

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** HARTFORD VOR/DME      **STATE:** CT      **COUNTRY:** US      **ICAO REGION CODE:** K6

**LATITUDE/LONGITUDE:** 413827.98N/0723250.70W      **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 | FEET | MRA | MAA   |
|-----|----------|-------|---------|-------|---------|----------|-----|------------------|------|-----|-------|
| 1   | HARTFORD | HFD   | VOR/DME | L     |         |          |     |                  |      |     | 17500 |

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

**PATTERNS:**

| PAT | DIR | IDENT | TYPE    | RAD/CRS/BRG | CRS INBOUND | TURN (L OR R) | LEG TIME | LENGTH DME | HOLDING ALTITUDES MIN | MAX  | TEMPLATES MIN | MAX |
|-----|-----|-------|---------|-------------|-------------|---------------|----------|------------|-----------------------|------|---------------|-----|
| 1   | SE  | HFD   | VOR/DME | 154.12      | 334.12      | R             | 1        |            | 2500                  | 5000 | 4             | 5   |

**CONTROLLING OBSTRUCTIONS:**

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------|------------------------|-----------|---------------|
| UPN | 200      | AAO         | 413639.00N/0723212.00W | 1109      | 4E            |
| 1   | 200      | AAO         | 413639.00N/0723212.00W | 1109      | 4E            |

**HOLDING RESTRICTIONS:**

UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3000.

**REMARKS:**

PRECIPITIOUS TERRAIN EVALUATION COMPLETED.  
UPN HOLDING ALTITUDE DERIVED FROM 2000 FT ABOVE TERRAIN.  
FACILITY MAGVAR: 13W 1970.

**FIX USE:**

| USE TYPE | USE TITLE                  | FAC | PAT | AIRPORT IDENT | CITY                  | STATE   |
|----------|----------------------------|-----|-----|---------------|-----------------------|---------|
| DP       | COASTAL                    |     |     | KHFD          | HARTFORD              | CT (US) |
| DP       | BRADLEY                    |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| DP       | COASTAL                    |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| DP       | COASTAL                    |     |     | KBAF          | WESTFIELD/SPRINGFIELD | MA (US) |
| DP       | BETTE                      |     |     | KJFK          | NEW YORK              | NY (US) |
| DP       | GREKI                      |     |     | KJFK          | NEW YORK              | NY (US) |
| DP       | HAPIE                      |     |     | KJFK          | NEW YORK              | NY (US) |
| DP       | MERIT                      |     |     | KJFK          | NEW YORK              | NY (US) |
| DP       | SKORR (RNAV)               |     |     | KJFK          | NEW YORK              | NY (US) |
| DP       | STEWART                    |     |     | KSWF          | NEWBURGH              | NY (US) |
| DP       | DUTCHESS                   |     |     | KPOU          | POUGHKEEPSIE          | NY (US) |
| EN ROUTE | J42                        |     |     |               |                       | (US)    |
| EN ROUTE | V1                         |     |     |               |                       | (US)    |
| EN ROUTE | V167                       |     |     |               |                       | (US)    |
| EN ROUTE | V229                       |     |     |               |                       | (US)    |
| EN ROUTE | V3                         |     |     |               |                       | (US)    |
| EN ROUTE | V58                        |     |     |               |                       | (US)    |
| EN ROUTE | V99                        |     |     |               |                       | (US)    |
| EN ROUTE | T216                       |     |     |               |                       | CT (US) |
| IAP      | RNAV (GPS) RWY 17          |     |     | KSNC          | CHESTER               | CT (US) |
| IAP      | VOR-A                      |     |     | KSNC          | CHESTER               | CT (US) |
| IAP      | LDA RWY 2                  |     | 1   | KHFD          | HARTFORD              | CT (US) |
| IAP      | RIVER VISUAL RWY 2         |     |     | KHFD          | HARTFORD              | CT (US) |
| IAP      | VOR-A                      |     | 1   | KHFD          | HARTFORD              | CT (US) |
| IAP      | VOR RWY 36                 |     |     | KMMK          | MERIDEN               | CT (US) |
| IAP      | RNAV (GPS) RWY 20          |     |     | KHVN          | NEW HAVEN             | CT (US) |
| IAP      | RNAV (GPS) RWY 9           |     |     | KIJD          | WILLIMANTIC           | CT (US) |
| IAP      | VOR-A                      |     |     | KIJD          | WILLIMANTIC           | CT (US) |
| IAP      | COPTER ILS OR LOC RWY 6    |     | 1   | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | ILS OR LOC RWY 24          |     | 1   | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | ILS OR LOC RWY 33          |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | ILS OR LOC RWY 6           |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | ILS RWY 24 (SA CAT I & II) |     | 1   | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | ILS RWY 6 (CAT II & III)   |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | ILS RWY 6 (SA CAT I)       |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | RNAV (GPS) RWY 33          |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | RNAV (GPS) Y RWY 6         |     |     | KBDL          | WINDSOR LOCKS         | CT (US) |
| IAP      | VOR/DME-B                  |     |     | K3B0          | SOUTHBRIDGE           | MA (US) |
| IAP      | VOR/DME RWY33              |     |     | KORH          | WORCESTER             | MA (US) |
| STAR     | DREEM (RNAV)               |     |     | KBED          | BEDFORD               | MA (US) |
| STAR     | GRAYM                      |     |     | KBED          | BEDFORD               | MA (US) |
| STAR     | DREEM (RNAV)               |     |     | KBVY          | BEVERLY               | MA (US) |
| STAR     | GRAYM                      |     |     | KBVY          | BEVERLY               | MA (US) |
| STAR     | WOONS                      |     |     | KBOS          | BOSTON                | MA (US) |
| STAR     | GRAYM                      |     |     | KFIT          | FITCHBURG             | MA (US) |
| STAR     | DREEM (RNAV)               |     |     | KLWM          | LAWRENCE              | MA (US) |
| STAR     | GRAYM                      |     |     | KLWM          | LAWRENCE              | MA (US) |
| STAR     | WOONS                      |     |     | K1B9          | MANSFIELD             | MA (US) |
| STAR     | WOONS                      |     |     | KGHG          | MARSHFIELD            | MA (US) |

|      |       |      |              |         |
|------|-------|------|--------------|---------|
| STAR | WOONS | KOWD | NORWOOD      | MA (US) |
| STAR | VALRE | KHPN | WHITE PLAINS | NY (US) |

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 22

**DATE OF REVISION:** 12/07/2017

**REASON FOR REVISION:**

1. REMOVED PAT 2.
2. CHANGED UPN AND PAT 1 CONTROLLING OBST FROM 1116 AAO TO 1109 AAO.
3. ADDED FACILITY MAGVAR REMARK.

**DEVELOPED BY:**      **DATE:** 06/19/2017      **OFFICE:** AJV-5421      **NAME:** JEFFREY ROBINSON

**APPROVED BY:**      **DATE:**      **OFFICE:** AJV-5420      **NAME:** JULIE MORGAN

**SIGNATURE:**

**DISTRIBUTION:**    **NFDC**  
                         **FPO:** EST  
                         **ARTCC:** ZBW  
                         **ATC FACILITY:** BDL APP CON  
                         **OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: KIBBE STATE: MA COUNTRY: US ICAO REGION CODE: K6  
 LATITUDE/LONGITUDE: 420615.93N/0722811.18W 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   | WINDSOR LOCKS | I-MYQ | LOC/DME |       | 058.39  | 044.39   | 12.54 | 14.66            | 3000 | 7000  |
| 2   | BARNES        | BAF   | VORTAC  | L     | 121.33  | 107.33   | 11.53 | 11.53            | 3000 | 17500 |
| 3   | PUTNAM        | PUT   | VOR/DME | H     | 301.92  | 287.92   | 29.37 | 29.37            | 3000 | 17500 |

## EXPANDED SERVICE VOLUME (ESV):

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|-----------|----------|----------------|----------|--------------|--------------|
| I-MYQ     | LOC/DME  | BRG-058        | 15       | 4600         | 7000         |

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   | NE  |       | WP      | 058.53      | 238.53      | L             | 4                   | 3000 7000                 | 5 9               |
| 2   | NE  | I-MYQ | LOC/DME | 058.39      | 238.39      | L             | 1                   | 3000 7000                 | 5 9               |

## CONTROLLING OBSTRUCTIONS:

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------|------------------------|-----------|---------------|
| 1   | 200      | AAO         | 420233.00N/0722412.00W | 1280      | 4E            |
| 2   | 200      | AAO         | 420233.00N/0722412.00W | 1280      | 4E            |

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST  
 PAT 2 ATC REQUEST

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

WINDSOR LOCKS (FAC 1) USED TO ESTABLISH FIX COORDINATES  
 MYQ DME COORD: 415717.29N/0723956.51W.  
 PRECIPITOUS TERRAIN EVAL COMPLETED.

## FIX USE:

| USE TYPE | USE TITLE                  | FAC     | PAT | AIRPORT IDENT | CITY          | STATE   |
|----------|----------------------------|---------|-----|---------------|---------------|---------|
| EN ROUTE | V146                       | 2, 3    |     |               |               | (US)    |
| IAP      | ILS OR LOC RWY 24          | 1, 2, 3 | 2   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | ILS RWY 24 (SA CAT I & II) | 1, 2, 3 | 2   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (GPS) Y RWY 24        |         | 1   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (GPS) Y RWY 6         |         | 1   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (RNP) Z RWY 24        |         |     | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (RNP) Z RWY 6         |         | 1   | KBDL          | WINDSOR LOCKS | CT (US) |

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13 DATE OF REVISION: 03/29/2018

## REASON FOR REVISION:

1. REMOVED FAC 4, BRADLEY VORTAC.  
 2. PAT 1, PAT 2 - CHANGED CONTROLLING OBST FROM 1194 TOWER TO 1280 AAO.  
 3. UPDATED FIX USE - ADDED KBDL ILS RWY 24 (SA CAT I & II).

1/12/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 6/19/17.

1. CHANGED MYQ DME COORD FROM 415717.28N/0723956.50W TO 415717.29N/0723956.51W.  
 2. FIX USE - REMOVED PAT 1 FROM RNAV (RNP) Z RWY 24.

DEVELOPED BY: DATE: 06/19/2017 OFFICE: AJV-5421 NAME: JEFFREY ROBINSON

APPROVED BY: DATE: OFFICE: AJV-5420 NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION: NFDC  
 FPO: EST  
 ARTCC: ZBW

**ATC FACILITY:** BDL APP CON  
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: PENNA STATE: CT COUNTRY: US ICAO REGION CODE: K6  
 LATITUDE/LONGITUDE: 414807.67N/0725158.53W 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   | WINDSOR LOCKS | I-BDL | LOC/DME |       | 238.38  | 224.38   | 12.83 | 12.81            | 3000 | 7000 |
| 2   | HARTFORD      | HFD   | VOR/DME | L     | 317.09  | 304.09   |       | 17.28            | 3000 | 7000 |
| 3   | BARNES        | BAF   | VORTAC  | L     | 211.33  | 197.33   |       | 22.60            | 3000 | 7000 |

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   | SW  | I-BDL | LOC/DME | 238.38      | 058.38      | L             | 1                   | 3000 7000                 | 5 9               |
| 2   | SW  | WP    | WP      | 238.26      | 058.26      | L             | 4                   | 3000 7000                 | 5 9               |

## CONTROLLING OBSTRUCTIONS:

| PAT | AIRSPEED | OBSTRUCTION | COORDINATES            | ELEVATION | ACCURACY CODE |
|-----|----------|-------------|------------------------|-----------|---------------|
| 1   | 200      | AAO         | 414836.00N/0720154.00W | 1365      | 4E            |
| 2   | 200      | AAO         | 414836.00N/0730154.00W | 1365      | 4E            |

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST/OBSTACLE  
 PAT 2 ATC REQUEST/OBSTACLE

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

WINDSOR LOCKS (FAC 1) USED TO ESTABLISH FIX COORDINATES  
 PRECIPITIOUS TERRAIN EVALUATION COMPLETED.  
 FAC 3 USED FOR 8260.19 CHAP 7, SECTION 5 REQUIREMENTS.  
 I-BDL DME L/L: 415717.29N/0723956.51W.

## FIX USE:

| USE TYPE | USE TITLE               | FAC     | PAT | AIRPORT IDENT | CITY          | STATE   |
|----------|-------------------------|---------|-----|---------------|---------------|---------|
| IAP      | COPTER ILS OR LOC RWY 6 | 1, 2, 3 |     | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | ILS OR LOC RWY 6        | 1, 2, 3 | 1   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | ILS RWY 6 (CAT II&III)  | 1, 2, 3 | 1   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | ILS RWY 6 (SA CAT I)    | 1, 2, 3 | 1   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (GPS) Y RWY 24     |         | 2   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (GPS) Y RWY 6      |         | 2   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (RNP) Z RWY 24     |         | 2   | KBDL          | WINDSOR LOCKS | CT (US) |
| IAP      | RNAV (RNP) Z RWY 6      |         |     | KBDL          | WINDSOR LOCKS | CT (US) |

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14 DATE OF REVISION: 03/29/2018

## REASON FOR REVISION:

- FAC 1, FAC 2, FAC 3 - MRA CHANGED FROM 2500 TO 3000.
- REMOVED PAT 3.
- PAT 1, PAT 2 - CONTROLLING OBST CHANGED FROM 1352 AAO TO 1365 AAO.
- ADDED DME L/L REMARK.
- UPDATED FIX USE - ADDED FAC 2, 3 TO ALL ILS IAPS, COMBINED ILS RWY 6 CAT II AND CAT III ENTRIES, ADDED ILS RWY 6 (SA CAT I), REMOVED COPTER ILS (CAT II) RWY 6.
- REMOVED I-BDL ESV DATA; ESV CANCELLED/NO LONGER REQUIRED.
- REMOVED MILITARY IAP FROM REQUIRED CHARTING.

- 11/21/17: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 6/19/17.
- FIX LAT/LONG CHANGED FROM 414807.63N/0725158.47W TO 414807.67N/0725158.53W; FIX MOVED 6 FT NORTHWEST.
  - FAC 1 - MAG/TRUE BRG CHANGED FROM 238.37/224.37 TO 238.38/224.38.
  - PAT 1 - RAD/CRS INBOUND CHANGED FROM 238.37/058.37 TO 238.38/058.38.
  - I-BDL DME L/L CHANGED FROM 415717.28N/0723956.50W TO 415717.29N/0723956.51W.

DEVELOPED BY: DATE: 06/19/2017 OFFICE: AJV-5421 NAME: JEFFREY ROBINSON  
 APPROVED BY: DATE: OFFICE: AJV-5420 NAME: JULIE MORGAN

**SIGNATURE:**

**DISTRIBUTION:**    **NFDC**  
                          **FPO: EST**  
                          **ARTCC: ZBW**  
                          **ATC FACILITY: BDL APP CON**  
                          **OTHER:**