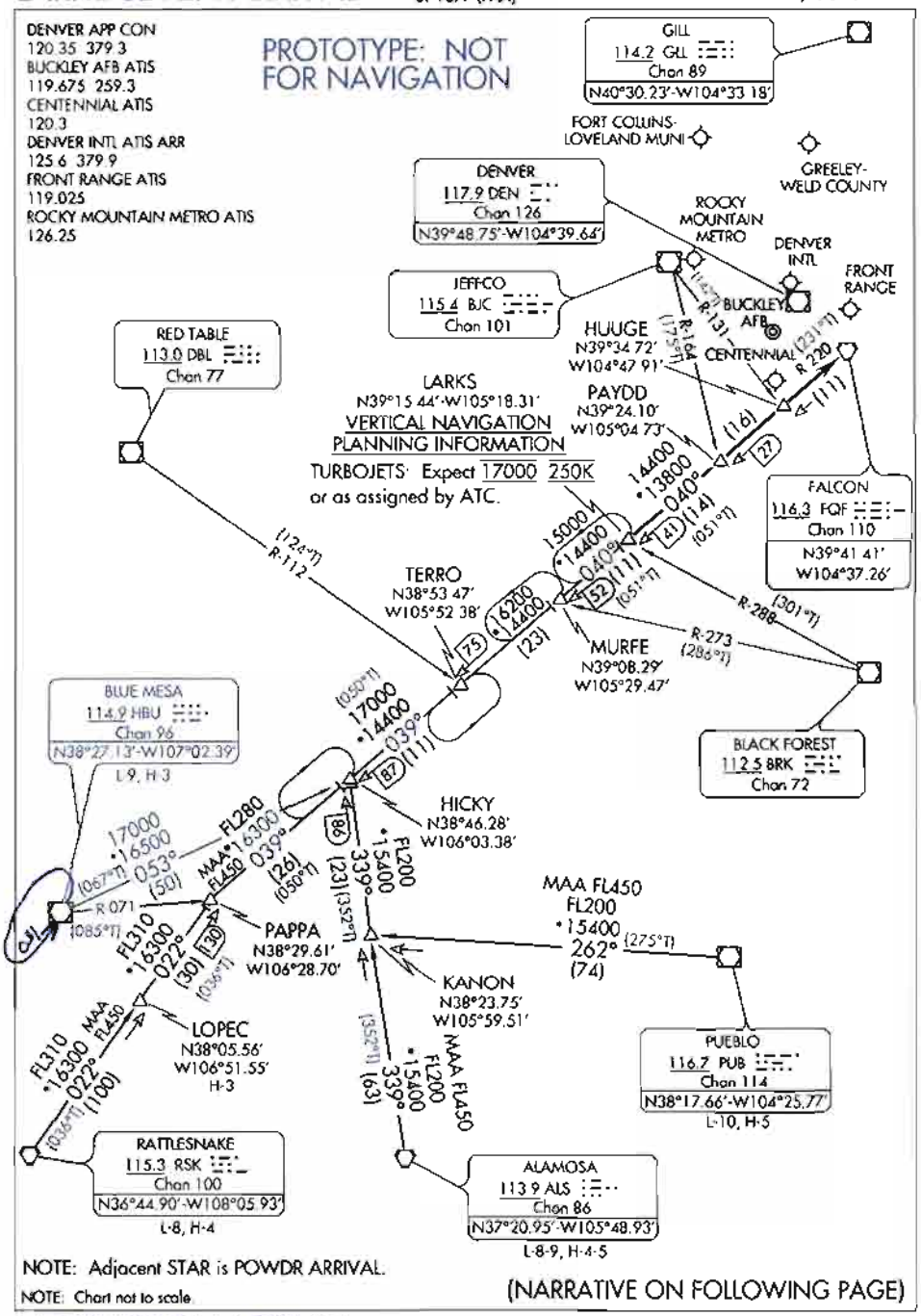
DENVER, CO; DENVER INTL (KDEN); STAR LARKS SEVEN; ENROUTE-NO; FC 10/2/12; PUB 11/15/12
ATTACHED FORMS: 7100-4; 8260-2(S): HICKY INT, REV 3; HUUGE INT, REV 2; KANON INT, REV 3; LOPEC INT, REV 2; PAPPA INT, REV 3; PAYDO INT, REV 1; TERRO INT, REV 5; BLUE MESA (HBU) VOR/DME, REV 14 (MULTIPLE); DENVER (DEN) VOR/DME, REV 2 (MULTIPLE); FALCON (FQF) VORTAC, REV 2 (MULTIPLE); GILL (GLL) VOR/DME, REV 14 (MULTIPLE); LARKS INT, REV 3 (MULTIPLE); MURFE INT, REV 3 (MULTIPLE); ALAMOSA (ALS) VORTAC, REV 13 (INFO ONLY); BLACK FOREST (BRK) VOR/DME, REV 15 (INFO ONLY); JEFFCO (BJC) VOR/DME, REV 2 (INFO ONLY); PUEBLO (PUB) VOR/DME, REV 16 (INFO ONLY); RATTLESNAKE (RSK) VORTAC, REV 11 (INFO ONLY); RED TABLE (DBL), REV 11 (INFO ONLY)

(LARKS.LARKS7) FIG

# LARKS SEVEN ARRIVAL

ST-9077 (FAA)

DENVER, COLORADO





# LARKS SEVEN ARRIVAL

DENVER, COLORADO

(LARKS.LARKS7) FIG

ARRIVAL ROUTE DESCRIPTION

ALAMOSA TRANSITION (ALS.LARKS7): From over ALS VORTAC via ALS R-339 and FQF R-220 to LARKS INT. Thence....

LOPEC TRANSITION (LOPEC.LARKS7): From over LOPEC INT via RSK R-022 and FQF R-220 to LARKS INT. Thence....

PUEBLO TRANSITION (PUB.LARKS7): From over PUB VOR/DME via PUB R-262 to KANON INT; then via ALS R-339 and FQF R-220 to LARKS INT. Thence....

RATTLESNAKE TRANSITION (RSK.LARKS7): From over RSK VORTAC via RSK R-022 and FQF R-220 to LARKS INT. Thence....

BLUE MESA TRANSITION (HBU.LARKS7): From over HBU VOR/DME via HBU R-053 and FQF R-220 to LARKS INT. Thence...

....From over LARKS INT via FQF R-220 to FQF VORTAC. Expect radar vectors to the final approach course at or before (FQF) VORTAC.

PROTOTYPE: NOT FOR NAVIGATION

## ESV Details

| Originating Office : | Airspace Docket Number : | Request Type : Establish | |
|---|---|---|---|
| **Facility Data** | | | |
| Chart Name : ALS | City : ALAMOSA | Ident : ALS | State : CO |
| Type/Class : TACR | Frequency : M1173 | Reference No.: 12064040 | |

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

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude |
|---|---|---|---|---|---|
| FAA 704153-010 | 339 | 0 | 86 | 170 | 450 |

| Requirement: GRANDFATHERED: HICKY FIX ON LARKS STAR | | |
|---|---|---|
| Signature: hughes jimmy | Routing Symbol: | Date: 06/26/2012 |

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

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704153-010 | 339 | 0 | 86 | 170 | 450 | APPROVE |

| Requirement/Remarks: GRANDFATHERED: HICKY FIX ON LARKS STARGRANDFATHER RULE/POLICY. DME SIGNAL STRENGTH(DBW) = | | |
|---|---|---|
| Signature: pham Vu | Routing Symbol: | Date: 06/26/2012 |

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

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704153-010 | 339 | 0 | 86 | 170 | 450 | APPROVE |

| Requirement/Remarks: GRANDFATHERED: HICKY FIX ON LARKS STARAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT. | | |
|---|---|---|
| Signature: CHRISTEIN THOMAS | Routing Symbol: | Date: 06/26/2012 |

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

| ESV ID | Radial 1 | Radial 2 | Distance | Minimum Altitude | Maximum Altitude | Action Type |
|---|---|---|---|---|---|---|
| FAA 704153-010 | 339 | 0 | | | | |

| Requirement/Remarks: | | |
|---|---|---|
| Signature: | Routing Symbol: | Date: |

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 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 |
|---|---|---|---|---|---|---|---|---|
| ALAMOSA | ALS.LARKS7 | ALS VORTAC | KANON INT | 339.45/63.29 (ALS R-339) | FL200 | 15,400 | FL450 | |
| | | KANON INT | HICKY INT | 339.45/22.71 (ALS R-339) | FL200 | 15,400 | FL450 | |
| | | HICKY INT | TERRO INT | 040.00/11.20 (FQF R-220) | 17,000 | 14,400 | | |
| | | TERRO INT | MURFE INT | 040.00/23.20 (FQF R-220) | 16,200 | 14,400 | | |
| | | MURFE INT | LARKS INT | 040.00/11.24 (FQF R-220) | 15,000 | 14,400 | | |
| LOPEC | LOPEC.LARKS7 | LOPEC INT | PAPPA INT | 021.96/29.96 (RSK R-022) | FL310 | 16,300 | FL450 | |
| | | PAPPA INT | HICKY INT | 040.00/25.96 (FQF R-220) | FL280 | 16,300 | FL450 | |
| | | HICKY INT | TERRO INT | 040.00/11.20 (FQF R-220) | 17,000 | 14,400 | | |
| | | TERRO INT | MURFE INT | 040.00/23.20 (FQF R-220) | 16,200 | 14,400 | | |
| | | MURFE INT | LARKS INT | 040.00/11.24 (FQF R-220) | 15,000 | 14,400 | | |
| PUEBLO | PUB.LARKS7 | PUB VOR/DME | KANON INT | 262.21/74.00 (PUB R-262) | FL200 | 15,400 | FL450 | |
| | | KANON INT | HICKY INT | 339.45/22.71 (ALS R-339) | FL200 | 15,400 | FL450 | |
| | | HICKY INT | TERRO INT | 040.00/11.20 (FQF R-220) | 17,000 | 14,400 | | |
| | | TERRO INT | MURFE INT | 040.00/23.20 (FQF R-220) | 16,200 | 14,400 | | |
| | | MURFE INT | LARKS INT | 040.00/11.24 (FQF R-220) | 15,000 | 14,400 | | |

**(2) Arrival Route Description:** ....From over LARKS intersection via FQF R-220 (MEA 14400, MOCA 13800) to FALCON (FQF) VORTAC. Expect radar vectors to the final approach course at or before the FALCON (FQF) VORTAC.

**(3) Procedural Data Notes:**

NOTE: VERTICAL NAVIGATION PLANNING INFORMATION TURBOJETS: Expect to cross LARKS at 17000 and 250 KIAS or as assigned by ATC.

NOTE: Adjacent STAR is POWDR Arrival.

NOTE: Chart not to scale.

**(4) Fixes and/or Holding Patterns:** CHART: APA, BJC, BRK, DBL, DEN, GLL, HUUGE INT, PAYDD INT. CHART HOLDING AT HICKY, SW, LEFT TURNS, 040 INBOUND; AT LARKS, SW, LEFT TURNS, 040 INBOUND; AT MURFE, SW, LEFT TURNS, 040 INBOUND; AND AT TERRO, SW, RIGHT TURNS, 040 INBOUND; AT HBU, SW, LEFT TURNS, 031 INBOUND.

**(5) Communications:** Denver Approach Control. Buckley AFB, Centennial, Denver International, Front Range, and Rocky Mountain Metropolitan ATIS.

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| **LARKS** | **SEVEN** | **LARKS.LARKS7** | **SIX** | **4 OCTOBER 2007** | |

| (12) Airports Served | |
|---|---|
| Airport Name DENVER INTERNATIONAL | City/State DENVER, CO |
| Airport Name BUCKLEY AFB | City/State AURORA, CO |
| Airport Name CENTENNIAL | City/State DENVER, CO |
| Airport Name FORT COLLINS-LOVELAND MUNI | City/State LOVELAND, CO |
| Airport Name FRONT RANGE | City/State DENVER, CO |
| Airport Name GREELEY-WELD COUNTY | City/State GREELEY, CO |
| Airport Name ROCKY MOUNTAIN METROPOLITAN | City/State DENVER, CO |

(13) Lost Communications Procedure:

(14) Remarks:

(15) Additional Flight Data:

QUALITY CHECKED

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**(16) Continuation:**

**(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 |
|---|---|---|---|---|---|---|---|---|
| RATTLESNAKE | RSK.LARKS7 | RSK VORTAC | LOPEC INT | 021.96/100.00 (RSK R-022) | FL310 | 16,300 | FL450 | |
| | | LOPEC INT | PAPPA INT | 022.71/30.02 (RSK R-022) | FL310 | 16,300 | FL450 | |
| | | PAPPA INT | HICKY INT | 038.81/25.90 (FQF R-220) | FL280 | 16,300 | FL450 | |
| | | HICKY INT | TERRO INT | 039.07/11.20 (FQF R-220) | 17,000 | 14,400 | | |
| | | TERRO INT | MURFE INT | 039.19/23.20 (FQF R-220) | 16,200 | 14,400 | | |
| | | MURFE INT | LARKS INT | 039.51/11.24 (FQF R-220) | 15,000 | 14,400 | | |
| BLUE MESA | HBU.LARKS7 | HBU VOR/DME | HICKY INT | 053.22/50.05 (HBU R-053) | 17,000 | 16,500 | | |
| | | HICKY INT | TERRO INT | 039.07/11.20 (FQF R-220) | 17,000 | 14,400 | | |
| | | TERRO INT | MURFE INT | 039.19/23.20 (FQF R-220) | 16,200 | 14,400 | | |
| | | MURFE INT | LARKS INT | 039.51/11.24 (FQF R-220) | 15,000 | 14,400 | | |

**(17) Changes:**
**Add HBU transition.**

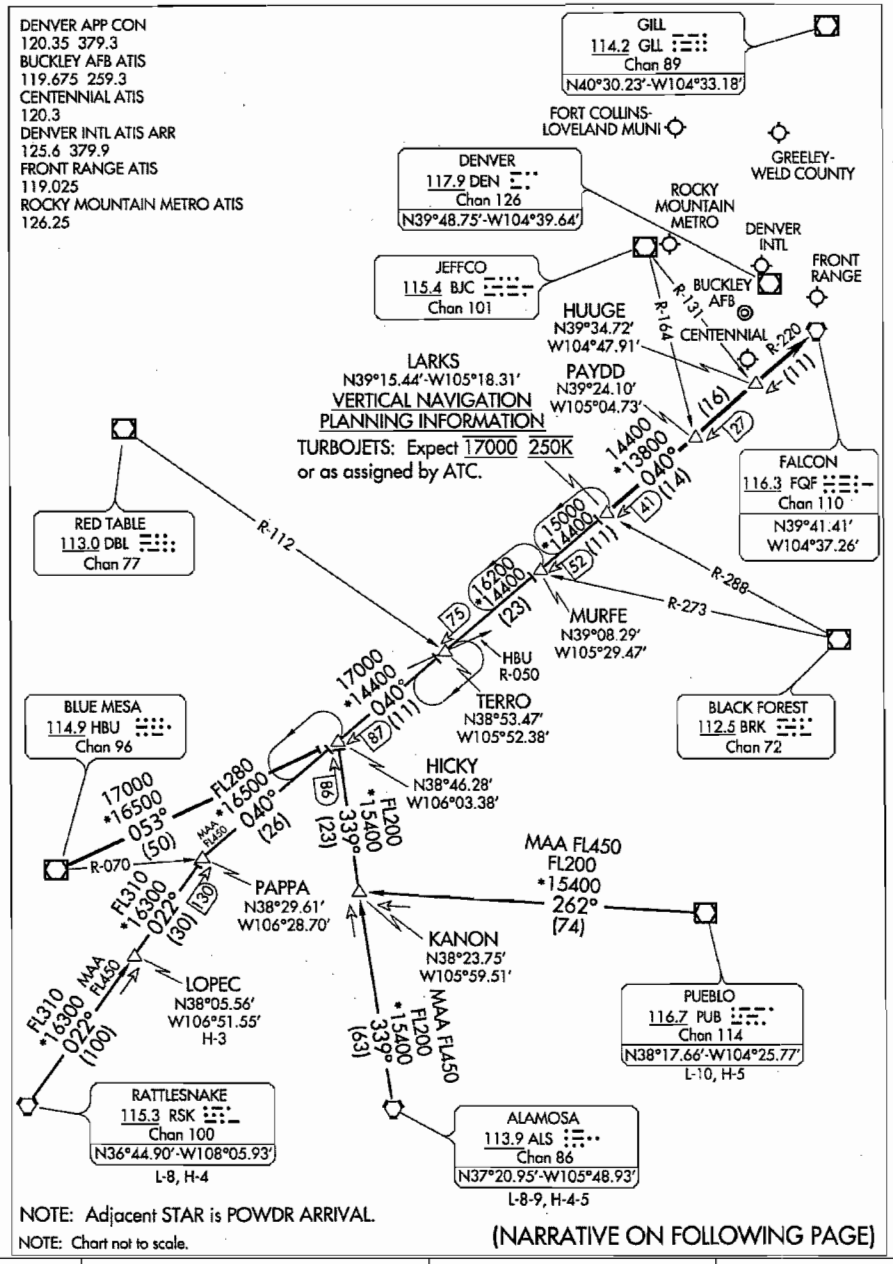
**(18) Reasons for Changes:**
**To accommodate user request and comply with air traffic control routing restrictions.**

**09/17/2012: THIS IS A CORRECTED COPY OF THE FORM DEVELOPED ON 04/26/2012.**
**CHANGED TRANSITION ROUTE NAMES FROM: RSK AND HBU; TO: RATTLESNAKE AND BLUE MESA.**

| | Name (Typed and Signed), Title and Organization | DATE |
|---|---|---|
| Developed By | Paul D. Garcia, Airspace & Procedures Manager, Denver ARTCC | 04/26/2012 |
| Approved | FIFO | |
| | Reg. ATD | |

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**(16) Graphic Depiction:**




QUALITY CHECKED

| (6) Arrival Name | (7) Number | (8) STAR Computer Code | (9) Superseded Nr. | (10) Dated | (11) Effective Date |
|---|---|---|---|---|---|
| **LARKS** | **SEVEN** | **LARKS.LARKS7** | **SIX** | **4 OCTOBER 2007** | |

**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  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        ALS   K2011390VTHW N37205697W105485593    N37205697W105485593E0130075352     NARALAMOSA
        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HICKY K20    R     N38461681W106032290                    E0092     NAR           HICKY
        SUSAEAENRT   HUUGE K20    R     N39344343W104475476                    E0087     NAR           HUUGE
        SUSAEAENRT   KANON K20    R     N38234525W105593056                    E0092     NAR           KANON
        SUSAEAENRT   LARKS K20    C   B N39152663W105181858                    E0089     NAR           LARKS
        SUSAEAENRT   LOPEC K20    R   H N38053358W106513322                    E0095     NAR           LOPEC
        SUSAEAENRT   MURFE K20    R   L N39081741W105292801                    E0090     NAR           MURFE
        SUSAEAENRT   PAPPA K20    R     N38293378W106284465                    E0094     NAR           PAPPA
        SUSAEAENRT   PAYDD K20    R     N39240576W105044374                    E0088     NAR           PAYDD
        SUSAEAENRT   TERRO K20    C   L N38532794W105522304                    E0092     NAR           TERRO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAPAK2AAPA      0     100YHN39341240W104505750E008005885         1800018000C    MNAR    CENTENNIAL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KAPAK2ELARKS71ALS   010ALS  K2D 0V       IF                                          18000
        SUSAP KAPAK2ELARKS71ALS   020KANONK2EA0E       TF                  33950633
        SUSAP KAPAK2ELARKS71ALS   030HICKYK2EA0E   H   TF                  33950227
        SUSAP KAPAK2ELARKS71ALS   040TERROK2EA0E   H   TF                  04000112
        SUSAP KAPAK2ELARKS71ALS   050MURFEK2EA0E   H   TF                  04000232
        SUSAP KAPAK2ELARKS71ALS   060LARKSK2EA0EE H   TF                  04000112
        SUSAP KAPAK2ELARKS71HBU   010HBU  K2D 0V   H   IF                                          18000
        SUSAP KAPAK2ELARKS71HBU   020HICKYK2EA0E   H   TF                  05320501
        SUSAP KAPAK2ELARKS71HBU   030TERROK2EA0E   H   TF                  04000112
        SUSAP KAPAK2ELARKS71HBU   040MURFEK2EA0E   H   TF                  04000232
```

QUALITY 1 CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

```
SUSAP KAPAK2ELARKS71HBU   050LARKSK2EA0EE H    TF                    04000112
SUSAP KAPAK2ELARKS71LOPEC 010LOPECK2EA0E       IF                                          18000
SUSAP KAPAK2ELARKS71LOPEC 020PAPPAK2EA0E       TF                    02200300
SUSAP KAPAK2ELARKS71LOPEC 030HICKYK2EA0E  H    TF                    04000260
SUSAP KAPAK2ELARKS71LOPEC 040TERROK2EA0E  H    TF                    04000112
SUSAP KAPAK2ELARKS71LOPEC 050MURFEK2EA0E  H    TF                    04000232
SUSAP KAPAK2ELARKS71LOPEC 060LARKSK2EA0EE H    TF                    04000112
SUSAP KAPAK2ELARKS71PUB   010PUB  K2D 0V       IF                                          18000
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SUSAP KAPAK2ELARKS71PUB   030HICKYK2EA0E  H     TF                    33950227
SUSAP KAPAK2ELARKS71PUB   040TERROK2EA0E  H     TF                    04000112
SUSAP KAPAK2ELARKS71PUB   050MURFEK2EA0E  H     TF                    04000232
SUSAP KAPAK2ELARKS71PUB   060LARKSK2EA0EE H     TF                    04000112
SUSAP KAPAK2ELARKS71RSK   010RSK  K2D 0V       IF                                          18000
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SUSAP KAPAK2ELARKS71RSK   030PAPPAK2EA0E        TF                    02200300
SUSAP KAPAK2ELARKS71RSK   040HICKYK2EA0E  H     TF                    04000260
SUSAP KAPAK2ELARKS71RSK   050TERROK2EA0E  H     TF                    04000112
SUSAP KAPAK2ELARKS71RSK   060MURFEK2EA0E  H     TF                    04000232
SUSAP KAPAK2ELARKS71RSK   070LARKSK2EA0EE H     TF                    04000112
SUSAP KAPAK2ELARKS72ALL   010LARKSK2EA0E  H     IF                                          18000
SUSAP KAPAK2ELARKS72ALL   020PAYDDK2EA0E        TF                    0400
SUSAP KAPAK2ELARKS72ALL   030HUUGEK2EA0E        TF                    0400
SUSAP KAPAK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KAPAK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------

SUSAP KAPAK2GRW10    0048001030 N39342242W104505357-0600    +17580058240000050075D
SUSAP KAPAK2GRW17L   0100011700 N39350292W104510530+0900    +17485057930000047100V
SUSAP KAPAK2GRW17R   0070001700 N39344434W104511338+0900    +17517058040000041077V
SUSAP KAPAK2GRW28    0048002830 N39340546W104495635+0600    +17488057940000041075R
SUSAP KAPAK2GRW35L   0070003500 N39333523W104511019-0900    +17716058690000037077V
SUSAP KAPAK2GRW35R   0100013500 N39332418W104510074-0900    +177660588500005310OIIAPA1
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

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

QUALITY 1 CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW10 | N393422.42 | W1045053.57 | N3934.374 | W10450.893 |
| RW17L | N393502.92 | W1045105.30 | N3935.049 | W10451.088 |
| RW17R | N393444.34 | W1045113.38 | N3934.739 | W10451.223 |
| RW28 | N393405.46 | W1044956.35 | N3934.091 | W10449.939 |
| RW35L | N393335.23 | W1045110.19 | N3933.587 | W10451.170 |
| RW35R | N393324.18 | W1045100.74 | N3933.403 | W10451.012 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW10 | 05824 | 50 |
| RW17L | 05793 | 47 |
| RW17R | 05804 | 41 |
| RW28 | 05794 | 41 |
| RW35L | 05869 | 37 |
| RW35R | 05885 | 53 |

QUALITY CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

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        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
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        SUSAEAENRT   HUUGE K20    R     N39344343W104475476                    E0087     NAR          HUUGE
        SUSAEAENRT   KANON K20    R     N38234525W105593056                    E0092     NAR          KANON
        SUSAEAENRT   LARKS K20    C   B N39152663W105181858                    E0089     NAR          LARKS
        SUSAEAENRT   LOPEC K20    R   H N38053358W106513322                    E0095     NAR          LOPEC
        SUSAEAENRT   MURFE K20    R   L N39081741W105292801                    E0090     NAR          MURFE
        SUSAEAENRT   PAPPA K20    R     N38293378W106284465                    E0094     NAR          PAPPA
        SUSAEAENRT   PAYDD K20    R     N39240576W105044374                    E0088     NAR          PAYDD
        SUSAEAENRT   TERRO K20    C   L N38532794W105522304                    E0092     NAR          TERRO

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AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KBJCK2ABJC     0     090YHN39543170W105070190E011005673        1800018000C    MNAR    ROCKY MOUNTAIN METROPOLITAN

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAP KBJCK2ELARKS71ALS   020KANONK2EA0E       TF                  33950633
        SUSAP KBJCK2ELARKS71ALS   030HICKYK2EA0E  H    TF                  33950227
        SUSAP KBJCK2ELARKS71ALS   040TERROK2EA0E  H    TF                  04000112
        SUSAP KBJCK2ELARKS71ALS   050MURFEK2EA0E  H    TF                  04000232
        SUSAP KBJCK2ELARKS71ALS   060LARKSK2EA0EE H    TF                  04000112
        SUSAP KBJCK2ELARKS71HBU   010HBU  K2D 0V  H    IF                                    18000
        SUSAP KBJCK2ELARKS71HBU   020HICKYK2EA0E  H    TF                  05320501
        SUSAP KBJCK2ELARKS71HBU   030TERROK2EA0E  H    TF                  04000112
        SUSAP KBJCK2ELARKS71HBU   040MURFEK2EA0E  H    TF                  04000232
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QUALITY 1 CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

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SUSAP KBJCK2ELARKS71HBU   050LARKSK2EA0EE H    TF                    04000112
SUSAP KBJCK2ELARKS71LOPEC 010LOPECK2EA0E       IF                                          18000
SUSAP KBJCK2ELARKS71LOPEC 020PAPPAK2EA0E       TF                    02200300
SUSAP KBJCK2ELARKS71LOPEC 030HICKYK2EA0E  H    TF                    04000260
SUSAP KBJCK2ELARKS71LOPEC 040TERROK2EA0E  H    TF                    04000112
SUSAP KBJCK2ELARKS71LOPEC 050MURFEK2EA0E  H    TF                    04000232
SUSAP KBJCK2ELARKS71LOPEC 060LARKSK2EA0EE H    TF                    04000112
SUSAP KBJCK2ELARKS71PUB   010PUB  K2D 0V       IF                                          18000
SUSAP KBJCK2ELARKS71PUB   020KANONK2EA0E       TF                    26220740
SUSAP KBJCK2ELARKS71PUB   030HICKYK2EA0E  H    TF                    33950227
SUSAP KBJCK2ELARKS71PUB   040TERROK2EA0E  H    TF                    04000112
SUSAP KBJCK2ELARKS71PUB   050MURFEK2EA0E  H    TF                    04000232
SUSAP KBJCK2ELARKS71PUB   060LARKSK2EA0EE H    TF                    04000112
SUSAP KBJCK2ELARKS71RSK   010RSK  K2D 0V       IF                                          18000
SUSAP KBJCK2ELARKS71RSK   020LOPECK2EA0E       TF                    02201000
SUSAP KBJCK2ELARKS71RSK   030PAPPAK2EA0E       TF                    02200300
SUSAP KBJCK2ELARKS71RSK   040HICKYK2EA0E  H    TF                    04000260
SUSAP KBJCK2ELARKS71RSK   050TERROK2EA0E  H    TF                    04000112
SUSAP KBJCK2ELARKS71RSK   060MURFEK2EA0E  H    TF                    04000232
SUSAP KBJCK2ELARKS71RSK   070LARKSK2EA0EE H    TF                    04000112
SUSAP KBJCK2ELARKS72ALL   010LARKSK2EA0E  H    IF                                          18000
SUSAP KBJCK2ELARKS72ALL   020PAYDDK2EA0E       TF                    0400
SUSAP KBJCK2ELARKS72ALL   030HUUGEK2EA0E       TF                    0400
SUSAP KBJCK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KBJCK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D
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          1         2         3         4         5         6         7         8         9         0         1         2         3
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          ------------------------------------------------------------------------------------------------------------------------
SUSAP KBJCK2GRW02    0036000233 N39542116W105070508-0400    +1695105616000030075V
SUSAP KBJCK2GRW11L   0090001133 N39545505W105074228-1000    +1708705660000041100V
SUSAP KBJCK2GRW11R   0070021133 N39545110W105075355-1100    +1712605673000040075V
SUSAP KBJCK2GRW20    0036002033 N39545053W105063904+0400    +1690205600000040075V
SUSAP KBJCK2GRW29L   0070022933 N39541212W105063933+1100    +1688805595000041075R
SUSAP KBJCK2GRW29R   0090002933 N39540495W105060691+1000    +1679805566000052100IIBJC1
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| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

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

QUALITY 1 CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW02 | N395421.16 | W1050705.08 | N3954.353 | W10507.085 |
| RW11L | N395455.05 | W1050742.28 | N3954.918 | W10507.705 |
| RW11R | N395451.10 | W1050753.55 | N3954.852 | W10507.893 |
| RW20 | N395450.53 | W1050639.04 | N3954.842 | W10506.651 |
| RW29L | N395412.12 | W1050639.33 | N3954.202 | W10506.656 |
| RW29R | N395404.95 | W1050606.91 | N3954.083 | W10506.115 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW02 | 05616 | 30 |
| RW11L | 05660 | 41 |
| RW11R | 05673 | 40 |
| RW20 | 05600 | 40 |
| RW29L | 05595 | 41 |
| RW29R | 05566 | 52 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

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        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
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        SUSAEAENRT   HUUGE K20    R     N39344343W104475476                E0087     NAR          HUUGE
        SUSAEAENRT   KANON K20    R     N38234525W105593056                E0092     NAR          KANON
        SUSAEAENRT   LARKS K20    C   B N39152663W105181858                E0089     NAR          LARKS
        SUSAEAENRT   LOPEC K20    R   H N38053358W106513322                E0095     NAR          LOPEC
        SUSAEAENRT   MURFE K20    R   L N39081741W105292801                E0090     NAR          MURFE
        SUSAEAENRT   PAPPA K20    R     N38293378W106284465                E0094     NAR          PAPPA
        SUSAEAENRT   PAYDD K20    R     N39240576W105044374                E0088     NAR          PAYDD
        SUSAEAENRT   TERRO K20    C   L N38532794W105522304                E0092     NAR          TERRO

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        SUSAP KBKFK2ELARKS71ALS   030HICKYK2EA0E  H    TF                  33950227
        SUSAP KBKFK2ELARKS71ALS   040TERROK2EA0E  H    TF                  04000112
        SUSAP KBKFK2ELARKS71ALS   050MURFEK2EA0E  H    TF                  04000232
        SUSAP KBKFK2ELARKS71ALS   060LARKSK2EA0EE H    TF                  04000112
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QUALITY CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

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SUSAP KBKFK2ELARKS71PUB   040TERROK2EA0E  H     TF                    04000112
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SUSAP KBKFK2ELARKS71RSK   060MURFEK2EA0E  H     TF                    04000232
SUSAP KBKFK2ELARKS71RSK   070LARKSK2EA0EE H     TF                    04000112
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SUSAP KBKFK2ELARKS72ALL   030HUUGEK2EA0E        TF                    0400
SUSAP KBKFK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KBKFK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------
SUSAP KBKFK2GRW14     0110061431 N39425393W104454116+0700     +16856055910000042150V
SUSAP KBKFK2GRW32     0110063231 N39411875W104443304-0700     +17261056640000044150IIBKF1
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

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

QUALITY 1 CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW14 | N394253.93 | W1044541.16 | N3942.899 | W10445.686 |
| RW32 | N394118.75 | W1044433.04 | N3941.313 | W10444.551 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW14 | 05591 | 42 |
| RW32 | 05664 | 44 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

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                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
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        SUSAD        ALS   K2011390VTHW N37205697W105485593    N37205697W105485593E0130075352     NARALAMOSA
        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HICKY K20    R     N38461681W106032290                    E0092     NAR          HICKY
        SUSAEAENRT   HUUGE K20    R     N39344343W104475476                    E0087     NAR          HUUGE
        SUSAEAENRT   KANON K20    R     N38234525W105593056                    E0092     NAR          KANON
        SUSAEAENRT   LARKS K20    C   B N39152663W105181858                    E0089     NAR          LARKS
        SUSAEAENRT   LOPEC K20    R   H N38053358W106513322                    E0095     NAR          LOPEC
        SUSAEAENRT   MURFE K20    R   L N39081741W105292801                    E0090     NAR          MURFE
        SUSAEAENRT   PAPPA K20    R     N38293378W106284465                    E0094     NAR          PAPPA
        SUSAEAENRT   PAYDD K20    R     N39240576W105044374                    E0088     NAR          PAYDD
        SUSAEAENRT   TERRO K20    C   L N38532794W105522304                    E0092     NAR          TERRO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KDENK2ADEN     0     160YHN39514200W104402340E008005434          1800018000C    MNAR     DENVER INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KDENK2ELARKS71ALS   010ALS  K2D 0V       IF                                                  18000
        SUSAP KDENK2ELARKS71ALS   020KANONK2EA0E       TF                    33950633
        SUSAP KDENK2ELARKS71ALS   030HICKYK2EA0E   H   TF                    33950227
        SUSAP KDENK2ELARKS71ALS   040TERROK2EA0E   H   TF                    04000112
        SUSAP KDENK2ELARKS71ALS   050MURFEK2EA0E   H   TF                    04000232
        SUSAP KDENK2ELARKS71ALS   060LARKSK2EA0EE  H   TF                    04000112
        SUSAP KDENK2ELARKS71HBU   010HBU  K2D 0V   H   IF                                                  18000
        SUSAP KDENK2ELARKS71HBU   020HICKYK2EA0E   H   TF                    05320501
        SUSAP KDENK2ELARKS71HBU   030TERROK2EA0E   H   TF                    04000112
        SUSAP KDENK2ELARKS71HBU   040MURFEK2EA0E   H   TF                    04000232
```

QUALITY CHECKED

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

```
SUSAP KDENK2ELARKS71HBU   050LARKSK2EA0EE H    TF                    04000112
SUSAP KDENK2ELARKS71LOPEC 010LOPECK2EA0E       IF                                          18000
SUSAP KDENK2ELARKS71LOPEC 020PAPPAK2EA0E       TF                    02200300
SUSAP KDENK2ELARKS71LOPEC 030HICKYK2EA0E  H    TF                    04000260
SUSAP KDENK2ELARKS71LOPEC 040TERROK2EA0E  H    TF                    04000112
SUSAP KDENK2ELARKS71LOPEC 050MURFEK2EA0E  H    TF                    04000232
SUSAP KDENK2ELARKS71LOPEC 060LARKSK2EA0EE H    TF                    04000112
SUSAP KDENK2ELARKS71PUB   010PUB  K2D 0V       IF                                          18000
SUSAP KDENK2ELARKS71PUB   020KANONK2EA0E       TF                    26220740
SUSAP KDENK2ELARKS71PUB   030HICKYK2EA0E  H    TF                    33950227
SUSAP KDENK2ELARKS71PUB   040TERROK2EA0E  H    TF                    04000112
SUSAP KDENK2ELARKS71PUB   050MURFEK2EA0E  H    TF                    04000232
SUSAP KDENK2ELARKS71PUB   060LARKSK2EA0EE H    TF                    04000112
SUSAP KDENK2ELARKS71RSK   010RSK  K2D 0V       IF                                          18000
SUSAP KDENK2ELARKS71RSK   020LOPECK2EA0E       TF                    02201000
SUSAP KDENK2ELARKS71RSK   030PAPPAK2EA0E       TF                    02200300
SUSAP KDENK2ELARKS71RSK   040HICKYK2EA0E  H    TF                    04000260
SUSAP KDENK2ELARKS71RSK   050TERROK2EA0E  H    TF                    04000112
SUSAP KDENK2ELARKS71RSK   060MURFEK2EA0E  H    TF                    04000232
SUSAP KDENK2ELARKS71RSK   070LARKSK2EA0EE H    TF                    04000112
SUSAP KDENK2ELARKS72ALL   010LARKSK2EA0E  H    IF                                          18000
SUSAP KDENK2ELARKS72ALL   020PAYDDK2EA0E       TF                    0400
SUSAP KDENK2ELARKS72ALL   030HUUGEK2EA0E       TF                    0400
SUSAP KDENK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KDENK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
-------------------------------------------------------------------------------------------------------------------------------------
SUSAP KDENK2GRW07    0120000825 N39502740W104433596+0000    +16128053500000055150IIDZG1
SUSAP KDENK2GRW08    0120000825 N39523920W104394403-0500    +16139053540000052150IIFUI1
SUSAP KDENK2GRW16L   0120001725 N39534933W104411250+0000    +16125053500000060150IILTT1
SUSAP KDENK2GRW16R   0160001725 N39534487W104414590+0000    +16040053220000055200IIDQQ1
SUSAP KDENK2GRW17L   0120001725 N39515383W104382870+0300    +16059053280000048150IIBXP1
SUSAP KDENK2GRW17R   0120001725 N39514048W104393656+0500    +16210053780000060150IIACX1
SUSAP KDENK2GRW25    0120002625 N39502637W104410217+0000    +16142053550000055150IIERP1
SUSAP KDENK2GRW26    0120002626 N39523808W104371015+0500    +15955052940000055150IIJOY1
SUSAP KDENK2GRW34L   0160003525 N39510679W104414772+0000    +16056053270000050200IIDXU3
SUSAP KDENK2GRW34R   0120003525 N39515077W104411388+0000    +16137053540000059150IIOUF3
SUSAP KDENK2GRW35L   0120003525 N39494193W104393798-0500    +16381054340000057150IIAQD3
SUSAP KDENK2GRW35R   0120003525 N39495527W104383016-0300    +16187053700000059150IIDPP3
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

| 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 |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW07 | N395027.40 | W1044335.96 | N3950.457 | W10443.599 |
| RW08 | N395239.20 | W1043944.03 | N3952.653 | W10439.734 |
| RW16L | N395349.33 | W1044112.50 | N3953.822 | W10441.208 |
| RW16R | N395344.87 | W1044145.90 | N3953.748 | W10441.765 |
| RW17L | N395153.83 | W1043828.70 | N3951.897 | W10438.478 |
| RW17R | N395140.48 | W1043936.56 | N3951.675 | W10439.609 |
| RW25 | N395026.37 | W1044102.17 | N3950.440 | W10441.036 |
| RW26 | N395238.08 | W1043710.15 | N3952.635 | W10437.169 |
| RW34L | N395106.79 | W1044147.72 | N3951.113 | W10441.795 |
| RW34R | N395150.77 | W1044113.88 | N3951.846 | W10441.231 |
| RW35L | N394941.93 | W1043937.98 | N3949.699 | W10439.633 |
| RW35R | N394955.27 | W1043830.16 | N3949.921 | W10438.503 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW07 | 05350 | 55 |
| RW08 | 05354 | 52 |
| RW16L | 05350 | 60 |
| RW16R | 05322 | 55 |
| RW17L | 05328 | 48 |
| RW17R | 05378 | 60 |
| RW25 | 05355 | 55 |
| RW26 | 05294 | 55 |
| RW34L | 05327 | 50 |
| RW34R | 05354 | 59 |
| RW35L | 05434 | 57 |
| RW35R | 05370 | 59 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

**STAR (Data Record)**

ARINC PACKET - 424-18 - STAR

```
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        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HICKY K20    R     N38461681W106032290                    E0092     NAR          HICKY
        SUSAEAENRT   HUUGE K20    R     N39344343W104475476                    E0087     NAR          HUUGE
        SUSAEAENRT   KANON K20    R     N38234525W105593056                    E0092     NAR          KANON
        SUSAEAENRT   LARKS K20    C   B N39152663W105181858                    E0089     NAR          LARKS
        SUSAEAENRT   LOPEC K20    R   H N38053358W106513322                    E0095     NAR          LOPEC
        SUSAEAENRT   MURFE K20    R   L N39081741W105292801                    E0090     NAR          MURFE
        SUSAEAENRT   PAPPA K20    R     N38293378W106284465                    E0094     NAR          PAPPA
        SUSAEAENRT   PAYDD K20    R     N39240576W105044374                    E0088     NAR          PAYDD
        SUSAEAENRT   TERRO K20    C   L N38532794W105522304                    E0092     NAR          TERRO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFNLK2AFNL     0     085YHN40270658W105004081E009005016        1800018000C    MNAR    FORT COLLINS-LOVELAND MUNI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFNLK2ELARKS71ALS   010ALS  K2D 0V       IF                                                  18000
        SUSAP KFNLK2ELARKS71ALS   020KANONK2EA0E       TF                  33950633
        SUSAP KFNLK2ELARKS71ALS   030HICKYK2EA0E  H    TF                  33950227
        SUSAP KFNLK2ELARKS71ALS   040TERROK2EA0E  H    TF                  04000112
        SUSAP KFNLK2ELARKS71ALS   050MURFEK2EA0E  H    TF                  04000232
        SUSAP KFNLK2ELARKS71ALS   060LARKSK2EA0EE H    TF                  04000112
        SUSAP KFNLK2ELARKS71HBU   010HBU  K2D 0V  H    IF                                                  18000
        SUSAP KFNLK2ELARKS71HBU   020HICKYK2EA0E  H    TF                  05320501
        SUSAP KFNLK2ELARKS71HBU   030TERROK2EA0E  H    TF                  04000112
        SUSAP KFNLK2ELARKS71HBU   040MURFEK2EA0E  H    TF                  04000232
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

```
SUSAP KFNLK2ELARKS71HBU   050LARKSK2EA0EE H    TF                    04000112
SUSAP KFNLK2ELARKS71LOPEC 010LOPECK2EA0E       IF                                          18000
SUSAP KFNLK2ELARKS71LOPEC 020PAPPAK2EA0E       TF                    02200300
SUSAP KFNLK2ELARKS71LOPEC 030HICKYK2EA0E  H    TF                    04000260
SUSAP KFNLK2ELARKS71LOPEC 040TERROK2EA0E  H    TF                    04000112
SUSAP KFNLK2ELARKS71LOPEC 050MURFEK2EA0E  H    TF                    04000232
SUSAP KFNLK2ELARKS71LOPEC 060LARKSK2EA0EE H    TF                    04000112
SUSAP KFNLK2ELARKS71PUB   010PUB  K2D 0V       IF                                          18000
SUSAP KFNLK2ELARKS71PUB   020KANONK2EA0E       TF                    26220740
SUSAP KFNLK2ELARKS71PUB   030HICKYK2EA0E  H    TF                    33950227
SUSAP KFNLK2ELARKS71PUB   040TERROK2EA0E  H    TF                    04000112
SUSAP KFNLK2ELARKS71PUB   050MURFEK2EA0E  H    TF                    04000232
SUSAP KFNLK2ELARKS71PUB   060LARKSK2EA0EE H    TF                    04000112
SUSAP KFNLK2ELARKS71RSK   010RSK  K2D 0V       IF                                          18000
SUSAP KFNLK2ELARKS71RSK   020LOPECK2EA0E       TF                    02201000
SUSAP KFNLK2ELARKS71RSK   030PAPPAK2EA0E       TF                    02200300
SUSAP KFNLK2ELARKS71RSK   040HICKYK2EA0E  H    TF                    04000260
SUSAP KFNLK2ELARKS71RSK   050TERROK2EA0E  H    TF                    04000112
SUSAP KFNLK2ELARKS71RSK   060MURFEK2EA0E  H    TF                    04000232
SUSAP KFNLK2ELARKS71RSK   070LARKSK2EA0EE H    TF                    04000112
SUSAP KFNLK2ELARKS72ALL   010LARKSK2EA0E  H    IF                                          18000
SUSAP KFNLK2ELARKS72ALL   020PAYDDK2EA0E       TF                    0400
SUSAP KFNLK2ELARKS72ALL   030HUUGEK2EA0E       TF                    0400
SUSAP KFNLK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KFNLK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D

          1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY    12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
          ------------------------------------------------------------------------------------------------------------------------

SUSAP KFNLK2GRW06    0022730616 N40271008W105004166-0100    +1505104990000050040D
SUSAP KFNLK2GRW15    0085001514 N40274421W105010270+0500    +1500004973000050100R
SUSAP KFNLK2GRW24    0022732416 N40271753W105001393+0100    +1504204987000050040D
SUSAP KFNLK2GRW33    0085003314 N40262508W105002589-0500    +1512905016000051100IIFNL1
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

| 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 |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW06 | N402710.08 | W1050041.66 | N4027.168 | W10500.694 |
| RW15 | N402744.21 | W1050102.70 | N4027.737 | W10501.045 |
| RW24 | N402717.53 | W1050013.93 | N4027.292 | W10500.232 |
| RW33 | N402625.08 | W1050025.89 | N4026.418 | W10500.432 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW06 | 04990 | 50 |
| RW15 | 04973 | 50 |
| RW24 | 04987 | 50 |
| RW33 | 05016 | 51 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        ALS   K2011390VTHW N37205697W105485593    N37205697W105485593E0130075352     NARALAMOSA
        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HICKY K20    R     N38461681W106032290                    E0092     NAR          HICKY
        SUSAEAENRT   HUUGE K20    R     N39344343W104475476                    E0087     NAR          HUUGE
        SUSAEAENRT   KANON K20    R     N38234525W105593056                    E0092     NAR          KANON
        SUSAEAENRT   LARKS K20    C   B N39152663W105181858                    E0089     NAR          LARKS
        SUSAEAENRT   LOPEC K20    R   H N38053358W106513322                    E0095     NAR          LOPEC
        SUSAEAENRT   MURFE K20    R   L N39081741W105292801                    E0090     NAR          MURFE
        SUSAEAENRT   PAPPA K20    R     N38293378W106284465                    E0094     NAR          PAPPA
        SUSAEAENRT   PAYDD K20    R     N39240576W105044374                    E0088     NAR          PAYDD
        SUSAEAENRT   TERRO K20    C   L N38532794W105522304                    E0092     NAR          TERRO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFTGK2AFTG     0     080YHN39470312W104321544E008005512          1800018000C    MNAR     FRONT RANGE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KFTGK2ELARKS71ALS   010ALS  K2D 0V       IF                                                  18000
        SUSAP KFTGK2ELARKS71ALS   020KANONK2EA0E       TF                    33950633
        SUSAP KFTGK2ELARKS71ALS   030HICKYK2EA0E  H    TF                    33950227
        SUSAP KFTGK2ELARKS71ALS   040TERROK2EA0E  H    TF                    04000112
        SUSAP KFTGK2ELARKS71ALS   050MURFEK2EA0E  H    TF                    04000232
        SUSAP KFTGK2ELARKS71ALS   060LARKSK2EA0EE H    TF                    04000112
        SUSAP KFTGK2ELARKS71HBU   010HBU  K2D 0V  H    IF                                                  18000
        SUSAP KFTGK2ELARKS71HBU   020HICKYK2EA0E  H    TF                    05320501
        SUSAP KFTGK2ELARKS71HBU   030TERROK2EA0E  H    TF                    04000112
        SUSAP KFTGK2ELARKS71HBU   040MURFEK2EA0E  H    TF                    04000232
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

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

**STAR (Data Record)**

```
SUSAP KFTGK2ELARKS71HBU   050LARKSK2EA0EE H    TF                    04000112
SUSAP KFTGK2ELARKS71LOPEC 010LOPECK2EA0E       IF                                          18000
SUSAP KFTGK2ELARKS71LOPEC 020PAPPAK2EA0E       TF                    02200300
SUSAP KFTGK2ELARKS71LOPEC 030HICKYK2EA0E  H    TF                    04000260
SUSAP KFTGK2ELARKS71LOPEC 040TERROK2EA0E  H    TF                    04000112
SUSAP KFTGK2ELARKS71LOPEC 050MURFEK2EA0E  H    TF                    04000232
SUSAP KFTGK2ELARKS71LOPEC 060LARKSK2EA0EE H    TF                    04000112
SUSAP KFTGK2ELARKS71PUB   010PUB  K2D 0V       IF                                          18000
SUSAP KFTGK2ELARKS71PUB   020KANONK2EA0E       TF                    26220740
SUSAP KFTGK2ELARKS71PUB   030HICKYK2EA0E  H    TF                    33950227
SUSAP KFTGK2ELARKS71PUB   040TERROK2EA0E  H    TF                    04000112
SUSAP KFTGK2ELARKS71PUB   050MURFEK2EA0E  H    TF                    04000232
SUSAP KFTGK2ELARKS71PUB   060LARKSK2EA0EE H    TF                    04000112
SUSAP KFTGK2ELARKS71RSK   010RSK  K2D 0V       IF                                          18000
SUSAP KFTGK2ELARKS71RSK   020LOPECK2EA0E       TF                    02201000
SUSAP KFTGK2ELARKS71RSK   030PAPPAK2EA0E       TF                    02200300
SUSAP KFTGK2ELARKS71RSK   040HICKYK2EA0E  H    TF                    04000260
SUSAP KFTGK2ELARKS71RSK   050TERROK2EA0E  H    TF                    04000112
SUSAP KFTGK2ELARKS71RSK   060MURFEK2EA0E  H    TF                    04000232
SUSAP KFTGK2ELARKS71RSK   070LARKSK2EA0EE H    TF                    04000112
SUSAP KFTGK2ELARKS72ALL   010LARKSK2EA0E  H    IF                                          18000
SUSAP KFTGK2ELARKS72ALL   020PAYDDK2EA0E       TF                    0400
SUSAP KFTGK2ELARKS72ALL   030HUUGEK2EA0E       TF                    0400
SUSAP KFTGK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KFTGK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
SUSAP KFTGK2GRW08     0080000832 N39473842W104335487+0400    +1643905450000050100D
SUSAP KFTGK2GRW17     0080001720 N39470815W104312724+0500    +1650805473000055100IIFZR1
SUSAP KFTGK2GRW26     0080002632 N39473682W104321243-0400    +1654705485000045100IIFTG1
SUSAP KFTGK2GRW35     0080003520 N39454910W104312722-0500    +1662705512000054100IIVWT1
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

| 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 |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW08 | N394738.42 | W1043354.87 | N3947.640 | W10433.915 |
| RW17 | N394708.15 | W1043127.24 | N3947.136 | W10431.454 |
| RW26 | N394736.82 | W1043212.43 | N3947.614 | W10432.207 |
| RW35 | N394549.10 | W1043127.22 | N3945.818 | W10431.454 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW08 | 05450 | 50 |
| RW17 | 05473 | 55 |
| RW26 | 05485 | 45 |
| RW35 | 05512 | 54 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        ALS   K2011390VTHW N37205697W105485593    N37205697W105485593E0130075352     NARALAMOSA
        SUSAD        FQF   K2011630VTHW N39412450W104371550    N39412450W104371550E0110057802     NARFALCON
        SUSAD        HBU   K2011490VDHW N38270775W107022325    N38270775W107022325E0140087302     NARBLUE MESA
        SUSAD        PUB   K2011670VTHW N38173932W104254601    N38173932W104254601E0130047592     NARPUEBLO
        SUSAD        RSK   K2011530VTHA N36445421W108055604    N36445421W108055604E0140058232     NARRATTLESNAKE

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   HICKY K20    R      N38461681W106032290                    E0092     NAR          HICKY
        SUSAEAENRT   HUUGE K20    R      N39344343W104475476                    E0087     NAR          HUUGE
        SUSAEAENRT   KANON K20    R      N38234525W105593056                    E0092     NAR          KANON
        SUSAEAENRT   LARKS K20    C    B N39152663W105181858                    E0089     NAR          LARKS
        SUSAEAENRT   LOPEC K20    R    H N38053358W106513322                    E0095     NAR          LOPEC
        SUSAEAENRT   MURFE K20    R    L N39081741W105292801                    E0090     NAR          MURFE
        SUSAEAENRT   PAPPA K20    R      N38293378W106284465                    E0094     NAR          PAPPA
        SUSAEAENRT   PAYDD K20    R      N39240576W105044374                    E0088     NAR          PAYDD
        SUSAEAENRT   TERRO K20    C    L N38532794W105522304                    E0092     NAR          TERRO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGXYK2AGXY      0     100YHN40261470W104375960E011004697         1800018000C    MNAR    GREELEY-WELD COUNTY

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KGXYK2ELARKS71ALS   010ALS  K2D 0V       IF                                                  18000
        SUSAP KGXYK2ELARKS71ALS   020KANONK2EA0E       TF                    33950633
        SUSAP KGXYK2ELARKS71ALS   030HICKYK2EA0E  H    TF                    33950227
        SUSAP KGXYK2ELARKS71ALS   040TERROK2EA0E  H    TF                    04000112
        SUSAP KGXYK2ELARKS71ALS   050MURFEK2EA0E  H    TF                    04000232
        SUSAP KGXYK2ELARKS71ALS   060LARKSK2EA0EE H    TF                    04000112
        SUSAP KGXYK2ELARKS71HBU   010HBU  K2D 0V  H    IF                                                  18000
        SUSAP KGXYK2ELARKS71HBU   020HICKYK2EA0E  H    TF                    05320501
        SUSAP KGXYK2ELARKS71HBU   030TERROK2EA0E  H    TF                    04000112
        SUSAP KGXYK2ELARKS71HBU   040MURFEK2EA0E  H    TF                    04000232
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

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

```
SUSAP KGXYK2ELARKS71HBU   050LARKSK2EA0EE H    TF                    04000112
SUSAP KGXYK2ELARKS71LOPEC 010LOPECK2EA0E       IF                                          18000
SUSAP KGXYK2ELARKS71LOPEC 020PAPPAK2EA0E       TF                    02200300
SUSAP KGXYK2ELARKS71LOPEC 030HICKYK2EA0E  H    TF                    04000260
SUSAP KGXYK2ELARKS71LOPEC 040TERROK2EA0E  H    TF                    04000112
SUSAP KGXYK2ELARKS71LOPEC 050MURFEK2EA0E  H    TF                    04000232
SUSAP KGXYK2ELARKS71LOPEC 060LARKSK2EA0EE H    TF                    04000112
SUSAP KGXYK2ELARKS71PUB   010PUB  K2D 0V       IF                                          18000
SUSAP KGXYK2ELARKS71PUB   020KANONK2EA0E       TF                    26220740
SUSAP KGXYK2ELARKS71PUB   030HICKYK2EA0E  H    TF                    33950227
SUSAP KGXYK2ELARKS71PUB   040TERROK2EA0E  H    TF                    04000112
SUSAP KGXYK2ELARKS71PUB   050MURFEK2EA0E  H    TF                    04000232
SUSAP KGXYK2ELARKS71PUB   060LARKSK2EA0EE H    TF                    04000112
SUSAP KGXYK2ELARKS71RSK   010RSK  K2D 0V       IF                                          18000
SUSAP KGXYK2ELARKS71RSK   020LOPECK2EA0E       TF                    02201000
SUSAP KGXYK2ELARKS71RSK   030PAPPAK2EA0E       TF                    02200300
SUSAP KGXYK2ELARKS71RSK   040HICKYK2EA0E  H    TF                    04000260
SUSAP KGXYK2ELARKS71RSK   050TERROK2EA0E  H    TF                    04000112
SUSAP KGXYK2ELARKS71RSK   060MURFEK2EA0E  H    TF                    04000232
SUSAP KGXYK2ELARKS71RSK   070LARKSK2EA0EE H    TF                    04000112
SUSAP KGXYK2ELARKS72ALL   010LARKSK2EA0E  H    IF                                          18000
SUSAP KGXYK2ELARKS72ALL   020PAYDDK2EA0E       TF                    0400
SUSAP KGXYK2ELARKS72ALL   030HUUGEK2EA0E       TF                    0400
SUSAP KGXYK2ELARKS72ALL   040FQF  K2D 0V       TF                    0400
SUSAP KGXYK2ELARKS72ALL   050FQF  K2D 0VE      FM FQF K2      000000000400    D
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
SUSAP KGXYK2GRW09    0058010944 N40255047W104384602-0300    +14024046610000501OOR
SUSAP KGXYK2GRW16    0100001668 N40272250W104375605-0500    +14133046970000461OOR
SUSAP KGXYK2GRW27    0058012744 N40253523W104373372+0300    +13973046450000501OOR
SUSAP KGXYK2GRW34    0100003468 N40255464W104375165+0500    +13998046531100481OOIIDCI1
```

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ALS | ALS | 010 | | IF | | FB | | | | | |
| | ALS | KANON | 020 | | TF | | FB | | 339.5() | 063.3 | | |
| | ALS | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | ALS | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALS | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | ALS | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | HBU | 010 | | IF | | FB | | | | | |
| | HBU | HICKY | 020 | | TF | | FB | | 053.2() | 050.1 | | |
| | HBU | TERRO | 030 | | TF | | FB | | 040.0() | 011.2 | | |
| | HBU | MURFE | 040 | | TF | | FB | | 040.0() | 023.2 | | |
| | HBU | LARKS | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | LOPEC | 010 | | IF | | FB | | | | | |
| | LOPEC | PAPPA | 020 | | TF | | FB | | 022.0() | 030.0 | | |
| | LOPEC | HICKY | 030 | | TF | | FB | | 040.0() | 026.0 | | |
| | LOPEC | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | LOPEC | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | LOPEC | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | PUB | 010 | | IF | | FB | | | | | |
| | PUB | KANON | 020 | | TF | | FB | | 262.2() | 074.0 | | |
| | PUB | HICKY | 030 | | TF | | FB | | 339.5() | 022.7 | | |
| | PUB | TERRO | 040 | | TF | | FB | | 040.0() | 011.2 | | |
| | PUB | MURFE | 050 | | TF | | FB | | 040.0() | 023.2 | | |
| | PUB | LARKS | 060 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | RSK | 010 | | IF | | FB | | | | | |
| | RSK | LOPEC | 020 | | TF | | FB | | 022.0() | 100.0 | | |
| | RSK | PAPPA | 030 | | TF | | FB | | 022.0() | 030.0 | | |
| | RSK | HICKY | 040 | | TF | | FB | | 040.0() | 026.0 | | |
| | RSK | TERRO | 050 | | TF | | FB | | 040.0() | 011.2 | | |
| | RSK | MURFE | 060 | | TF | | FB | | 040.0() | 023.2 | | |
| | RSK | LARKS | 070 | | TF | | FB | | 040.0() | 011.2 | | |
| | ALL | LARKS | 010 | | IF | | FB | | | | | |
| | ALL | PAYDD | 020 | | TF | | FB | | 040.0() | | | |
| | ALL | HUUGE | 030 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 040 | | TF | | FB | | 040.0() | | | |
| | ALL | FQF | 050 | | FM | | FB | | 040.0() | | | |

| 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 |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

FAA Form 7100-3 (9/02)

| | | | | |
|---|---|---|---|---|
| ALS | N372056.97 | W1054855.93 | N3720.950 | W10548.932 |
| FQF | N394124.50 | W1043715.50 | N3941.408 | W10437.258 |
| HBU | N382707.75 | W1070223.25 | N3827.129 | W10702.388 |
| PUB | N381739.32 | W1042546.01 | N3817.655 | W10425.767 |
| RSK | N364454.21 | W1080556.04 | N3644.904 | W10805.934 |
| HICKY | N384616.81 | W1060322.90 | N3846.280 | W10603.382 |
| HUUGE | N393443.43 | W1044754.76 | N3934.724 | W10447.913 |
| KANON | N382345.25 | W1055930.56 | N3823.754 | W10559.509 |
| LARKS | N391526.63 | W1051818.58 | N3915.444 | W10518.310 |
| LOPEC | N380533.58 | W1065133.22 | N3805.560 | W10651.554 |
| MURFE | N390817.41 | W1052928.01 | N3908.290 | W10529.467 |
| PAPPA | N382933.78 | W1062844.65 | N3829.563 | W10628.744 |
| PAYDD | N392405.76 | W1050443.74 | N3924.096 | W10504.729 |
| TERRO | N385327.94 | W1055223.04 | N3853.466 | W10552.384 |
| RW09 | N402550.47 | W1043846.02 | N4025.841 | W10438.767 |
| RW16 | N402722.50 | W1043756.05 | N4027.375 | W10437.934 |
| RW27 | N402535.23 | W1043733.72 | N4025.587 | W10437.562 |
| RW34 | N402554.64 | W1043751.65 | N4025.911 | W10437.861 |

RUNWAY DATA

| RWY | THRESHOLD ELEVATION | TCH |
|---|---|---|
| RW09 | 04661 | 50 |
| RW16 | 04697 | 46 |
| RW27 | 04645 | 50 |
| RW34 | 04653 | 48 |

| (11) Arrival Name | (12) Number | (13) STAR Computer Code | (14) Superseded Nr. | (15) Dated | (16) Effective Date |
|---|---|---|---|---|---|
| LARKS | SEVEN | LARKS.LARKS7 | SIX | 4 OCTOBER 2007 | |

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** ALAMOSA VORTAC **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 372056.97N/1054855.93W **TYPE:**

INFO ONLY

**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 | ALAMOSA | ALS | VORTAC | H | | | | | | | 45000 |

**FIX RESTRICTIONS:**
MCA V210 11200 WESTBOUND
MCA V83 10400 SOUTHBOUND

**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 | ALS | VORTAC | 322.00 | 142.00 | R | 1 | | 10000 | 14000 | 9 | 10 |
| 2 | SE | ALS | VORTAC | 121.38 | 301.38 | R | 1-1 1/2 | | 10700 | 17500 | 9 | 20 |
| 3 | SE | | WP | 122.38 | 302.38 | R | | 7 | 10700 | 17500 | 10 | 17 |
| 4 | NW | ALS | VORTAC | 322.00 | 142.00 | R | 1 | | 10700 | 14000 | 9 | 10 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | AAO | 371248.00N/1054830.00W | 9416 | 4E |
| 2 | 230 | AAO | 371225.00N/1054722.00W | 9384 | 4E |
| 2 | 310 | AAO | 371248.00N/1052136.00W | 9439 | 4E |
| 3 | 230 | AAO | 371248.00N/1054830.00W | 9416 | 4E |
| 4 | 230 | AAO | 371248.00N/1054830.00W | 9416 | 4E |
| 4 | 310 | AAO | 370820.40N/1054949.00W | 9676 | 4E |

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

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 2 | TAKE-OFF MINIMUMS | KALS | ALAMOSA | CO (US) |
| 2 | TAKE-OFF MINIMUMS | KMVI | MONTE VISTA | CO (US) |
| 4 | VOR/DME OR GPS-B | KALS | ALAMOSA | CO (US) |
| 4 | VOR OR GPS-A | KALS | ALAMOSA | CO (US) |

**REMARKS:**
AUTHORIZED USE AT THIS FIX: LOW ALT - COMPULSORY, HIGH ALT - ON REQUEST.
PATTERN 1 CONTROLLING OBSTRUCTION LOCATED 4295 FT INTO SECONDARY AREA.
PRECIPITOUS TERRAIN EVALUATION COMPLETED

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ST. JOHNS | | | KPHX | PHOENIX | AZ (US) |
| DP | ASPEN | | | KASE | ASPEN | CO (US) |
| DP | PIKES | | | KBKF | AURORA | CO (US) |
| DP | SPRINGS | | | KCOS | COLORADO SPRINGS | CO (US) |
| DP | PIKES | | | KAPA | DENVER | CO (US) |
| DP | PIKES | | | KBJC | DENVER | CO (US) |
| DP | PIKES | | | KDEN | DENVER | CO (US) |
| DP | PIKES | | | KFTG | DENVER | CO (US) |
| DP | PIKES | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | PIKES | | | KGXY | GREELEY | CO (US) |
| DP | CANYON | | | KPUB | PUEBLO | CO (US) |
| DP | ALBUQUERQUE | | | KABQ | ALBUQUERQUE | NM (US) |
| DP | ATOMK (RNAV) | | | KABQ | ALBUQUERQUE | NM (US) |
| DP | JEMEZ (RNAV) | | | KABQ | ALBUQUERQUE | NM (US) |
| EN ROUTE | J102 | | | | | (US) |
| EN ROUTE | J110 | | | | | (US) |
| EN ROUTE | J13 | | | | | (US) |
| EN ROUTE | J206 | | | | | (US) |
| EN ROUTE | J44 | | | | | (US) |
| EN ROUTE | V210 | | | | | (US) |
| EN ROUTE | V368 | | | | | (US) |
| EN ROUTE | V484 | | | | | (US) |
| EN ROUTE | V83 | | | | | (US) |
| IAP | ILS OR LOC RWY 02 | | 1 | KALS | ALAMOSA | CO (US) |
| IAP | RNAV (GPS) RWY 02 | | | KALS | ALAMOSA | CO (US) |
| IAP | RNAV (GPS) RWY 20 | | | KALS | ALAMOSA | CO (US) |
| IAP | VOR OR GPS-A | | 4 | KALS | ALAMOSA | CO (US) |
| IAP | VOR/DME OR GPS-B | | 4 | KALS | ALAMOSA | CO (US) |
| IAP | GPS RWY 20 | | | KMVI | MONTE VISTA | CO (US) |
| IAP | RNAV (GPS)-B | | 3 | KMVI | MONTE VISTA | CO (US) |

QUALITY CHECKED

| | | | | | |
|---|---|---|---|---|---|
| IAP | VOR/DME-A | 2 | KMVI | MONTE VISTA | CO (US) |
| OTHER | TAKE-OFF MINIMUMS | 2 | KALS | ALAMOSA | CO (US) |
| OTHER | TAKE-OFF MINIMUMS | 2 | KMVI | MONTE VISTA | CO (US) |
| STAR | DEBERRY | | KCOS | COLORADO SPRINGS | CO (US) |
| STAR | LARKS | | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** LOW

**RECORD REVISION NUMBER:** 13 **DATE OF REVISION:** 08/26/2010

**REASON FOR REVISION:**
1. CHANGE PAT1 MIN HOLDING ALTITUDE TO 10000, REV12 INCORRECTLY RAISED MIN HOLDING FROM 10000 TO 10500.
2. UPDATE FIX USE.
3. ADDED PAT4.

**DEVELOPED BY:** **DATE:** 05/17/2010 **OFFICE:** AVN-130 **NAME:** PATRICK MULQUEEN

**APPROVED BY:** **DATE:** 07/01/2010 **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD INFO ONLY

**NAME:** BLACK FOREST VOR/DME **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 385640.22N/1043800.48W **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 | BLACK FOREST | BRK | VOR/DME | L | | | | | | | 17500 |

**FIX RESTRICTIONS:**
MCA V81 10000 NORTHWEST BOUND
MCA V108 10700 WESTBOUND
MCA V611 10000 NORTHEAST BOUND
VOR UNUSABLE R-300 TO R-040 BEYOND 10 NM

**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 | BRK | VOR/DME | 334.00 | 154.00 | L | 1 | | 10000 | 14000 | 9 | 10 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | TOWER (08-000087) | 390246.00N/1044140.00W | 7940 | 3A |
| 1 | 310 | AAO | 390818.00N/1045033.59W | 8055 | 4E |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 TERRAIN

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

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | SPRINGS | KCOS | COLORADO SPRINGS | CO (US) |
| 1 | TAKEOFF MINIMUMS | KCOS | COLORADO SPRINGS | CO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVAL COMPLETED.
CHART PATTERN 1 ON LOW ENROUTE ALTITUDE CHART

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ASPEN | | | KASE | ASPEN | CO (US) |
| DP | DENVER | | | KBKF | AURORA | CO (US) |
| DP | PIKES | | | KBKF | AURORA | CO (US) |
| DP | SPRINGS | | 1 | KCOS | COLORADO SPRINGS | CO (US) |
| DP | TAKEOFF MINIMUMS | | 1 | KCOS | COLORADO SPRINGS | CO (US) |
| DP | DENVER | | | KAPA | DENVER | CO (US) |
| DP | PIKES | | | KAPA | DENVER | CO (US) |
| DP | DENVER | | | KBJC | DENVER | CO (US) |
| DP | PIKES | | | KBJC | DENVER | CO (US) |
| DP | DENVER | | | KDEN | DENVER | CO (US) |
| DP | PIKES | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KFTG | DENVER | CO (US) |
| DP | PIKES | | | KFTG | DENVER | CO (US) |
| DP | DENVER | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | PIKES | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | DENVER | | | KGXY | GREELEY | CO (US) |
| DP | PIKES | | | KGXY | GREELEY | CO (US) |
| DP | CANYON | | | KPUB | PUEBLO | CO (US) |
| EN ROUTE | V108 | | | | | (US) |
| EN ROUTE | V611 | | | | | (US) |
| EN ROUTE | V81 | | | | | (US) |
| EN ROUTE | V83 | | | | | (US) |
| IAP | ILS OR LOC RWY 17L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS OR LOC RWY 35L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS OR LOC RWY 35R | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS RWY 17L (SA CAT I) | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | NDB RWY 35L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | RNAV (GPS) RWY 31 | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS RWY 17R | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 08L | | | KPUB | PUEBLO | CO (US) |
| IAP | ILS OR LOC RWY 26R | | | KPUB | PUEBLO | CO (US) |
| IAP | VOR OR TACAN RWY 26R | | | KPUB | PUEBLO | CO (US) |
| STAR | DEBERRY | | | KCOS | COLORADO SPRINGS | CO (US) |
| STAR | LARKS | | | KDEN | DENVER | CO (US) |

QUALITY CHECKED

STAR QUAIL KDEN DENVER CO (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 15 **DATE OF REVISION:** 04/05/2012

**REASON FOR REVISION:**
UPDATED 310 CONTROLLING OBSTACLE
UPDATED FIX USE
UPDATED NAME FROM BLACK FOREST VORTAC TO BLACK FOREST VOR/DME

| | | | |
|---|---|---|---|
| **DEVELOPED BY:** | **DATE:** 11/16/2011 | **OFFICE:** AJV-354 | **NAME:** ADOLFO URRUTIA (DANA MITCHELL) |
| **APPROVED BY:** | **DATE:** 01/26/2012 | **OFFICE:** AJV-354 | **NAME:** DEZ SILAGYI |
| | **SIGNATURE:** | | |

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** COS APP CON
**OTHER:** COS ATCT

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** BLUE MESA VOR/DME **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 382707.75N/1070223.25W **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 | BLUE MESA | HBU | VOR/DME | H | | | | | | | 45000 |

**FIX RESTRICTIONS:**
MCA V95 12900 NORTHEAST BOUND
MCA V160 12900 NORTHEAST BOUND
MCA V421 12900 NORTHBOUND
MCA V95-421 12600 SOUTHBOUND

**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 | HBU | VOR/DME | 211.00 | 031.00 | L | 1-1 1/2 | | 13800 | 29000 | 10 | 22 |
| 2 | SW | HBU | VOR/DME | 211.00 | 031.00 | L | 1-1 1/2 | | 12000 | 29000 | 9 | 22 |
| 3 | N | | WP | 354.50 | 174.50 | L | | 8 | 13000 | 14000 | 11 | 11 |
| 4 | SW | | WP | 211.00 | 031.00 | L | | 10 | 17000 | 45000 | 15 | 30 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | AAO | 381603.00N/1071957.00W | 10525 | 4E |
| 1 | 310 | AAO | 381024.00N/1072612.00W | 12431 | 4E |
| 2 | 230 | AAO | 381636.00N/1071848.00W | 10230 | 4E |
| 3 | 230 | AAO | 384042.00N/1070554.00W | 11559 | 2C |
| 4 | 265 | AAO | 380842.00N/1071124.00W | 12664 | 4E |

**PRECIPITOUS TERRAIN ADDITIONS:**

| PAT | SPEED | ADDITION |
|---|---|---|
| 1 | 230 | 258 |
| 1 | 310 | 361 |
| 2 | 230 | 224 |
| 3 | 230 | 367 |
| 4 | 265 | 342 |

**REASON FOR NONSTANDARD HOLDING:**
PAT 4 ATC REQUEST
PAT 1 ATC REQUEST
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST

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

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | TAKE-OFF MINIMUMS | KGUC | GUNNISON | CO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED
CHART PAT 1 ON ENROUTE LOW.
PAT 4, MIN HOLDING TEMPLATE 15 USED TO ACCOMODATE 10 DME HOLDING LEG LENGTH, 10 DME HOLDING ATC REQUEST
PAT 4 OBSTACLE 10224 FT INTO SECONDARY (11812 PRIMARY EQ)

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ASPEN | | | KASE | ASPEN | CO (US) |
| DP | DENVER | | | KBKF | AURORA | CO (US) |
| DP | ROCKIES | | | KBKF | AURORA | CO (US) |
| DP | SPRINGS | | | KCOS | COLORADO SPRINGS | CO (US) |
| DP | CORTEZ | | | KCEZ | CORTEZ | CO (US) |
| DP | TAKE-OFF MINIMUMS | | | KCEZ | CORTEZ | CO (US) |
| DP | DENVER | | | KAPA | DENVER | CO (US) |
| DP | ROCKIES | | | KAPA | DENVER | CO (US) |
| DP | DENVER | | | KBJC | DENVER | CO (US) |
| DP | ROCKIES | | | KBJC | DENVER | CO (US) |
| DP | DENVER | | | KDEN | DENVER | CO (US) |
| DP | ROCKIES | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KFTG | DENVER | CO (US) |
| DP | ROCKIES | | | KFTG | DENVER | CO (US) |
| DP | DENVER | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | ROCKIES | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |

QUALITY CHECKED

| | | | | | |
|---|---|---|---|---|---|
| DP | GRAND MESA | | KGJT | GRAND JUNCTION | CO (US) |
| DP | DENVER | | KGXY | GREELEY | CO (US) |
| DP | ROCKIES | | KGXY | GREELEY | CO (US) |
| DP | TAKE-OFF MINIMUMS | 1 | KGUC | GUNNISON | CO (US) |
| DP | BLUE MESA | | KMTJ | MONTROSE | CO (US) |
| DP | CANYON | | KPUB | PUEBLO | CO (US) |
| EN ROUTE | J10 | | | | (US) |
| EN ROUTE | J10-128 | | | | (US) |
| EN ROUTE | J128 | | | | (US) |
| EN ROUTE | J146 | | | | (US) |
| EN ROUTE | J206 | | | | (US) |
| EN ROUTE | J240 | | | | (US) |
| EN ROUTE | J28 | | | | (US) |
| EN ROUTE | V160 | | | | (US) |
| EN ROUTE | V244 | | | | (US) |
| EN ROUTE | V26-244 | | | | (US) |
| EN ROUTE | V421 | | | | (US) |
| EN ROUTE | V484 | | | | (US) |
| EN ROUTE | V95 | | | | (US) |
| EN ROUTE | V95-421 | | | | (US) |
| IAP | GPS-B | 2 | KGUC | GUNNISON | CO (US) |
| IAP | ILS OR LOC RWY 6 | 2 | KGUC | GUNNISON | CO (US) |
| IAP | RNAV (RNP) RWY 24 | 3 | KGUC | GUNNISON | CO (US) |
| IAP | RNAV (RNP) RWY 6 | 3 | KGUC | GUNNISON | CO (US) |
| IAP | VOR OR GPS-A | 2 | KGUC | GUNNISON | CO (US) |
| STAR | DEBERRY | | KCOS | COLORADO SPRINGS | CO (US) |
| STAR | CREDE (RNAV) | 4 | KBJC | DENVER | CO (US) |
| STAR | CREDE (RNAV) | 4 | KDEN | DENVER | CO (US) |
| STAR | LARKS | 2 | KDEN | DENVER | CO (US) |
| STAR | LDORA (RNAV) | 4 | KDEN | DENVER | CO (US) |
| STAR | PEEKK (RNAV) | 4 | KDEN | DENVER | CO (US) |
| STAR | POWDR | 2 | KDEN | DENVER | CO (US) |
| STAR | TELLR (RNAV) | 4 | KDEN | DENVER | CO (US) |
| STAR | PEEKK (RNAV) | 4 | KLMO | LONGMONT | CO (US) |

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

**COMPULSORY REPORTING POINT:** LOW

**RECORD REVISION NUMBER:** 14 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
UPDATED FIX USE
UPDATED 230K PAT 1 AND 2 CONTROLLING OBSTACLES TO NEW DTED AAO, AND UPDATED PRECIPITOUS ADJUSTMENT
ADDED HOLDING PAT 4

**DEVELOPED BY:** **DATE:** 02/01/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** DEN
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** DENVER VOR/DME **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 394845.05N/1043938.66W **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 | DENVER | DEN | VOR/DME | 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 | DEN | VOR/DME | 163.00 | 343.00 | R | 1-1 1/2 | | 8100 | 17500 | 9 | 20 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | AAO | 393300.00N/1043427.00W | 6437 | 4E |
| 1 | 310 | TOWER (08-000111) | 392514.47N/1043916.71W | 7048 | 2B |

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

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | TAKE-OFF MINIMUMS | KAPA | DENVER | CO (US) |
| 1 | TAKE-OFF MINIMUMS | KFTG | DENVER | CO (US) |
| 1 | TAKE-OFF MINIMUMS | KBJC | DENVER | CO (US) |
| 1 | TAKE-OFF MINIMUMS | KDEN | DENVER | CO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | DENVER | | | KBKF | AURORA | CO (US) |
| DP | PIKES | | | KBKF | AURORA | CO (US) |
| DP | PLAINS | | | KBKF | AURORA | CO (US) |
| DP | ROCKIES | | | KBKF | AURORA | CO (US) |
| DP | YELLOWSTONE | | | KBKF | AURORA | CO (US) |
| DP | DENVER | | | KAPA | DENVER | CO (US) |
| DP | PIKES | | | KAPA | DENVER | CO (US) |
| DP | PLAINS | | | KAPA | DENVER | CO (US) |
| DP | ROCKIES | | | KAPA | DENVER | CO (US) |
| DP | TAKE-OFF MINIMUMS | | 1 | KAPA | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KAPA | DENVER | CO (US) |
| DP | DENVER | | | KBJC | DENVER | CO (US) |
| DP | PIKES | | | KBJC | DENVER | CO (US) |
| DP | PLAINS | | | KBJC | DENVER | CO (US) |
| DP | ROCKIES | | | KBJC | DENVER | CO (US) |
| DP | TAKE-OFF MINIMUMS | | 1 | KBJC | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KBJC | DENVER | CO (US) |
| DP | DENVER | | | KDEN | DENVER | CO (US) |
| DP | PIKES | | | KDEN | DENVER | CO (US) |
| DP | PLAINS | | | KDEN | DENVER | CO (US) |
| DP | ROCKIES | | | KDEN | DENVER | CO (US) |
| DP | TAKE-OFF MINIMUMS | | 1 | KDEN | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KFTG | DENVER | CO (US) |
| DP | PIKES | | | KFTG | DENVER | CO (US) |
| DP | PLAINS | | | KFTG | DENVER | CO (US) |
| DP | ROCKIES | | | KFTG | DENVER | CO (US) |
| DP | TAKE-OFF MINIMUMS | | 1 | KFTG | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KFTG | DENVER | CO (US) |
| DP | TAKE-OFF MINIMUMS | | | KEIK | ERIE | CO (US) |
| DP | DENVER | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | PIKES | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | PLAINS | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | ROCKIES | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | YELLOWSTONE | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | DENVER | | | KGXY | GREELEY | CO (US) |
| DP | PIKES | | | KGXY | GREELEY | CO (US) |
| DP | PLAINS | | | KGXY | GREELEY | CO (US) |
| DP | ROCKIES | | | KGXY | GREELEY | CO (US) |
| DP | YELLOWSTONE | | | KGXY | GREELEY | CO (US) |
| IAP | ILS OR LOC Z RWY 29R | | | KBJC | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 16L | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 16R | | | KDEN | DENVER | CO (US) |

QUALITY CHECKED

| | | | | |
|---|---|---|---|---|
| IAP | ILS OR LOC RWY 17L | KDEN | DENVER | CO (US) |
| STAR | PUFFR (RNAV) | KAPA | DENVER | CO (US) |
| STAR | SKARF (RNAV) | KAPA | DENVER | CO (US) |
| STAR | DANDD | KDEN | DENVER | CO (US) |
| STAR | LANDR | KDEN | DENVER | CO (US) |
| STAR | LARKS | KDEN | DENVER | CO (US) |
| STAR | POWDR | KDEN | DENVER | CO (US) |
| STAR | QUAIL | KDEN | DENVER | CO (US) |
| STAR | RAMMS | KDEN | DENVER | CO (US) |
| STAR | SAYGE | KDEN | DENVER | CO (US) |
| STAR | TOMSN | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
UPDATED FIX COORDINATES TO REFLECT MOST RECENT SURVEY.
CHANGED HOLDING PAT 1 COURSE INBOUND FROM 340 TO 343 TO REFLECT FACILITY MAGVAR ROTATION FROM 11E TO 8E.
UPDATED PAT 1 310KT CONTROLLING OBSTACLE COORDINATES AND ACCURACY CODE TO CURRENT DATA.
MOVED LIMITED HOLDING NOTE FROM REMARKS TO HOLDING RESTRICTIONS.
UPDATED PRECIPITOUS TERRAIN NOTE TO CURRENT FORMAT.
ADDED STAR TO REQUIRED CHARTING.

**DEVELOPED BY:** **DATE:** 11/14/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (STEPHEN PETERSON)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** DEN APP CON
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** FALCON VORTAC **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 394124.50N/1043715.50W **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 | FALCON | FQF | 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 | SW | FQF | VORTAC | 223.74 | 043.74 | R | 1 | | 8000 | 14000 | 8 | 18 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | AAO | 393104.60N/1043946.90W | 6615 | 6C |
| 1 | 310 | AAO | 392543.60N/1045203.00W | 6913 | 6C |

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

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | ILS OR LOC RWY 26 | KFTG | DENVER | CO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ASPEN | | | KASE | ASPEN | CO (US) |
| DP | DENVER | | | KBKF | AURORA | CO (US) |
| DP | SPRINGS | | | KCOS | COLORADO SPRINGS | CO (US) |
| DP | DENVER | | | KAPA | DENVER | CO (US) |
| DP | DENVER | | | KBJC | DENVER | CO (US) |
| DP | DECI-BELLE | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KFTG | DENVER | CO (US) |
| DP | DENVER | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | GRAND MESA | | | KGJT | GRAND JUNCTION | CO (US) |
| DP | DENVER | | | KGXY | GREELEY | CO (US) |
| DP | CANYON | | | KPUB | PUEBLO | CO (US) |
| EN ROUTE | J10 | | | | | (US) |
| EN ROUTE | J116 | | | | | (US) |
| EN ROUTE | J128 | | | | | (US) |
| EN ROUTE | J13 | | | | | (US) |
| EN ROUTE | J17 | | | | | (US) |
| EN ROUTE | J20 | | | | | (US) |
| EN ROUTE | J44 | | | | | (US) |
| EN ROUTE | J52 | | | | | (US) |
| EN ROUTE | J56 | | | | | (US) |
| EN ROUTE | J80 | | | | | (US) |
| EN ROUTE | V134 | | | | | (US) |
| EN ROUTE | V148 | | | | | (US) |
| EN ROUTE | V160 | | | | | (US) |
| EN ROUTE | V366 | | | | | (US) |
| EN ROUTE | V389 | | | | | (US) |
| EN ROUTE | V85 | | | | | (US) |
| EN ROUTE | V95 | | | | | (US) |
| IAP | ILS OR LOC RWY 35R | | | KAPA | DENVER | CO (US) |
| IAP | NDB RWY 35 | | | KAPA | DENVER | CO (US) |
| IAP | RNAV (GPS) RWY 28 | | | KAPA | DENVER | CO (US) |
| IAP | RNAV (GPS) RWY 35R | | | KAPA | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 07 | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 08 | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 16L | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 16R | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 17L | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 25 | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 34L | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 17R | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 26 | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34L (CAT II) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34L (CAT III) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34R | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34R (CAT II) | | | KDEN | DENVER | CO (US) |

QUALITY CHECKED

| | | | | | |
|---|---|---|---|---|---|
| IAP | ILS RWY 34R (CAT III) | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 17 | | KFTG | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 26 | 1 | KFTG | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 35 | | KFTG | DENVER | CO (US) |
| IAP | NDB RWY 26 | | KFTG | DENVER | CO (US) |
| IAP | RNAV (GPS) RWY 17 | | KFTG | DENVER | CO (US) |
| IAP | RNAV (GPS) RWY 26 | | KFTG | DENVER | CO (US) |
| IAP | RNAV (GPS) RWY 35 | | KFTG | DENVER | CO (US) |
| STAR | DANDD | | KDEN | DENVER | CO (US) |
| STAR | LANDR | | KDEN | DENVER | CO (US) |
| STAR | LARKS | | KDEN | DENVER | CO (US) |
| STAR | POWDR | | KDEN | DENVER | CO (US) |
| STAR | QUAIL | | KDEN | DENVER | CO (US) |
| STAR | RAMMS | | KDEN | DENVER | CO (US) |
| STAR | SAYGE | | KDEN | DENVER | CO (US) |
| STAR | TOMSN | | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
CHANGED HOLDING MAX TEMPLATE FROM 10 TO 18.
REMOVED PAT 2.
CHANGED PAT 1 230KT AND 310KT CONTROLLING OBSTACLE ACCURACY CODES FROM 6A TO 6C.
CHANGED PAT 1 INBOUND COURSE FROM 044.00 TO 043.74.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 12/15/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (STEPHEN PETERSON)

**APPROVED BY:** **DATE:** 03/30/2012 **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** DEN APP CON/FTG TOWER
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** GILL VOR/DME **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 403013.93N/1043310.86W **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 | GILL | GLL | VOR/DME | 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 | NE | GLL | VOR/DME | 025.00 | 205.00 | R | 1-1 1/2 | | 6800 | 17500 | 8 | 16 |
| 2 | NE | | WP | 030.00 | 210.00 | R | | 7 | 10000 | 14000 | 10 | 11 |
| 3 | NE | | WP | 028.00 | 208.00 | R | | 7 | 7200 | 10000 | 9 | 10 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 230 | TOWER (08-001084) | 403831.00N/1044905.00W | 6000 | 5D |
| 1 | 230 | AAO | 404400.00N/1042921.00W | 5460 | 4E |
| 1 | 310 | AAO | 404748.00N/1043251.00W | 5591 | 4E |
| 2 | 230 | AAO | 404527.00N/1042942.00W | 5568 | 4E |
| 3 | 230 | AAO | 404436.00N/1042927.00W | 5522 | 4E |

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 8000 FT.

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | T/O MINS AND DP | KGXY | GREELEY | CO (US) |
| 1 | ILS OR LOC RWY 33 | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| 1 | ILS OR LOC RWY 34 | KGXY | GREELEY | CO (US) |
| 1 | T/O MINS AND DP | KFNL | FORT COLLINS/LOVELAND | CO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | DENVER | | | KBKF | AURORA | CO (US) |
| DP | YELLOWSTONE | | | KBKF | AURORA | CO (US) |
| DP | DENVER | | | KAPA | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KAPA | DENVER | CO (US) |
| DP | DENVER | | | KBJC | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KBJC | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KFTG | DENVER | CO (US) |
| DP | YELLOWSTONE | | | KFTG | DENVER | CO (US) |
| DP | DENVER | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | T/O MINS AND DP | | 1 | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | YELLOWSTONE | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | DENVER | | | KGXY | GREELEY | CO (US) |
| DP | T/O MINS AND DP | | 1 | KGXY | GREELEY | CO (US) |
| DP | YELLOWSTONE | | | KGXY | GREELEY | CO (US) |
| DP | T/O MINS AND DP | 1 | | KLMO | LONGMONT | CO (US) |
| EN ROUTE | V101 | | | | | (US) |
| EN ROUTE | V207 | | | | | (US) |
| EN ROUTE | V220 | | | | | (US) |
| EN ROUTE | V4 | | | | | (US) |
| EN ROUTE | V611 | | | | | (US) |
| EN ROUTE | V89 | | | | | (US) |
| IAP | ILS OR LOC RWY 17L | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 25 | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 26 | | 1 | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 34L | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 34R | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 35L | | 1 | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 35R | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 7 | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 8 | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34L (CAT II/CAT III) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34L (SA CAT I) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34R (CAT II/CAT III) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 34R (SA CAT I) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 35L (CAT II/CAT III) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 35L (SA CAT I) | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 35R (CAT II/III) | | | KDEN | DENVER | CO (US) |

QUALITY CHECKED

| | | | | | | |
|---|---|---|---|---|---|---|
| IAP | ILS RWY 35R (SA CAT I) | | | KDEN | DENVER | CO (US) |
| IAP | RNAV (GPS) Y RWY 35L | | 2 | KDEN | DENVER | CO (US) |
| IAP | RNAV (RNP) Z RWY 35L | | 2 | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 35 | | | KFTG | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 33 | | 1 | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| IAP | RNAV (GPS) RWY 33 | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| IAP | VOR/DME-A | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| IAP | ILS OR LOC RWY 34 | | 1 | KGXY | GREELEY | CO (US) |
| IAP | NDB RWY 34 | | | KGXY | GREELEY | CO (US) |
| IAP | RNAV (GPS) RWY 16 | | | KGXY | GREELEY | CO (US) |
| IAP | RNAV (GPS) RWY 27 | | | KGXY | GREELEY | CO (US) |
| IAP | RNAV (GPS) RWY 34 | | | KGXY | GREELEY | CO (US) |
| IAP | VOR-A | | | KGXY | GREELEY | CO (US) |
| IAP | RNAV (GPS) B | | 3 | KLMO | LONGMONT | CO (US) |
| IAP | VOR/DME-A | 1 | 1 | KLMO | LONGMONT | CO (US) |
| IAP | ILS OR LOC RWY 27 | | | KCYS | CHEYENNE | WY (US) |
| IAP | NDB RWY 27 | | | KCYS | CHEYENNE | WY (US) |
| STAR | DANDD | | | KDEN | DENVER | CO (US) |
| STAR | LANDR | | | KDEN | DENVER | CO (US) |
| STAR | LARKS | | | KDEN | DENVER | CO (US) |
| STAR | POWDR | | | KDEN | DENVER | CO (US) |
| STAR | QUAIL | | | KDEN | DENVER | CO (US) |
| STAR | RAMMS | | | KDEN | DENVER | CO (US) |
| STAR | SAYGE | | | KDEN | DENVER | CO (US) |
| STAR | TOMSN | | | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 14 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
UPDATE FIX USE.
PAT 2 CRS INBOUND CHANGED FROM 207.00 TO 210.00, MAGVAR CHANGED FROM 11E TO 8E

**DEVELOPED BY:** **DATE:** 11/21/2011 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** DEN APP CON
**OTHER:** CYS ATCT

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HICKY **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 384616.81N/1060322.90W **TYPE:** 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 | FALCON | FQF | VORTAC | H | 220.00 | 231.00 | 86.67 | 86.67 | | 17000 | 45000 |
| 2 | ALAMOSA | ALS | VORTAC | H | 339.45 | 352.45 | 86.00 | 86.00 | | 17000 | 45000 |
| 3 | BLUE MESA | HBU | VOR/DME | H | 053.22 | 067.22 | | 50.05 | | 17000 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| HBU | VOR/DME | R-053 | 51 | 17000 | 45000 |
| FQF | VORTAC | R-220 | 87 | 15000 | 45000 |
| ALS | VORTAC | R-339 | 86 | 17000 | 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 | SW | FQF | VORTAC | 220.00 | 040.00 | L | 1 1/2 | | 17000 | 45000 | 18 | 31 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 265 | SPOT ELEV+ AAO | 384037.00N/1061440.00W | 14469 | 2A |

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

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

**REMARKS:**
FALCON (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED: PAT 1, 375 FEET ADJUSTMENT.
FQF DME REQUIRED FOR HOLDING.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | LARKS | 1, 2, 3 | 1 | KDEN | DENVER | CO (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. UPDATED DIST FROM FAC DATA FOR FAC 1,2, AND 3.
2. UPDATED FIX USE FOR FORMAT.
3. MOVED HOLDING STATEMENT TO RESTRICTIONS.

**DEVELOPED BY:** **DATE:** 06/15/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HUUGE **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 393443.43N/1044754.76W **TYPE:** 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 | FALCON | FQF | VORTAC | H | 220.00 | 231.00 | 10.60 | 10.60 | | 8800 | 17500 |
| 2 | JEFFCO | BJC | VOR/DME | H | 130.72 | 141.72 | | 25.49 | | 8800 | 17500 |

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

**REMARKS:**
FALCON (FAC 1) AND JEFFCO (FAC 2) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | LARKS | 1, 2 | | KDEN | DENVER | CO (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. ADDED DIST FROM FAC FOR FAC 1&2.
2. UPDATED FIX USE FOR FORMAT.
3. IDENTIFIED FACILITIES THAT MAKE-UP COORDINATES.

**DEVELOPED BY:** **DATE:** 06/19/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD INFO ONLY

**NAME:** JEFFCO VOR/DME **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 395446.87N/1050820.47W **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 | JEFFCO | BJC | VOR/DME | 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 | NE | BJC | VOR/DME | 023.00 | 203.00 | L | 1 | | 8000 | 14000 | 6 | 8 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 210 | TOWER (08-020232) | 395422.39N/1051330.74W | 6498 | 4D |

**PRECIPITOUS TERRAIN ADDITIONS:**

| PAT | SPEED | ADDITION |
|---|---|---|
| 1 | 210 | 82 |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 AVOID TERRAIN TO THE WEST

**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 | TAKE-OFF MINIMUMS | | | KEIK | ERIE | CO (US) |
| EN ROUTE | V81 | | | | | (US) |
| IAP | ILS OR LOC Y RWY 29R | | | KBJC | DENVER | CO (US) |
| IAP | ILS OR LOC Z RWY 29R | | | KBJC | DENVER | CO (US) |
| IAP | VOR/DME RWY 29L/R | | | KBJC | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 07 | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 16R | | | KDEN | DENVER | CO (US) |
| IAP | ILS OR LOC RWY 17L | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 16L | | | KDEN | DENVER | CO (US) |
| IAP | ILS RWY 17R | | | KDEN | DENVER | CO (US) |
| IAP | VOR/DME OR GPS A | | | KEIK | ERIE | CO (US) |
| IAP | RNAV (GPS) B | | | KLMO | LONGMONT | CO (US) |
| IAP | VOR/DME-A | | | KLMO | LONGMONT | CO (US) |
| STAR | DANDO | | | KDEN | DENVER | CO (US) |
| STAR | LANDR | | | KDEN | DENVER | CO (US) |
| STAR | LARKS | | | KDEN | DENVER | CO (US) |
| STAR | POWDR | | | KDEN | DENVER | CO (US) |
| STAR | QUAIL | | | KDEN | DENVER | CO (US) |
| STAR | RAMMS | | | KDEN | DENVER | CO (US) |
| STAR | SAYGE | | | KDEN | DENVER | CO (US) |
| STAR | TOMSN | | | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 02/09/2012

**REASON FOR REVISION:**
UPDATE FIX USE.
UPDATE AIRPORT ID FROM K2V2 TO KLMO.
UPDATE AIRPORT ID FROM K48V TO KEIK.
REMOVED PAT 2.
RAISED PAT 1 MAX TEMPLATE FROM 6 TO 8.
CHANGED PAT 1 CONTROLLING OBS.

**DEVELOPED BY:** **DATE:** 05/06/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (THERON CYRUS)

**APPROVED BY:** **DATE:** 12/21/2011 **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

QUALITY 8 CHECKED

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** DEN APP CON
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** KANON **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 382345.25N/1055930.56W **TYPE:** 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 | ALAMOSA | ALS | VORTAC | H | 339.45 | 352.45 | 63.29 | 63.29 | | 18000 | 45000 |
| 2 | PUEBLO | PUB | VORTAC | H | 262.21 | 275.21 | 74.00 | 74.00 | | 18000 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| ALS | VORTAC | R-339 | 64 | 18000 | 22100 |
| PUB | VORTAC | R-262 | 75 | 18000 | 45000 |

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

**REMARKS:**
ALAMOSA (FAC 1) AND PUEBLO (FAC 2) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | LARKS | 1, 2 | | KDEN | DENVER | CO (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. ADDED DIST FROM FAC DATA TO FAC 1&2.
2. UPDATED FIX USE FOR FORMAT.
3. IDENTIFIED FACILITIES FOR FIX MAKE-UP.

**DEVELOPED BY:** **DATE:** 06/15/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** LARKS **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 391526.63N/1051818.58W **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 | FALCON | FQF | VORTAC | H | 220.00 | 231.00 | 41.03 | 41.03 | | 14400 | 45000 |
| 2 | BLACK FOREST | BRK | VOR/DME | L | 288.08 | 301.08 | | 36.55 | | 15600 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| BRK | VOR/DME | R-288 | 37 | 15600 | 45000 |
| FQF | VORTAC | R-220 | 42 | 13800 | 18000 |

**FIX RESTRICTIONS:**
MRA ALL 15600

**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 | SW | FQF | VORTAC | 220.00 | 040.00 | L | 1 1/2 | | 15600 | 24000 | 17 | 21 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 265 | AAO | 391428.60N/1052949.90W | 12631 | 6C |

**PRECIPITOUS TERRAIN ADDITIONS:**

| PAT | SPEED | ADDITION |
|---|---|---|
| 1 | 265 | 375 |

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

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

**REMARKS:**
FALCON (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVAL COMPLETED

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V160 | 1, 2 | | | | (US) |
| STAR | LARKS | 1, 2 | 1 | KDEN | DENVER | CO (US) |
| STAR | LDORA (RNAV) | | | KDEN | DENVER | CO (US) |
| STAR | PEEKK (RNAV) | | | KDEN | DENVER | CO (US) |
| STAR | PEEKK (RNAV) | | | KLMO | LONGMONT | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
UPDATED FIX USE
FAC 2 CHANGED FROM VORTAC TO VOR/DME
ADDED WP TO FIX TYPE

**DEVELOPED BY:** **DATE:** 05/27/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** DEN
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** LOPEC **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 380533.58N/1065133.22W **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 | RATTLESNAKE | RSK | VORTAC | H | 021.96 | 035.96 | 100.00 | 100.00 | | 31000 | 45000 |

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

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | LARKS | 1 | | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 2 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. UPDATED DIST FROM FAC FOR FAC 1.
2. UPDATED FIX USE FOR FORMAT.

**DEVELOPED BY:** **DATE:** 06/18/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** MURFE **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 390817.41N/1052928.01W **TYPE:** 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 | FALCON | FQF | VORTAC | H | 220.00 | 231.00 | 52.27 | 52.27 | | 15600 | 45000 |
| 2 | BLACK FOREST | BRK | VOR/DME | L | 273.42 | 286.42 | 41.74 | 41.74 | | 15600 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| FQF | VORTAC | R-220 | 53 | 15000 | 45000 |
| BRK | VOR/DME | R-273 | 42 | 15000 | 45000 |

**FIX RESTRICTIONS:**
MRA V-160 15600

**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 | FQF | VORTAC | 220.00 | 040.00 | L | 1 1/2 | | 16000 | 45000 | 17 | 31 |
| 2 | SW | | WP | 220.00 | 040.00 | L | | 10 | 16000 | 20000 | 16 | 18 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 265 | AAO | 391429.00N/1052950.00W | 12631 | 6A |
| 2 | 265 | AAO | 391428.60N/1052949.90W | 12631 | 6A |

**PRECIPITOUS TERRAIN ADDITIONS:**

| PAT | SPEED | ADDITION |
|---|---|---|
| 1 | 265 | 355 |
| 2 | 265 | 352 |

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

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

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V108 | 2 | | | | (US) |
| EN ROUTE | V160 | 1 | | | | (US) |
| IAP | RNAV (GPS) - A | | | KAEJ | BUENA VISTA | CO (US) |
| STAR | LARKS | 1, 2 | 1 | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. ADDED DISTANCE FROM FAC IN NM.
2. ADDED PROPER ESV FORMAT, FIX USE.
3. ADDED HOLDING PATTERN 2 AND ALL REQUIRED INFORMATION.
4. ADDED IAP TO REQUIRED CHARTING.
5. CHANGED FAC 2 MAG/TRUE BRG FROM 273.41/286.41 TO 273.42/286.42.
6. MOVED FIX 27 FEET NE TO V108 CENTERLINE.

**DEVELOPED BY:** **DATE:** 06/26/2012 **OFFICE:** AJV-354 **NAME:** JIMMY HUGHES

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

QUALITY CHECKED

**DISTRIBUTION:** **NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** PAPPA **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 382933.78N/1062844.65W **TYPE:** 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 | RATTLESNAKE | RSK | VORTAC | H | 021.96 | 035.96 | 129.93 | 129.96 | | 31000 | 45000 |
| 2 | BLUE MESA | HBU | VOR/DME | H | 070.57 | 084.57 | | 26.58 | | 18000 | 45000 |

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

**REMARKS:**
RATTLESNAKE (FAC 1) USED TO ESTABLISH FIX COORDINATES
PLACED ON FQF RADIAL 220.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | LARKS | 1, 2 | | KDEN | DENVER | CO (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 3 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. ADDED DIST FROM FAC TO BOTH FAC 1&2.
2. IDENTITIFED FACILITIES FOR FIX MAKE-UP.
3. UPDATED FIX USE FOR FORMAT.
4. MOVED FIX 385 FEET SOUTH.
5. CHANGED FAC 1 DME FROM 130.02 TO 129.96.
6. CHANGED FAC 2 MAG/TRUE BRG FROM 070.47/084.47 TO 070.57/084.57.

**DEVELOPED BY:** **DATE:** 06/18/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** PAYDD **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 392405.76N/1050443.74W **TYPE:** 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 | FALCON | FQF | VORTAC | H | 220.00 | 231.00 | 27.40 | 27.40 | | 14400 | 17500 |
| 2 | JEFFCO | BJC | VOR/DME | H | 163.78 | 174.78 | | 30.79 | | 14400 | 17500 |

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

**REMARKS:**
FALCON (FAC 1) AND JEFFCO (FAC 2) USED TO ESTABLISH FIX COORDINATES

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| STAR | LARKS | 1, 2 | | KDEN | DENVER | CO (US) |

**REQUIRED CHARTING:** STAR

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 1 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. ADDED DIST FROM FAC FOR FAC 1&2.
2. UPDATED FIX USE FOR FORMAT.
3. IDENTIFIED FACILITIES THAT MAKE-UP COORDINATES.

**DEVELOPED BY:** **DATE:** 06/19/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** PUEBLO VOR/DME **STATE:** CO **COUNTRY:** US

INFO ONLY

**LATITUDE/LONGITUDE:** 381739.32N/1042546.01W **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 | PUEBLO | PUB | VOR/DME | 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 | NE | PUB | VOR/DME | 064.22 | 244.22 | R | 1-1 1/2 | | 7400 | 17500 | 8 | 20 |
| 2 | NE | PUB | VOR/DME | 066.78 | 246.78 | R | 1-1 1/2 | | 7500 | 14000 | 8 | 10 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | TOWER (08-000066) | 382224.00N/1043329.00W | 6303 | 4D |
| 1 | 310 | TOWER (08-000066) | 382224.00N/1043329.00W | 6303 | 4D |
| 2 | 230 | TOWER (08-000066) | 382224.00N/1043329.00W | 6303 | 4D |

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

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | TAKE-OFF MINIMUMS | KPUB | PUEBLO | CO (US) |
| 2 | VOR/DME RWY 26R | KPUB | PUEBLO | CO (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1 230K OBSTACLE LOCATED 8412 FEET INTO SECONDARY.
PAT 2 230K OBSTACLE LOCATED 4902 FEET INTO SECONDARY.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | ASPEN | | | KASE | ASPEN | CO (US) |
| DP | DENVER | | | KBKF | AURORA | CO (US) |
| DP | PIKES | | | KBKF | AURORA | CO (US) |
| DP | PUEBLO (RNAV) (OBSTACLE) | | | KAEJ | BUENA VISTA | CO (US) |
| DP | SPRINGS | | | KCOS | COLORADO SPRINGS | CO (US) |
| DP | DENVER | | | KAPA | DENVER | CO (US) |
| DP | PIKES | | | KAPA | DENVER | CO (US) |
| DP | DENVER | | | KBJC | DENVER | CO (US) |
| DP | PIKES | | | KBJC | DENVER | CO (US) |
| DP | DENVER | | | KDEN | DENVER | CO (US) |
| DP | PIKES | | | KDEN | DENVER | CO (US) |
| DP | DENVER | | | KFTG | DENVER | CO (US) |
| DP | PIKES | | | KFTG | DENVER | CO (US) |
| DP | DENVER | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | PIKES | | | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | DENVER | | | KGXY | GREELEY | CO (US) |
| DP | PIKES | | | KGXY | GREELEY | CO (US) |
| DP | CANYON | | | KPUB | PUEBLO | CO (US) |
| EN ROUTE | J104 | | | | | (US) |
| EN ROUTE | J17 | | | | | (US) |
| EN ROUTE | J28 | | | | | (US) |
| EN ROUTE | J64 | | | | | (US) |
| EN ROUTE | V10 | | | | | (US) |
| EN ROUTE | V244 | | | | | (US) |
| EN ROUTE | V389 | | | | | (US) |
| EN ROUTE | V611 | | | | | (US) |
| EN ROUTE | V81 | | | | | (US) |
| EN ROUTE | V83 | | | | | (US) |
| IAP | ILS OR LOC RWY 17L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS OR LOC RWY 35L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS OR LOC RWY 35R | | 1 | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS RWY 17L (SA CAT 1) | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | NDB RWY 35L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | RNAV (GPS) RWY 31 | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | RNAV (GPS) Y RWY 17R | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | RNAV (GPS) Y RWY 35L | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | RNAV (GPS) Y RWY 35R | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | RNAV (RNP) Z RWY 17R | | | KCOS | COLORADO SPRINGS | CO (US) |
| IAP | ILS OR LOC/DME RWY 08L | | | KPUB | PUEBLO | CO (US) |
| IAP | ILS OR LOC/DME RWY 26R | | | KPUB | PUEBLO | CO (US) |
| IAP | RNAV (GPS) RWY 08L | | | KPUB | PUEBLO | CO (US) |

QUALITY CHECKED

| | | | | | |
|---|---|---|---|---|---|
| IAP | RNAV (GPS) RWY 26R | | KPUB | PUEBLO | CO (US) |
| IAP | VOR/DME RWY 26R | 2 | KPUB | PUEBLO | CO (US) |
| OTHER | TAKE-OFF MINIMUMS | | K1V6 | CANON CITY | CO (US) |
| OTHER | TAKE-OFF MINIMUMS | 1 | KPUB | PUEBLO | CO (US) |
| STAR | DEBERRY | | KCOS | COLORADO SPRINGS | CO (US) |
| STAR | DANDD | | KDEN | DENVER | CO (US) |
| STAR | LARKS | | KDEN | DENVER | CO (US) |
| STAR | QUAIL | | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** LOW

**RECORD REVISION NUMBER:** 16 **DATE OF REVISION:** 05/03/2012

**REASON FOR REVISION:**
FIX NAME CHANGED FROM PUB VORTAC TO PUB VOR/DME.
FACILITY TYPE CHANGED FROM VORTAC TO VOR/DME.
ADDED PAT 2 HOLDING.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 12/02/2011 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (ROBERT DAVIS)

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** PUB ATCT, COS ATCT
**OTHER:** COS APP CON

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

INFO ONLY

**NAME:** RATTLESNAKE VORTAC **STATE:** NM **COUNTRY:** US

**LATITUDE/LONGITUDE:** 364454.21N/1080556.04W **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 | RATTLESNAKE | RSK | 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 | E | RSK | VORTAC | 072.35 | 252.35 | L | 1-1 1/2 | | 8300 | 17500 | 9 | 16 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 230 | AAO | 363629.97N/1074813.20W | 7328 | 2C |
| 1 | 230 | TOWER (35-020113) | 364852.88N/1075333.29W | 7091 | 5E |
| 1 | 310 | AAO | 363629.97N/1074813.20W | 7328 | 2C |

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

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 9300.

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

| PAT | PROCEDURE TITLE | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|
| 1 | VOR/DME RWY 7 | KFMN | FARMINGTON | NM (US) |
| 1 | VOR/DME RWY 5 | KFMN | FARMINGTON | NM (US) |
| 1 | TAKEOFF MINIMUMS | KFMN | FARMINGTON | NM (US) |

**REMARKS:**
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| DP | SILOW | | | KPHX | PHOENIX | AZ (US) |
| DP | ST JOHNS | | | KPHX | PHOENIX | AZ (US) |
| DP | JONHH | | | KSDL | SCOTTSDALE | AZ (US) |
| DP | GRAND MESA | | | KGJT | GRAND JUNCTION | CO (US) |
| DP | ALBUQUERQUE | | | KABQ | ALBUQUERQUE | NM (US) |
| DP | ATOMK (RNAV) | | | KABQ | ALBUQUERQUE | NM (US) |
| DP | JEMEZ (RNAV) | | | KABQ | ALBUQUERQUE | NM (US) |
| DP | LARGO | | | KABQ | ALBUQUERQUE | NM (US) |
| DP | CHACO | | | KFMN | FARMINGTON | NM (US) |
| DP | PLATA | | | KFMN | FARMINGTON | NM (US) |
| DP | TAKEOFF MINIMUMS | | 1 | KFMN | FARMINGTON | NM (US) |
| EN ROUTE | J10 | | | | | (US) |
| EN ROUTE | J110 | | | | | (US) |
| EN ROUTE | J15 | | | | | (US) |
| EN ROUTE | J161 | | | | | (US) |
| EN ROUTE | J44 | | | | | (US) |
| EN ROUTE | J44-110 | | | | | (US) |
| EN ROUTE | J58 | | | | | (US) |
| EN ROUTE | J64 | | | | | (US) |
| EN ROUTE | Q130 | | | | | (US) |
| EN ROUTE | V187 | | | | | (US) |
| EN ROUTE | V210 | | | | | (US) |
| EN ROUTE | V361 | | | | | (US) |
| EN ROUTE | V368 | | | | | (US) |
| EN ROUTE | V421 | | | | | (US) |
| EN ROUTE | V68 | | | | | (US) |
| EN ROUTE | V68-391 | | | | | (US) |
| EN ROUTE | V95 | | | | | (US) |
| EN ROUTE | V95-421 | | | | | (US) |
| IAP | RNAV (GPS) RWY 3 | | | KCEZ | CORTEZ | CO (US) |
| IAP | ILS OR LOC/DME RWY 3 | | | KDRO | DURANGO | CO (US) |
| IAP | RNAV (GPS) RWY 3 | | | KDRO | DURANGO | CO (US) |
| IAP | VOR/DME RWY 3 | | | KDRO | DURANGO | CO (US) |
| IAP | HI-ILS OR LOC RWY 8 | | | KABQ | ALBUQUERQUE | NM (US) |
| IAP | HI-TACAN RWY 8 | | | KABQ | ALBUQUERQUE | NM (US) |
| IAP | ILS OR LOC RWY 25 | | | KFMN | FARMINGTON | NM (US) |
| IAP | VOR RWY 23 | | | KFMN | FARMINGTON | NM (US) |
| IAP | VOR RWY 25 | | | KFMN | FARMINGTON | NM (US) |
| IAP | VOR/DME RWY 5 | | 1 | KFMN | FARMINGTON | NM (US) |
| IAP | VOR/DME RWY 7 | | 1 | KFMN | FARMINGTON | NM (US) |

QUALITY CHECKED 8

| | | | | |
|---|---|---|---|---|
| IAP | RNAV (GPS) RWY 35 | KBDG | BLANDING | UT (US) |
| STAR | LARKS | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** BOTH

**RECORD REVISION NUMBER:** 11 **DATE OF REVISION:** 08/25/2011

**REASON FOR REVISION:**
UPDATED FIX USE.
CHANGED UNPLANNED HOLDING AND PAT 1, 310 KNOT PATTERN, COORDINATES TO ACTUAL SPOT ELEVATION LOCATION AND CHANGED THE ACCURACY CODE FROM 1A TO 2C.
CHANGED PAT 1 230 KNOT CONTROLLING OBSTACLE FROM TOWER (35-0005520) 7053 ELEVATION TO TOWER (35-020113)7091 ELEVATION, NO CHANGE TO MINIMUM HOLDING ALTITIUDE.
Q130 VERIFIED WITH ENROUTE IS A NEW AIRWAY SEGMENT.
ADDED STAR TO REQUIRED CHARTING.

**DEVELOPED BY:** **DATE:** 03/23/2011 **OFFICE:** AJV-354 **NAME:** ANDREW FIELDS

**APPROVED BY:** **DATE:** 08/03/2011 **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** FMN ATCT
**OTHER:** FMN ATCT

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** RED TABLE VOR/DME **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 392621.64N/1065340.85W **TYPE:**

INFO ONLY

**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 | RED TABLE | DBL | VOR/DME | H | | | | | | | 45000 |

**FIX RESTRICTIONS:**
SPECIAL GLENO-ONE (RNP), KASE, ASPEN, CO
SPECIAL RNAV (GPS) Z RWY 15, KASE, ASPEN, CO
SPECIAL LOC/DME RWY 15, KASE, ASPEN, CO

**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 | N | DBL | VOR/DME | 344.00 | 164.00 | R | 1-1 1/2 | | 14000 | 29000 | 10 | 22 |
| 2 | N | DBL | VOR/DME | 343.38 | 163.38 | R | 1-1 1/2 | | 13700 | 17500 | 10 | 16 |
| 3 | N | | WP | 343.38 | 163.38 | R | | 8 | 13700 | 17500 | 11 | 17 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| 1 | 230 | AAO | 392506.00N/1064648.00W | 11979 | 4E |
| 2 | 230 | AAO | 392506.00N/1064648.00W | 11979 | 4E |
| 3 | 230 | AAO | 392512.60N/1064616.80W | 12238 | 6C |

**PRECIPITOUS TERRAIN ADDITIONS:**

| PAT | SPEED | ADDITION |
|---|---|---|
| 1 | 230 | 375 |
| 2 | 230 | 375 |
| 3 | 230 | 375 |

**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 | ASPEN | | | KASE | ASPEN | CO (US) |
| DP | GLENO-ONE (RNP) | | | KASE | ASPEN | CO (US) |
| DP | LINDZ | | | KASE | ASPEN | CO (US) |
| DP | SARDD (OBSTACLE) | | | KASE | ASPEN | CO (US) |
| DP | TAKE-OFF MINIMUMS | | | KASE | ASPEN | CO (US) |
| DP | ROCKIES | | 1 | KBKF | AURORA | CO (US) |
| DP | SPRINGS | | | KCOS | COLORADO SPRINGS | CO (US) |
| DP | ROCKIES | | 1 | KAPA | DENVER | CO (US) |
| DP | ROCKIES | | 1 | KBJC | DENVER | CO (US) |
| DP | ROCKIES | | 1 | KDEN | DENVER | CO (US) |
| DP | ROCKIES | | 1 | KFTG | DENVER | CO (US) |
| DP | GYPSUM | | | KEGE | EAGLE | CO (US) |
| DP | MEEKER | | | KEGE | EAGLE | CO (US) |
| DP | ROCKIES | | 1 | KFNL | FORT COLLINS/LOVELAND | CO (US) |
| DP | GRAND JUNCTION | | | KGJT | GRAND JUNCTION | CO (US) |
| DP | GRAND MESA | | | KGJT | GRAND JUNCTION | CO (US) |
| DP | ROCKIES | | 1 | KGXY | GREELEY | CO (US) |
| DP | CANYON | | | KPUB | PUEBLO | CO (US) |
| DP | UYRIG (RNAV) DP | | | KRIL | RIFLE | CO (US) |
| EN ROUTE | J206 | | | | | (US) |
| EN ROUTE | J60 | | | | | (US) |
| EN ROUTE | J80 | | | | | (US) |
| EN ROUTE | V108 | | | | | (US) |
| EN ROUTE | V134 | | | | | (US) |
| EN ROUTE | V356 | | | | | (US) |
| EN ROUTE | V361 | | | | | (US) |
| EN ROUTE | V421 | | | | | (US) |
| IAP | LOC/DME RWY 15 | | | KASE | ASPEN | CO (US) |
| IAP | LOC/DME-E | | | KASE | ASPEN | CO (US) |
| IAP | RNAV (GPS) Z RWY 15 | | | KASE | ASPEN | CO (US) |
| IAP | RNAV (GPS)-F | | 3 | KASE | ASPEN | CO (US) |
| IAP | ROARING FORK VISUAL RWY 15 | | | KASE | ASPEN | CO (US) |
| IAP | VOR/DME-C | | 2 | KASE | ASPEN | CO (US) |
| IAP | ILS RWY 26 | | | KRIL | RIFLE | CO (US) |
| IAP | LOC/DME-A | | | KRIL | RIFLE | CO (US) |

QUALITY CHECKED

| | | | | |
|---|---|---|---|---|
| IAP | RNAV (GPS) Z RWY 26 | KRIL | RIFLE | CO (US) |
| IAP | RNAV (RNP) Y RWY 26 | KRIL | RIFLE | CO (US) |
| STAR | LARKS | KDEN | DENVER | CO (US) |
| STAR | POWDR | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 11 **DATE OF REVISION:** 09/20/2012

**REASON FOR REVISION:**
ADDED PATTERN 1 AND 2.
UPDATED FIX USE.

**DEVELOPED BY:** **DATE:** 02/24/2012 **OFFICE:** AJV-354 **NAME:** JACOB POWERS

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:** ASE ATCT, DEN APP CON
**OTHER:**

QUALITY CHECKED

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** TERRO **STATE:** CO **COUNTRY:** US

**LATITUDE/LONGITUDE:** 385327.94N/1055223.04W **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 | FALCON | FQF | VORTAC | H | 220.00 | 231.00 | 75.47 | 75.47 | | 16200 | 45000 |
| 2 | BLUE MESA | HBU | VOR/DME | H | 050.00 | 064.00 | | 60.81 | | 16200 | 45000 |
| 3 | RED TABLE | DBL | VOR/DME | H | 112.26 | 124.26 | | 57.90 | | 16200 | 45000 |

**EXPANDED SERVICE VOLUME (ESV):**

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|---|---|---|---|---|---|
| FQF | VORTAC | R-220 | 76 | 16200 | 45000 |
| HBU | VOR/DME | R-050 | 61 | 16200 | 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 | | WP | 283.00 | 103.00 | L | | 10 | 16000 | 45000 | 17 | 30 |
| 2 | SW | FQF | VORTAC | 220.00 | 040.00 | R | 1 1/2 | | 17000 | 45000 | 18 | 31 |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES | ELEVATION | ACCURACY CODE |
|---|---|---|---|---|---|
| UPN | 265 | AAO | 385532.10N/1061906.00W | 14620 | 6A |
| 1 | 265 | AAO | 391106.00N/1061106.00W | 14115 | 4E |
| 2 | 265 | AAO | 384036.80N/1061440.30W | 14469 | 6A |

**REASON FOR NONSTANDARD HOLDING:**
PAT 1 TERRAIN/AIRWAYS

**HOLDING RESTRICTIONS:**
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 16300.

**REMARKS:**
FALCON (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED: PAT 1, 2 AND UPN, 375 FEET ADJUSTMENT.

**FIX USE:**

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|---|---|---|---|---|---|---|
| EN ROUTE | V160 | 1, 2, 3 | | | | (US) |
| IAP | GPS RWY 33 | | | KAEJ | BUENA VISTA | CO (US) |
| IAP | GPS RWY 16 | | 1 | KLXV | LEADVILLE | CO (US) |
| STAR | LARKS | 1, 3 | 2 | KDEN | DENVER | CO (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 5 **DATE OF REVISION:** 11/15/2012

**REASON FOR REVISION:**
1. UPDATED HOLDING PAT 1 OBSTACLE.
2. UPDATED HOLDING PAT 1 DME LEG LENGTH.
3. IDENTIFIED FAC 1 AS ESTABLISHING FIX COORDINATES.

**DEVELOPED BY:** **DATE:** 06/15/2012 **OFFICE:** AJV-354 **NAME:** ROY CURRIE

**APPROVED BY:** **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

**SIGNATURE:**

**DISTRIBUTION:**
**NFDC**
**FPO:** WST
**ARTCC:** ZDV
**ATC FACILITY:**
**OTHER:**

QUALITY CHECKED