

# RADIO FIX AND HOLDING DATA RECORD

NAME: ZERZO STATE: MT COUNTRY: US ICAO REGION CODE: K1  
 LATITUDE/LONGITUDE: 465225.99N/1100508.51W 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 | MRA   | MAA   |
|-----|-------------|-------|---------|-------|---------|----------|-------|------------------|-------|-------|
| 1   | BILLINGS    | BIL   | VORTAC  | H     | 303.00  | 317.00   |       | 88.19            | 11000 | 45000 |
| 2   | LEWISTOWN   | LWT   | VOR/DME | H     | 226.56  | 241.56   |       | 22.45            | 11000 | 45000 |
| 3   | GREAT FALLS | GTF   | VORTAC  | H     | 106.00  | 122.00   | 64.38 | 64.38            | 13000 | 45000 |

## EXPANDED SERVICE VOLUME (ESV):

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|-----------|----------|----------------|----------|--------------|--------------|
| BIL       | VORTAC   | R-303          | 89       | 11000        | 17500        |
| GTF       | VORTAC   | R-106          | 65       | 13000        | 17500        |

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

| PAT | DIR | IDENT | TYPE | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG LENGTH TIME | HOLDING ALTITUDES MIN | MAX   | TEMPLATES MIN | MAX |
|-----|-----|-------|------|-------------|-------------|---------------|-----------------|-----------------------|-------|---------------|-----|
| 1   | S   |       | WP   | 172.38      | 352.38      | R             | 7               | 9600                  | 12000 | 10            | 10  |

## CONTROLLING OBSTRUCTIONS:

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------|------------------------|-----------|---------------|
| 1   | 230      | AAO         | 464230.00N/1101242.00W | 8252      | 4E            |

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

BILLINGS (FAC 1) AND GREAT FALLS (FAC 3) USED TO ESTABLISH FIX COORDINATES  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 BILLINGS (BIL) VORTAC ESV IS APPROVED ONLY FOR VOR PORTION.

## FIX USE:

| USE TYPE | USE TITLE         | FAC     | PAT | AIRPORT IDENT | CITY      | STATE   |
|----------|-------------------|---------|-----|---------------|-----------|---------|
| EN ROUTE | Q146              |         |     |               |           | (US)    |
| EN ROUTE | T317              |         |     |               |           | (US)    |
| EN ROUTE | V187              | 1, 2, 3 |     |               |           | (US)    |
| IAP      | RNAV (GPS) RWY 27 |         | 1   | KHWQ          | HARLOWTON | MT (US) |

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 11/05/2020

## REASON FOR REVISION:

1. REMOVED AIRSPACE DOCKET NUMBER 17-ANM-24 - DOCKET PUBLISHED, DOCUMENTATION NO LONGER REQUIRED ON THIS FORM.
2. FIX MAKE-UP: REMOVED DME DISTANCE FROM FAC 1 - TO MITIGATE FDC 9/6091, BIL ESV IS APPROVED ONLY FOR VOR PORTION.
3. ADDED TO REMARKS "BILLINGS (BIL) VORTAC ESV IS APPROVED ONLY FOR VOR PORTION." - TO MITIGATE FDC 9/6091.
3. FIX USE: ADDED FAC 3 TO V187 - ALL THREE FACILITIES REQUIRED TO DEFINE THE DOG LEG AT THIS FIX - TO MITIGATE FDC 9/6091.
4. CHANGED FAC 1 DISTANCE FROM FAC IN NM FROM 88.18 TO 88.19.

INITIATED BY: DATE: ORGANIZATION: NAME:

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

APPROVED BY: DATE: OFFICE: AJV-A420 NAME: MARLON ROBINSON

SIGNATURE:

*Digitally signed by*

DISTRIBUTION:

NFDC  
 FPO: WST  
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 ATC FACILITY:  
 OTHER:

**JOHN BORDY**

Aug 18, 2020

