

RADIO FIX AND HOLDING DATA RECORD

NAME: BROSS

STATE: MD

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 391128.40N/0755249.88W

TYPE: WP, 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	FEET	MRA	MAA
1	SMYRNA	ENO	VORTAC	L	271.00	262.00	17.17	17.17		2000	17500
2	WOODSTOWN	OOD	VORTAC	L	235.38	225.38	37.84	37.84		2000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

SMYRNA (FAC 1) AND WOODSTOWN (FAC 2) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	DUKPN (RNAV)			KBWI	BALTIMORE	MD (US)
DP	DUKPN (RNAV)			KMTN	BALTIMORE	MD (US)
DP	DUKPN (RNAV)			KDMW	WESTMINSTER	MD (US)
DP	PTOMC (RNAV)			KJYO	LEESBURG	VA (US)
EN ROUTE	Q419					(US)
EN ROUTE	T358					(US)
EN ROUTE	V268	1, 2				(US)
IAP	RNAV (GPS) RWY 12			KRJD	RIDGELY	MD (US)
STAR	ARLFT (RNAV)			KDOV	DOVER	DE (US)
STAR	ARLFT (RNAV)			33N	DOVER/CHESWOLD	DE (US)
STAR	ARLFT (RNAV)			KILG	WILMINGTON	DE (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

1. REMOVED SWANN DP FROM FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: BARBARA GORMAN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

Digitally signed by
CASIMIR L TABAKA

Feb 14, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: DUPONT VORTAC STATE: DE COUNTRY: US ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 394041.30N/0753625.51W 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	DUPONT	DQO	VORTAC	L						45000

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 MIN MAX	TEMPLATES MIN MAX
1	SW	DQO	VORTAC	233.00	053.00	L	1		2000 14000	6 8
2	E	DQO	VORTAC	068.00	248.00	L	1		3000 8000	4 8
3	SW		WP	235.00	055.00	L		4	4000 12000	5 10
4	SW		WP	234.53	054.53	L		4	4000 12000	5 10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	210	STACK (10-000014)	393536.00N/0753803.00W	560	5D
2	200	TOWER (10-000182)	394629.40N/0753146.00W	515	5D
3	200	STACK (10-000014)	393536.00N/0753803.00W	560	5D
4	200	STACK (10-000014)	393536.00N/0753803.00W	560	5D

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST
PAT 4 ATC REQUEST

HOLDING RESTRICTIONS:

PAT 1 CHART 210K ICON
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

SECTIONAL CHARTING PER ATC REQUEST
ASSIGNED FACILITY MAGVAR: 10W (1980).
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 3 AND PAT 4, 4 DME LEG PER ATC REQUEST
DUPONT RADIAL/DME USED UP TO 45000, PER ESVMs.
CHART DQO SUBDUED ON EN ROUTE HIGH AND CONTROLLER HIGH CHARTS.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	DOCTR (RNAV)			KDCA	WASHINGTON	DC (US)
DP	ATLANTIC CITY			KACY	ATLANTIC CITY	NJ (US)
DP	LEEAH			KMIV	MILLVILLE	NJ (US)
DP	PHILADELPHIA			KPHL	PHILADELPHIA	PA (US)
EN ROUTE	T335					(US)
EN ROUTE	V166					(US)
EN ROUTE	V170		1			(US)
EN ROUTE	V252					(US)
EN ROUTE	V29					(US)
EN ROUTE	V433					(US)
EN ROUTE	V469					(US)
EN ROUTE	V479					(US)
IAP	RNAV (GPS) RWY 17			KEVY	MIDDLETOWN	DE (US)
IAP	RNAV (GPS) RWY 19			KILG	WILMINGTON	DE (US)
IAP	VOR RWY 27			KILG	WILMINGTON	DE (US)
IAP	VOR RWY 9			KILG	WILMINGTON	DE (US)
IAP	RNAV (GPS) RWY 29			KMQS	COATESVILLE	PA (US)
IAP	ILS OR LOC RWY 9L			KPHL	PHILADELPHIA	PA (US)
IAP	ILS RWY 9L (SA CAT II)		2	KPHL	PHILADELPHIA	PA (US)
IAP	ILS V RWY 9R (CONVERGING)		2	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z OR LOC Z RWY 9R		2	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z RWY 9R (CAT II & III)		2	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z RWY 9R (SA CAT I)		2	KPHL	PHILADELPHIA	PA (US)
IAP	RIVER VISUAL RWY 9L/9R			KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (GPS) Y RWY 9L			KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (GPS) Y RWY 9R			KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (RNP) Z RWY 9L			KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (RNP) Z RWY 9R			KPHL	PHILADELPHIA	PA (US)
STAR	DELRO			KIAD	WASHINGTON	DC (US)
STAR	BRAND (RNAV)		3	KEWR	NEWARK	NJ (US)
STAR	PHLBO (RNAV)			KEWR	NEWARK	NJ (US)
STAR	APPLE (RNAV)		4	KLGA	NEW YORK	NY (US)
STAR	BUNTS			KPHL	PHILADELPHIA	PA (US)

QUALITY
16
CHECKED

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 22

DATE OF REVISION: 09/05/2024

REASON FOR REVISION:

1. REMOVED AIRSPACE DOCKET: 23-AEA-10
2. FIX USE: REMOVED SWANN DP; ADDED STAR BUNTS (KPHL).

06/14/2024: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON: 02/14/2024.

1. DELETED KEVY - NDB-A FROM FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: BARBARA GORMAN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Jun 14, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: SWANN

STATE: MD

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 390905.28N/0761343.94W

TYPE: WP, 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	BALTIMORE	BAL	VORTAC	L	104.20	093.20	20.21	20.21	2000	17500
2	SMYRNA	ENO	VORTAC	L	271.00	262.00		33.60	2000	17500
3	WASHINGTON	DCA	VOR/DME	L	073.88	064.88	41.63	41.63	7000	17500
4	DUPONT	DQO	VORTAC	L	232.68	222.68		42.81		17500
5	WESTMINSTER	EMI	VORTAC	VH	128.66	120.66		40.46	2000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
DCA	VOR/DME	R-074	42	7000	17500
EMI	VORTAC	R-129	41	2000	15400

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

BALTIMORE (FAC 1) AND SMYRNA (FAC 2) USED TO ESTABLISH FIX COORDINATES.
DQO R-233 UNUSABLE BEYOND 20 NM.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NATIONAL			KDCA	WASHINGTON	DC (US)
DP	SOOKI (RNAV)			KDCA	WASHINGTON	DC (US)
DP	CAPITAL	1, 2		KIAD	WASHINGTON	DC (US)
DP	JCOBY (RNAV)			KIAD	WASHINGTON	DC (US)
DP	WOOLY (RNAV)			KIAD	WASHINGTON	DC (US)
DP	DUKPN (RNAV)			KBWI	BALTIMORE	MD (US)
DP	DUKPN (RNAV)			KMTN	BALTIMORE	MD (US)
DP	DUKPN (RNAV)			KDMW	WESTMINSTER	MD (US)
DP	PTOMC (RNAV)			KJYO	LEESBURG	VA (US)
EN ROUTE	T356					(US)
EN ROUTE	T358					(US)
EN ROUTE	V123	1, 2, 3,				(US)
		4, 5				
EN ROUTE	V268	1, 2, 3,				(US)
		4, 5				
STAR	ARLFT (RNAV)			KDOV	DOVER	DE (US)
STAR	ARLFT (RNAV)			33N	DOVER/CHESWOLD	DE (US)
STAR	ARLFT (RNAV)			KILG	WILMINGTON	DE (US)
STAR	JAIKE (RNAV)			KCDW	CALDWELL	NJ (US)
STAR	MAZIE (RNAV)			KCDW	CALDWELL	NJ (US)
STAR	JAIKE (RNAV)			KLDJ	LINDEN	NJ (US)
STAR	MAZIE (RNAV)			KLDJ	LINDEN	NJ (US)
STAR	JAIKE (RNAV)			47N	MANVILLE	NJ (US)
STAR	MAZIE (RNAV)			47N	MANVILLE	NJ (US)
STAR	JAIKE (RNAV)			KMMU	MORRISTOWN	NJ (US)
STAR	MAZIE (RNAV)			KMMU	MORRISTOWN	NJ (US)
STAR	BRAND (RNAV)			KEWR	NEWARK	NJ (US)
STAR	PHLBO (RNAV)			KEWR	NEWARK	NJ (US)
STAR	JAIKE (RNAV)			KSMQ	SOMERVILLE	NJ (US)
STAR	MAZIE (RNAV)			KSMQ	SOMERVILLE	NJ (US)
STAR	JAIKE (RNAV)			KTEB	TETERBORO	NJ (US)
STAR	MAZIE (RNAV)			KTEB	TETERBORO	NJ (US)
STAR	APPLE (RNAV)			KLGA	NEW YORK	NY (US)

REQUIRED CHARTING: DP, STAR, AREA, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 25

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

1. REMOVED SWANN DP FROM FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: BARBARA GORMAN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

CASIMIR L TABAKA

Feb 14, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: WOODSTOWN VORTAC

STATE: NJ

COUNTRY: US

ICAO REGION CODE: K6

LATITUDE/LONGITUDE: 393809.88N/0751811.00W

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	WOODSTOWN	OOD	VORTAC	L						45000

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 MIN MAX	TEMPLATES MIN MAX
1	SW	OOD	VORTAC	212.28	032.28	L	1		2100 8000	4 8
2	SW		WP	212.28	032.28	L		4	2100 8000	5 9
3	SW		WP	214.28	034.28	L		4	3000 8000	5 9

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (34-000514)	394143.35N/0751753.48W	1055	1A
2	200	TOWER (34-000514)	394143.35N/0751753.48W	1055	1A
3	200	TOWER (34-000514)	394143.35N/0751753.48W	1055	1A

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

ASSIGNED FACILITY MAGVAR: 10W (1980).
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
RADIALS USED FOR FIXES UP TO 45000 ESVS ON FILE.
CHART SUBDUED ON EN ROUTE HIGH.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ATLANTIC CITY			KACY	ATLANTIC CITY	NJ (US)
DP	LEEAH			KMIV	MILLVILLE	NJ (US)
DP	PHILADELPHIA			KPHL	PHILADELPHIA	PA (US)
EN ROUTE	V123					(US)
EN ROUTE	V166					(US)
EN ROUTE	V184					(US)
EN ROUTE	V312					(US)
EN ROUTE	V469					(US)
IAP	ILS OR LOC RWY 1			KILG	WILMINGTON	DE (US)
IAP	RNAV (GPS) RWY 1			KILG	WILMINGTON	DE (US)
IAP	RNAV (GPS) RWY 27			KILG	WILMINGTON	DE (US)
IAP	RNAV (GPS) RWY 9		2	KILG	WILMINGTON	DE (US)
IAP	VOR RWY 27			KILG	WILMINGTON	DE (US)
IAP	RNAV (GPS)-B			58M	ELKTON	MD (US)
IAP	RNAV (GPS) RWY 5			19N	BERLIN	NJ (US)
IAP	VOR-B			19N	BERLIN	NJ (US)
IAP	ILS OR LOC RWY 10			KMIV	MILLVILLE	NJ (US)
IAP	RNAV (GPS) RWY 14			KMIV	MILLVILLE	NJ (US)
IAP	VOR-A			KMIV	MILLVILLE	NJ (US)
IAP	RNAV (GPS) RWY 8			KVAY	MOUNT HOLLY	NJ (US)
IAP	ILS OR LOC RWY 26			KPHL	PHILADELPHIA	PA (US)
IAP	ILS OR LOC RWY 27L		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS OR LOC RWY 27R			KPHL	PHILADELPHIA	PA (US)
IAP	ILS OR LOC RWY 9L			KPHL	PHILADELPHIA	PA (US)
IAP	ILS RWY 27L (SA CAT II)		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS RWY 27R (SA CAT I AND II)			KPHL	PHILADELPHIA	PA (US)
IAP	ILS RWY 9L (SA CAT II)		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS V RWY 17 (CONVERGING)			KPHL	PHILADELPHIA	PA (US)
IAP	ILS V RWY 9R (CONVERGING)		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z OR LOC RWY 17		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z OR LOC Z RWY 9R		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z RWY 9R (CAT II AND III)		1	KPHL	PHILADELPHIA	PA (US)
IAP	ILS Z RWY 9R (SA CAT I)		1	KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (GPS) Y RWY 9L			KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (GPS) Y RWY 9R		3	KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (RNP) Z RWY 9L		3	KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (RNP) Z RWY 9R		3	KPHL	PHILADELPHIA	PA (US)
IAP	RNAV (GPS) RWY 33			KPNE	PHILADELPHIA	PA (US)
STAR	CEDAR LAKE			KILG	WILMINGTON	DE (US)

QUALITY
8
CHECKED

STAR	CEDAR LAKE	KTTN	TRENTON	NJ (US)
STAR	CEDAR LAKE	KMQS	COATESVILLE	PA (US)
STAR	CEDAR LAKE	KPHL	PHILADELPHIA	PA (US)
STAR	CEDAR LAKE	KPNE	PHILADELPHIA	PA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 30

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

1. FIX USE: REMOVED SWANN DP; UPDATED PROCEDURE NAME AT KPHL FROM ILS Z OR LOC RWY 9R TO ILS Z OR LOC Z RWY 9R.

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

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A432 **NAME:** BARBARA GORMAN

APPROVED BY: **DATE:** 07/11/2024 **OFFICE:** AJV-A430 **NAME:** CASIMIR TABAKA

SIGNATURE:

Digitally signed by
CASIMIR L TABAKA
Feb 14, 2024

