

# RADIO FIX AND HOLDING DATA RECORD

NAME: GARDNER VOR/DME STATE: MA COUNTRY: US ICAO REGION CODE: K6  
 LATITUDE/LONGITUDE: 423245.32N/0720329.48W 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	MRA	MAA
1	GARDNER	GDM	VOR/DME	L						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 DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	NW	GDM	VOR/DME	298.00	118.00	L	1	4000 17500	4 16
2	W	GDM	VOR/DME	276.81	096.81	R	1	3000 6000	4 5
3	NW	GDM	VOR/DME	293.78	113.78	L	1	7000 29000	8 22
4	SW	WP	WP	202.91	022.91	R	4	3000 6000	5 6

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	423245.00N/0721018.00W	1595	4E
2	200	AAO	423245.00N/0721018.00W	1595	4E
2	310	AAO	422921.00N/0715312.00W	2215	4E
3	230	AAO	423245.00N/0721018.00W	1595	4E
4	200	AAO	423057.00N/0720248.00W	1569	4E

## REASON FOR NONSTANDARD HOLDING:

PAT 1 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
2	VOR-A	KGDM	GARDNER	MA (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 CHART PAT 3 ENROUTE HIGH PER ATC REQUEST.  
 ASSIGNED FACILITY MAGVAR: 14W (1970).

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BRADLEY			KBDL	WINDSOR LOCKS	CT (US)
DP	TAKEOFF MINIMUMS			KAFN	JAFFREY	NH (US)
DP	MANCHESTER			KMHT	MANCHESTER	NH (US)
DP	PEASE			KPSM	PORTSMOUTH	NH (US)
DP	TANKER			KPSM	PORTSMOUTH	NH (US)
DP	ALBANY			KALB	ALBANY	NY (US)
EN ROUTE	Q935					(US)
EN ROUTE	V106					(US)
EN ROUTE	V14		1			(US)
EN ROUTE	V151					(US)
EN ROUTE	V2		1			(US)
EN ROUTE	V229					(US)
EN ROUTE	V39					(US)
EN ROUTE	V431					(US)
IAP	ILS OR LOC RWY 11			KBED	BEDFORD	MA (US)
IAP	ILS OR LOC RWY 29			KBED	BEDFORD	MA (US)
IAP	ILS OR LOC RWY 27			KBOS	BOSTON	MA (US)
IAP	ILS OR LOC/DME RWY 15R			KBOS	BOSTON	MA (US)
IAP	RNAV (GPS) RWY 15R			KBOS	BOSTON	MA (US)
IAP	NDB-A			KFIT	FITCHBURG	MA (US)
IAP	RNAV (GPS) RWY 14			KFIT	FITCHBURG	MA (US)
IAP	RNAV (GPS) RWY 20			KFIT	FITCHBURG	MA (US)
IAP	VOR-A		2	KGDM	GARDNER	MA (US)
IAP	VOR-A			K0B5	MONTAGUE	MA (US)
IAP	LOC RWY 35			KOWD	NORWOOD	MA (US)
IAP	VOR-A			KORE	ORANGE	MA (US)
IAP	VOR/DME-B			K3B0	SOUTHBRIDGE	MA (US)
IAP	RNAV (GPS) RWY 21			K6B6	STOW	MA (US)
IAP	VOR/DME RWY 21			K6B6	STOW	MA (US)
IAP	ILS OR LOC RWY 20			KBAF	WESTFIELD/SPRINGFIELD	MA (US)
IAP	ILS OR LOC RWY 11			KORH	WORCESTER	MA (US)
IAP	ILS OR LOC RWY 29			KORH	WORCESTER	MA (US)
IAP	ILS RWY 11 (CAT II & III)			KORH	WORCESTER	MA (US)
IAP	RNAV (GPS) RWY 33			KORH	WORCESTER	MA (US)

IAP	VOR/DME RWY 33		KORH	WORCESTER	MA (US)
IAP	RNAV (GPS)- B	4	KAFN	JAFFREY	NH (US)
IAP	VOR-A		KAFN	JAFFREY	NH (US)
IAP	ILS OR LOC RWY 2		KEEN	KEENE	NH (US)
IAP	RNAV (GPS) RWY 2		KEEN	KEENE	NH (US)
IAP	VOR RWY 2		KEEN	KEENE	NH (US)
IAP	ILS OR LOC RWY 6		KMHT	MANCHESTER	NH (US)
IAP	RNAV (GPS) RWY 32		KASH	NASHUA	NH (US)
STAR	GRAYM		KBED	BEDFORD	MA (US)
STAR	GRAYM		KBVY	BEVERLY	MA (US)
STAR	GARDNER	3	KBOS	BOSTON	MA (US)
STAR	GRAYM		KFIT	FITCHBURG	MA (US)
STAR	GRAYM		KLWM	LAWRENCE	MA (US)
STAR	POPPP		KMHT	MANCHESTER	NH (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 28

**DATE OF REVISION:** 07/19/2018

**REASON FOR REVISION:**

1. DELETED TAKEOFF MINIMUMS AT KORE FROM FIX USE.
2. DELETED TAKEOFF MINIMUMS AT KPSF FROM FIX USE.
3. ADDED ILS OR LOC RWY 11 AT KBED TO FIX USE.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>DEVELOPED BY:</b>	<b>DATE:</b> 02/21/2018	<b>OFFICE:</b> AJV-5422	<b>NAME:</b> PETER GUIMOND
<b>APPROVED BY:</b>	<b>DATE:</b>	<b>OFFICE:</b> AJV-5420	<b>NAME:</b> JULIE MORGAN
<b>SIGNATURE:</b>			
<b>DISTRIBUTION:</b>	<b>NFDC</b> <b>FPO:</b> EST <b>ARTCC:</b> ZBW <b>ATC FACILITY:</b> BOS APP CON <b>OTHER:</b>		

# RADIO FIX AND HOLDING DATA RECORD

NAME: SWIGG STATE: MA COUNTRY: US ICAO REGION CODE: K6  
 LATITUDE/LONGITUDE: 423158.57N/0711437.41W TYPE: WP, RADAR, 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	BOSTON	I-MDC	LOC/DME		328.56	313.56	15.33	15.31	4000	4500
2	GARDNER	GDM	VOR/DME	L	104.96	090.96	36.13	36.13	2000	6000
3	LAWRENCE	LWM	VOR/DME	L	222.96	207.96		14.08	4000	4500
4	MANCHESTER	MHT	VOR/DME	L	179.50	164.50		20.89	4000	4500
5	BOSTON	BOS	VOR/DME	H	329.08	313.08	15.44	15.44	2000	6000

HOLDING: HOLDING TYPE OF ACTION: ESTABLISH

## 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	W	GDM	VOR/DME	284.96	104.96	L	1	2000 6000	5 15

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	423436.00N/0712630.00W	670	4E
1	310	AAO	423018.00N/0713330.00W	850	4E

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 11	KBED	BEDFORD	MA (US)

## REMARKS:

BOSTON (FAC 1) USED TO ESTABLISH FIX COORDINATES  
 I-MDC DME COORDS: 422126.51N/0705935.06W.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11	2, 5	1	KBED	BEDFORD	MA (US)
IAP	ILS OR LOC RWY 15R	1, 2, 3, 4		KBOS	BOSTON	MA (US)
STAR	JFUND (RNAV)			KBOS	BOSTON	MA (US)

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9

DATE OF REVISION: 02/28/2019

## REASON FOR REVISION:

FIX TYPE: ADDED "WP" AND "RADAR."  
 FIX MAKE-UP: CHANGED FAC 1 DME DIST FROM 15.32 TO 15.33; ADDED DME DIST 36.13 TO FAC 2; CHANGED FAC 2 MRA FROM 4000 TO 2000 AND MAA FROM 4500 TO 6000; CHANGED FAC 4 DIST FROM FAC NM FROM 20.88 TO 20.89 ADDED FAC 5.  
 HOLDING: ADDED PAT 1.  
 HOLDING RESTRICTIONS: ADDED "HOLDING LIMITED TO ESTABLISHED PATTERN."  
 CIH: ADDED CIH TO KBED - ILS OR LOC RWY 11.  
 REMARKS: ADDED "PRECIPITOUS TERRAIN EVALUATION COMPLETED"; UPDATED I-MDC DME COORDS. FROM 422126.66N/0705935.05W TO 422126.51N/0705935.06W.  
 FIX USE: ADDED KBED - ILS OR LOC RWY 11.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-5431	NAME: JACOB MAXFIELD
APPROVED BY:	DATE:	OFFICE: AJV-5430	NAME: PATRICK MULQUEEN
SIGNATURE:			

**DISTRIBUTION:****NFDC****FPO: EST****ARTCC: ZBW****ATC FACILITY: BOS APP CON, BOS ATCT****OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: WOBUR

STATE: MA

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 422839.89N/0710953.67W

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 NM	FAC FEET	MRA	MAA
1	BOSTON	I-MDC	LOC/DME		328.56	313.56	10.51	10.49		3000	4500
2	LAWRENCE	LWM	VOR/DME	L	206.17	191.17		16.06		3000	4500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

I-MDC DME COORDS: 422126.66N/0705935.05W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15R	1, 2		KBOS	BOSTON	MA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8

DATE OF REVISION: 10/12/2017

## REASON FOR REVISION:

I-MDC MAG BRG CHANGED FROM 329.56 TO 328.56 - MAG VAR UPDATE FROM 16W TO 15W.  
PROCEDURE NAME CHANGED FROM ILS OR LOC/DME RWY 15R TO ILS OR LOC RWY 15R IN FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 03/22/2017

OFFICE: AJV-5412

NAME: MIKE MELSSEN

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: EST  
ARTCC: ZBW  
ATC FACILITY: BOS APP CON, BOS ATCT  
OTHER:

# RADIO FIX AND HOLDING DATA RECORD

NAME: ZASMU

STATE: MA

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 422237.87N/0710118.48W

TYPE: 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 NM	FAC FEET	MRA	MAA
1	BOSTON	I-MDC	LOC/DME		328.56	313.56	1.75	1.73		167	4500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15R	1		KBOS	BOSTON	MA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 03/29/2018

## REASON FOR REVISION:

THIS REVISION IS TO CORRECT THE LOCATION IN NASR. IT PUBLISHED IN NASR AT 422219.07N/0710056.24W BUT SHOULD HAVE BEEN AT 422237.87N/0710118.48W.

INITIATED BY:      DATE:      ORGANIZATION:      NAME:

DEVELOPED BY:      DATE: 10/05/2017      OFFICE: AJV-5412      NAME: MIKE MELSSEN

APPROVED BY:      DATE:      OFFICE: AJV-5410      NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:      NFDC  
FPO: EST  
ARTCC: ZBW  
ATC FACILITY: BOS APP CON; BOS ATCT  
OTHER: