

RADIO FIX AND HOLDING DATA RECORD

NAME: CONCORD VOR/DME **STATE:** NH **COUNTRY:** US **ICAO REGION CODE:** K6

LATITUDE/LONGITUDE: 431311.23N/0713431.63W **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	MRA	MAA
							NM	FEET		
1	CONCORD	CON	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 TIME	LENGTH DME	HOLDING ALTITUDES	TEMPLATES	
									MIN	MAX	
1	NW	CON	VOR/DME	329.75	149.75	R	1		4000	17500	4 16
2	NW	CON	VOR/DME	298.54	118.54	R	1		3500	14000	4 10
3	NW		WP	329.75	149.75	R		5	5000	10000	6 10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	431903.00N/0714236.00W	1080	4E
2	200	AAO	431333.00N/0714803.00W	1257	4E
2	310	AAO	432253.00N/0715127.20W	3140	4E
3	200	AAO	431448.00N/0714745.00W	1221	4E
3	310	AAO	432253.00N/0715127.20W	3140	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	VOR-A	KCON	CONCORD	NH (US)
3	RNAV (GPS) RWY 24	KMHT	MANCHESTER	NH (US)

REMARKS:

PAT 2, 310 KIAS CONTROLLING OBSTACLE LIES IN SECONDARY AREA 10572 FT FROM EDGE OF PRIMARY AREA (PRIMARY EQUIVALENT HEIGHT 2205 MSL).
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.
 ASSIGNED FACILITY MAGVAR: 15W (1980).
 CHART PATTERN 1 ON ENROUTE LOW PER ATC REQUEST.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	PORTLAND			KPWM	PORTLAND	ME (US)
DP	MANCHESTER			KMHT	MANCHESTER	NH (US)
DP	PEASE			KPSM	PORTSMOUTH	NH (US)
DP	TANKER			KPSM	PORTSMOUTH	NH (US)
DP	TAKE-OFF MINIMUMS			KDAW	ROCHESTER	NH (US)
EN ROUTE	ENROUTE LOW		1			(US)
EN ROUTE	T295					(US)
EN ROUTE	T395					(US)
IAP	ILS OR LOC RWY 11			KPWM	PORTLAND	ME (US)
IAP	ILS RWY 11 (CAT II & III)			KPWM	PORTLAND	ME (US)
IAP	ILS RWY 11 (SA CAT I)			KPWM	PORTLAND	ME (US)
IAP	ILS OR LOC RWY 7			KFSM	SANFORD	ME (US)
IAP	RNAV (GPS) RWY 25			KFSM	SANFORD	ME (US)
IAP	RNAV (GPS) RWY 7			KFSM	SANFORD	ME (US)
IAP	NDB-A			KCNH	CLAREMONT	NH (US)
IAP	ILS OR LOC RWY 35		2	KCON	CONCORD	NH (US)
IAP	RNAV (GPS) RWY 12			KCON	CONCORD	NH (US)
IAP	RNAV (GPS) RWY 17			KCON	CONCORD	NH (US)
IAP	VOR-A		2	KCON	CONCORD	NH (US)
IAP	ILS OR LOC RWY 8			KLCI	LACONIA	NH (US)
IAP	RNAV (GPS) RWY 26			KLCI	LACONIA	NH (US)
IAP	RNAV (GPS) RWY 25			KLEB	LEBANON	NH (US)
IAP	RNAV (GPS) RWY 36			KLEB	LEBANON	NH (US)
IAP	RNAV (GPS) RWY 7			KLEB	LEBANON	NH (US)
IAP	ILS OR LOC RWY 17		1	KMHT	MANCHESTER	NH (US)
IAP	ILS OR LOC RWY 35		1	KMHT	MANCHESTER	NH (US)
IAP	ILS OR LOC RWY 6			KMHT	MANCHESTER	NH (US)
IAP	ILS RWY 35 (CAT II & III)		1	KMHT	MANCHESTER	NH (US)
IAP	ILS RWY 35 (SA CAT I)		1	KMHT	MANCHESTER	NH (US)
IAP	RNAV (GPS) RWY 24		3	KMHT	MANCHESTER	NH (US)
IAP	RNAV (GPS) Y RWY 17			KMHT	MANCHESTER	NH (US)
IAP	ILS OR LOC RWY 14			KASH	NASHUA	NH (US)
IAP	RNAV (GPS) RWY 14			KASH	NASHUA	NH (US)
IAP	ILS OR LOC RWY 16			KPSM	PORTSMOUTH	NH (US)
IAP	ILS OR LOC RWY 34			KPSM	PORTSMOUTH	NH (US)
IAP	NDB RWY 33			KDAW	ROCHESTER	NH (US)

IAP RNAV (GPS) RWY 15 KDAW ROCHESTER NH (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 29

DATE OF REVISION: 12/01/2022

REASON FOR REVISION:

UPDATED FIX USE, ADDED KDAW RNAV (GPS) RWY 15, ADDED ENROUTE LOW AND PATTERN 1 USE.
ADDED REMARK CHART PATTERN 1 ON ENROUTE LOW PER ATC REQUEST.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A423	NAME: PHILLIP BRANDENBURG
APPROVED BY:	DATE: 12/01/2022	OFFICE: AJV-A420	NAME: ALLAN WILL
	SIGNATURE:		

RADIO FIX AND HOLDING DATA RECORD

NAME: HESKO

STATE: NH

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 424830.46N/0713409.24W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 14

FAC

PAT

AIRPORT IDENT
KASH

CITY
NASHUA

STATE
NH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 06/27/2013

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 12/28/2012

OFFICE: AJV-352

NAME: DONALD SMITH (THERON CYRUS)

APPROVED BY:

DATE: 05/07/2013

OFFICE: AJV-352

NAME: SUE CRUMB

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: JOHNZ **STATE:** NH **COUNTRY:** US **ICAO REGION CODE:** K6

LATITUDE/LONGITUDE: 424322.87N/0714055.80W **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	CONCORD	CON	VOR/DME	L	204.00	189.00	30.17	30.17	4000	17500
2	GARDNER	GDM	VOR/DME	L	071.34	057.34	19.75	19.75	4000	17500

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

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	HOLDING DME	ALTITUDES MIN	ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	W		WP	251.34	071.34	R		4	4000	6000	5	13

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	424024.00N/0715124.00W	1700	4E
1	310	AAO	422921.00N/0715312.00W	2215	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	RNAV (GPS) RWY 32	KASH	NASHUA	NH (US)

REMARKS:

CONCORD (FAC 1) AND GARDNER (FAC 2) USED TO ESTABLISH FIX COORDINATES.
 CHART ON SECTIONAL - ATC REQUEST.
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	T314					(US)
IAP	RNAV (GPS) RWY 32			KORE	ORANGE	MA (US)
IAP	RNAV (GPS) RWY 32		1	KASH	NASHUA	NH (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:**

03/21/2024 REASON FOR REVISION:

- FIX MAKE-UP FACILITIES: REMOVED MHT VOR FROM FIX MAKE-UP.
- PATTERNS: DELETED PATTERNS 2 AND 3 WITH ASSOCIATED NOTES AND OBSTRUCTIONS, NO LONGER REQUIRED FOR ILS OR LOC RWY 14 AT KASH AND NOT NEEDED BY ATC.
- REMARKS: REMOVED "COORDINATE WITH ZBW - 530 FOR ANY CHANGES IN THIS FIX" PER ATC.
- FIX USE: REMOVED ILS OR LOC RWY 14 AT KASH.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**
OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 **NAME:** CHRISTOPHER WILKINSON
APPROVED BY: **DATE:** 03/21/2024 **OFFICE:** AJV-A432 **NAME:** CASIMIR TABAKA

SIGNATURE: *Digitally signed by*
CASIMIR L TABAKA
 Dec 13, 2023



RADIO FIX AND HOLDING DATA RECORD

NAME: LODTI **STATE:** NH **COUNTRY:** US **ICAO REGION CODE:** K6

LATITUDE/LONGITUDE: 425126.06N/0714021.97W **TYPE:** WP, RADAR, INT

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	FAC FEET	MRA	MAA
1	NASHUA	I-ASH	LOC		318.70	302.70		8.92		2500	4600
2	GARDNER	GDM	VOR/DME	L	056.27	042.27		25.29		2500	17500

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

REMARKS:

NASHUA (FAC 1) AND GARDNER (FAC 2) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 14	1, 2		KASH	NASHUA	NH (US)
IAP	RNAV (GPS) RWY 14			KASH	NASHUA	NH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 03/21/2024

REASON FOR REVISION:

1. LATITUDE/LONGITUDE: CHANGED TO 425126.06N/0714021.97W TO MEET SATIDFACTORY INTERSECTION CRITERIA.
2. FIX TYPE: ADDED RADAR.
3. FIX MAKE-UP FACILITIES: AMENDED NASHUA (I-ASH) MAG/TRUE BRG AND DIST FROM FAC TO REFLECT NEW LAT/LONG POSITION.
4. FIX MAKE-UP FACILITIES: REMOVED MHT VOR AND ADDED GDM VOR.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**
OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 **NAME:** CHRISTOPHER WILKINSON
APPROVED BY: **DATE:** 03/21/2024 **OFFICE:** AJV-A432 **NAME:** CASIMIR TABAKA
SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: MUGGY

STATE: NH

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 425344.72N/0714517.22W

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 FEET	MRA	MAA
1	NASHUA	I-ASH	LOC		318.69	302.69		13.22	3000	4600
2	CONCORD	CON	VOR/DME	L	217.15	202.15		20.98	3000	17500
3	GARDNER	GDM	VOR/DME	L	046.50	032.50		24.91	3800	17500

FIX RESTRICTIONS:

MCA T316 3100 WESTBOUND

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		WP	318.69	138.69	L	4	3800 6000	5 6
2	NW	I-ASH	LOC	318.69	138.69	L	1	3800 4600	5 6

CONTROLLING OBSTRUCTIONS:

PAT	AIRPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	425309.00N/0715157.00W	2458	4B
2	200	AAO	425309.00N/0715157.00W	2458	4B

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST.
PAT 2 ATC REQUEST.

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

REMARKS:

NASHUA (FAC 1) AND CONCORD (FAC 2) USED TO ESTABLISH FIX COORDINATES.
CHART ON SECTIONAL - ATC REQUEST.
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	T316					
IAP	ILS OR LOC RWY 14	1, 2, 3	2	KASH	NASHUA	NH (US)
IAP	RNAV (GPS) RWY 14		1	KASH	NASHUA	NH (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10

DATE OF REVISION: 03/21/2024

REASON FOR REVISION:

1. FIX MAKE-UP FACILITIES: REMOVED MHT VOR AND ADDED GDM VOR.
2. HOLDING CONTROLLING OBSTRUCTIONS: UPDATED OBSTACLE ELEVATION AND ACCURACY CODE WITH NEW MITRE 3ARCSEC DTED RESULTS.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 **NAME:** CHRISTOPHER WILKINSON

APPROVED BY: **DATE:** 03/21/2024 **OFFICE:** AJV-A432 **NAME:** CASIMIR TABAKA

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: NORIY

STATE: NH

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 424930.28N/0713616.06W

TYPE: WP, INT

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	NASHUA	I-ASH	LOC		318.69	302.69		5.34 32469	1600	4600
2	GARDNER	GDM	VOR/DME	L	064.02	050.02		26.14 158855	1600	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

NASHUA (FAC 1) USED TO ESTABLISH FIX COORDINATES.
RNP FORMULA USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 14	1, 2		KASH	NASHUA	NH (US)
IAP	RNAV (GPS) RWY 14			KASH	NASHUA	NH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 03/21/2024

REASON FOR REVISION:

1. FIX MAKE-UP FACILITIES: REMOVED MHT VOR AND ADDED GDM VOR.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: CHRISTOPHER WILKINSON

APPROVED BY:

DATE: 03/21/2024

OFFICE: AJV-A432

NAME: CASIMIR TABAKA

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: PELAN STATE: NH COUNTRY: US ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 424520.00N/0711947.41W 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	MANCHESTER	I-MHT	LOC/DME		171.53	156.53	12.42	12.41	2500	4700
2	GARDNER	GDM	VOR/DME	L	082.45	068.45	34.61	34.61	2000	6000
3	CONCORD	CON	VOR/DME	L	173.69	158.69	29.87	29.87	2000	6000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
GDM	VOR/DME	R-082	35	2000	2200

HOLDING: HOLDING TYPE OF ACTION: MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	HOLDING ALTITUDES DME	MIN	MAX	TEMPLATES MIN	MAX
1	E		WP	082.45	262.45	R		4	2000	6000	4	6
2	E	GDM	VOR/DME	082.45	262.45	R	1		2000	6000	5	7

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (33-023160)	424900.40N/0711611.50W	869	2C
2	200	TOWER (33-023160)	424900.40N/0711611.50W	869	2C

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

REMARKS:

MANCHESTER (FAC 1) USED TO ESTABLISH FIX COORDINATES.
I-MHT DME COORDINATES: 425642.13N/0712635.39W
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 35	1		KMHT	MANCHESTER	NH (US)
IAP	ILS RWY 35 (CAT II & III)	1		KMHT	MANCHESTER	NH (US)
IAP	ILS RWY 35 (SA CAT I)	1		KMHT	MANCHESTER	NH (US)
IAP	RNAV (GPS) Y RWY 35			KMHT	MANCHESTER	NH (US)
IAP	RNAV (RNP) Z RWY 35			KMHT	MANCHESTER	NH (US)
IAP	ILS OR LOC RWY 14	2, 3	2	KASH	NASHUA	NH (US)
IAP	RNAV (GPS) RWY 14		1	KASH	NASHUA	NH (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14

DATE OF REVISION: 03/21/2024

REASON FOR REVISION:

- TYPE: ADDED INT TO FIX TYPE
- FIX MAKE-UP: ADDED GDM AND CON AS FIX MAKE-UP FACILITIES.
- ADDED GDM ESV.
- PATTERNS: UPDATED PATTERN 1 RADIAL/CRS/BRG FROM 086.63 TO 082.45 AND CRS INBOUND FROM 266.83 TO 262.45 AND ADDED PATTERN 2.
- CONTROLLING OBSTRUCTIONS: UPDATED PATTERN 1 CONTROLLING OBSTACLE FROM 980 TOWER (33-000085) 424407.00N/0712335.00W (4D) TO 869 TOWER (33-023160) 424900.40N/0711611.50W (2C) AND ADDED CONTROLLING OBSTACLE FOR PATTERN 2.
- FIX USE: ADDED KASH ILS OR LOC RWY 14 WITH ASSOCIATED FACILITIES AND PATTERN.

INITIATED BY: DATE: ORGANIZATION: NAME:
OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 NAME: CHRISTOPHER WILKINSON
APPROVED BY: DATE: 03/21/2024 OFFICE: AJV-A432 NAME: CASIMIR TABAKA
SIGNATURE: