

# RADIO FIX AND HOLDING DATA RECORD

NAME: HOVIL STATE: MO COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 370008.48N/0941957.86W TYPE: WP, RADAR, 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 | MRA  | MAA   |
|-----|--------|-------|---------|-------|---------|----------|-------|------------------|------|-------|
| 1   | JOPLIN | I-JLN | LOC     |       | 133.98  | 137.98   |       | 11.33            | 3100 | 5400  |
| 2   | LUNNS  | JL    | LOM     |       | 133.94  | 137.94   |       | 16.19            | 3100 | 17500 |
| 3   | OSWEGO | OSW   | VOR/DME | L     | 094.27  | 102.27   | 42.83 | 42.83            | 3100 | 17500 |

## EXPANDED SERVICE VOLUME (ESV):

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|-----------|----------|----------------|----------|--------------|--------------|
| OSW       | VOR/DME  | R-094          | 43       | 3100         | 18000        |
| JL        | LOM      | R-134          | 33       | 3100         | 8000         |

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | DME | HOLDING ALTITUDES MIN | MAX  | TEMPLATES MIN | MAX |
|-----|-----|-------|------|-------------|-------------|---------------|-----------------|-----|-----------------------|------|---------------|-----|
| 1   | SE  |       | WP   | 134.08      | 314.08      | R             |                 | 4   | 3100                  | 8000 | 5             | 9   |
| 2   | SE  | JL    | LOM  | 133.85      | 313.85      | R             | 1               |     | 3100                  | 8000 | 4             | 8   |
| 3   | SE  | I-JLN | LOC  | 133.98      | 313.98      | R             | 1               |     | 3100                  | 8000 | 4             | 8   |

## CONTROLLING OBSTRUCTIONS:

| PAT | AIRSPEED | OBSTRUCTION       | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------------|------------------------|-----------|---------------|
| 1   | 200      | TOWER (29-001840) | 365436.00N/0941237.00W | 1706      | 1A            |
| 2   | 200      | TOWER (29-001840) | 365436.00N/0941237.00W | 1706      | 1A            |
| 3   | 200      | TOWER (29-001840) | 365436.00N/0941237.00W | 1706      | 1A            |

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

| USE TYPE | USE TITLE             | FAC     | PAT | AIRPORT IDENT | CITY   | STATE   |
|----------|-----------------------|---------|-----|---------------|--------|---------|
| IAP      | ILS OR LOC/NDB RWY 13 | 1, 2, 3 | 3   | KJLN          | JOPLIN | MO (US) |
| IAP      | LOC BC RWY 31         | 1, 3    |     | KJLN          | JOPLIN | MO (US) |
| IAP      | RNAV (GPS) RWY 13     |         | 1   | KJLN          | JOPLIN | MO (US) |
| IAP      | RNAV (GPS) RWY 31     |         | 1   | KJLN          | JOPLIN | MO (US) |

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 DATE OF REVISION: 12/02/2021

## REASON FOR REVISION:

1. CHANGED FIX TYPE - ADDED RADAR, DELETED INT - EOS BEING DECOMMISSIONED.
2. DELETED EOS FROM FIX MAKE-UP - BEING DECOMMISSIONED.
3. DELETED REMARK NEOSHO (FAC 2) AND OSWEGO (FAC 4) USED TO ESTABLISH FIX COORDINATES - PER 8260.191 PARA 8-5-2E.
4. CHANGED MAA FROM 7100 TO 5400.

INITIATED BY: DATE: ORGANIZATION: NAME:

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A422 NAME: WILLIAM MELTON

APPROVED BY: DATE: 12/02/2021 OFFICE: AJV-A420 NAME: MARLON ROBINSON

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: LUNNS LOM STATE: MO COUNTRY: US ICAO REGION CODE: K3  
 LATITUDE/LONGITUDE: 371211.59N/0943330.43W 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 | FEET | MRA  | MAA   |
|-----|--------|-------|------|-------|---------|----------|-----|------------------|------|------|-------|
| 1   | LUNNS  | JL    | LOM  |       |         |          |     |                  |      |      | 17500 |
| 2   | JOPLIN | I-JLN | LOC  |       | 313.97  | 317.97   |     | 4.87             |      | 2000 | 5400  |

HOLDING: HOLDING TYPE OF ACTION: MODIFY

## PATTERNS:

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | DME | HOLDING ALTITUDES MIN | MAX   | TEMPLATES MIN | MAX |
|-----|-----|-------|------|-------------|-------------|---------------|-----------------|-----|-----------------------|-------|---------------|-----|
| 1   | NW  | JL    | LOM  | 313.83      | 133.83      | R             | 1               |     | 3100                  | 14000 | 4             | 12  |

## CONTROLLING OBSTRUCTIONS:

| PAT | AIRSPEED | OBSTRUCTION       | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------------|------------------------|-----------|---------------|
| 1   | 200      | TOWER (20-000268) | 371315.13N/0944225.97W | 2019      | 1D            |
| 1   | 310      | TOWER (29-000339) | 370433.00N/0943317.00W | 2056      | 3C            |

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

| PAT | PROCEDURE TITLE       | AIRPORT IDENT | CITY   | STATE   |
|-----|-----------------------|---------------|--------|---------|
| 1   | ILS OR LOC RWY 18     | KJLN          | JOPLIN | MO (US) |
| 1   | ILS OR LOC/NDB RWY 13 | KJLN          | JOPLIN | MO (US) |

## REMARKS:

COORDINATES REFLECT LOCATION ON LOC/AZ CENTERLINE ABEAM THE LUNNS LOM.  
 ACTUAL FACILITY LOCATION IS 371211.34N/0943330.78W.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 ASSIGNED FACILITY MAG VAR: 4 DEGREES EAST. EPOCH: 2000.

## FIX USE:

| USE TYPE | USE TITLE             | FAC | PAT | AIRPORT IDENT | CITY   | STATE   |
|----------|-----------------------|-----|-----|---------------|--------|---------|
| IAP      | ILS OR LOC RWY 18     |     | 1   | KJLN          | JOPLIN | MO (US) |
| IAP      | ILS OR LOC/NDB RWY 13 |     | 1   | KJLN          | JOPLIN | MO (US) |

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9 DATE OF REVISION: 12/02/2021

## REASON FOR REVISION:

1. CHANGED REMARKS FROM "ACTUAL FACILITY LOCATION IS 371211.33N/0943330.78W." TO "ACTUAL FACILITY LOCATION IS 371211.34N/0943330.78W." - NEW SURVEY DATA.
2. ADDED CLIMB-IN-HOLD FOR PAT 1 AND INCREASED MAX TEMPLATE SIZE FROM 10 TO 12 - CLIMB-IN-HOLD REQUIRED TO REACH HOLDING ALTITUDE AT CLEARANCE LIMIT.
3. CHANGED HOLDING PAT 1 CONTROLLING OBSTACLE FROM 2049 TOWER 2 (17-0268) 371315.00N/0944226.00W 2049 TO 2019 (20-000268) 371315.13N/0944225.97W - CURRENT OBSTACLE DATA BASE.
4. CHANGED IAP NAME FROM ILS OR LOC/DME RWY 18 TO ILS OR LOC RWY 18 AT KJLN - PER FAAO 8260.19I.
5. REMOVED FROM FIX USE "(ALTERNATE MISSED APPROACH)" FOR ILS OR LOC RWY 18 AND ILS OR LOC/NDB RWY 13 - ALTERNATE IS NOW PRIMARY DUE TO EOS VOR DECOMMISSIONING.
6. DELETED FROM FIX USE VOR-A AT KEOS - EOS VOR DECOMMISSIONING.
7. MOVED REMARK "HOLDING LIMITED TO ESTABLISHED PATTERN" FROM REMARKS TO HOLDING RESTRICTIONS - PER FAAO 8260.19I.
8. ADDED TO REMARKS ASSIGNED FACILITY MAG VAR: 4 DEGREES EAST. EPOCH: 2000 - PER FAAO 8260.19I.
9. CHANGED FAC 2 MAG BRG/TRUE BRG FROM 133.98/137.98 TO 313.97/317.97 AND CHANGED MAA FROM 7000 TO 5400 AND ADDED DISTANCE TO FACILITY 4.87 - INVERSE OF THE LOC FINAL APPROACH COURSE IS DOCUMENTED, LOCALIZER MAA AND NEW SURVEY DATA.
10. CHANGED HOLDING PAT 1 RAD/CRS/BRG FROM 313.85 TO 313.83 AND CHANGED CRS INBOUND FROM 133.85 TO 133.83 - RECALCULATED COURSE FROM LOM TO LOCALIZER.

|                                   |                  |                  |                       |
|-----------------------------------|------------------|------------------|-----------------------|
| INITIATED BY:                     | DATE:            | ORGANIZATION:    | NAME:                 |
| OFFICE OF PRIMARY RESPONSIBILITY: |                  | AJV-A422         | NAME: WILLIAM HANBY   |
| APPROVED BY:                      | DATE: 12/02/2021 | OFFICE: AJV-A420 | NAME: MARLON ROBINSON |
| SIGNATURE:                        |                  |                  |                       |

# RADIO FIX AND HOLDING DATA RECORD

NAME: QUALM STATE: MO COUNTRY: US ICAO REGION CODE: K3  
 LATITUDE/LONGITUDE: 371418.80N/0941628.84W TYPE: 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 | MRA  | MAA   |
|-----|-------------|-------|---------|-------|---------|----------|-------|------------------|------|-------|
| 1   | SPRINGFIELD | SGF   | VORTAC  | H     | 257.41  | 261.41   | 45.57 | 45.57            | 3000 | 17500 |
| 2   | NEOSHO      | EOS   | VOR/DME | H     | 011.00  | 018.00   |       | 24.96            | 3000 | 17500 |
| 3   | LUNNS       | JL    | LOM     |       | 257.24  | 261.24   |       | 13.76            | 3100 | 17500 |

## EXPANDED SERVICE VOLUME (ESV):

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|-----------|----------|----------------|----------|--------------|--------------|
| SGF       | VORTAC   | R-257          | 46       | 3000         | 15800        |

## FIX RESTRICTIONS:

MCA V190 3700 WESTBOUND  
 MCA V88 3700 WESTBOUND

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

| PAT | DIR | IDENT | TYPE   | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | DME | HOLDING ALTITUDES MIN | MAX   | TEMPLATES MIN | MAX |
|-----|-----|-------|--------|-------------|-------------|---------------|-----------------|-----|-----------------------|-------|---------------|-----|
| 1   | E   | SGF   | VORTAC | 257.41      | 257.41      | R             | 1               |     | 3000                  | 14000 | 5             | 12  |

## CONTROLLING OBSTRUCTIONS:

| PAT | AIRSPEED | OBSTRUCTION       | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------------|------------------------|-----------|---------------|
| 1   | 200      | TOWER (29-001308) | 371857.00N/0940907.00W | 1375      | 2C            |

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 FIX 3.8 FEET NORTH OF AIRWAY CENTERLINE NOT MOVED PER ENROUTE POLICY LETTER DATED 2/28/2012.

## FIX USE:

| USE TYPE | USE TITLE         | FAC  | PAT | AIRPORT IDENT | CITY   | STATE   |
|----------|-------------------|------|-----|---------------|--------|---------|
| EN ROUTE | V190              | 1, 2 |     |               |        | (US)    |
| EN ROUTE | V88               | 1, 2 |     |               |        | (US)    |
| IAP      | ILS OR LOC RWY 13 | 3    |     | KJLN          | JOPLIN | MO (US) |

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 06/22/2017

## REASON FOR REVISION:

1. CHANGED FIX RESTRICTION FOR V-190 FROM MRA "TO" MCA AND ADDED WEST BOUND.
2. CHANGED FIX RESTRICTION FOR V-88 FROM MRA "TO" MCA AND ADDED WEST BOUND.
3. ADDED FAC 3 AND ASSOCIATED DATA.
4. ADDED FAC 3 TO FIX USE FOR ILS OR LOC RWY 13.
5. CHANGED DISTRIBUTION FROM FPO: MKC TO FPO: CEN.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 03/07/2017

OFFICE: AJV-5433

NAME: SYLVAN DRAKES

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

NFDC  
 FPO: CEN  
 ARTCC: ZKC  
 ATC FACILITY: JLN TOWER  
 OTHER: