

RADIO FIX AND HOLDING DATA RECORD

NAME: BLUFI

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 265337.86N/0794953.06W

TYPE: WP, 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	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	70.50	70.50	5000	45000
2	TREASURE	TRV	VORTAC	H	149.99	142.99	58.67	58.67	5000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
TRV	VORTAC	R-150	59	5000	14500
VKZ	VOR/DME	R-018	71	5000	14500

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	N	VKZ	VOR/DME	018.23	198.23	R	1-1 1/2 7	5000 45000	7 31

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	SHIP	265337.86N/0794953.06W	280	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

VIRGINIA KEY (FAC 1) USED TO ESTABLISH FIX COORDINATES
 PRECIPITOUS TERRAIN EVALUATION COMPLETE.
 PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER W-497B.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	J45	1, 2	1			(US)
EN ROUTE	V295	1, 2	1			(US)
STAR	BLUFI	1, 2		KFLL	FORT LAUDERDALE	FL (US)
STAR	BLUFI	1, 2		KFXE	FORT LAUDERDALE	FL (US)
STAR	BLUFI	1, 2		KHWO	HOLLYWOOD	FL (US)
STAR	BLUFI	1, 2		KHST	HOMESTEAD	FL (US)
STAR	BLUFI	1, 2		KX51	HOMESTEAD	FL (US)
STAR	BLUFI	1, 2		K07FA	KEY LARGO	FL (US)
STAR	BLUFI	1, 2		KMIA	MIAMI	FL (US)
STAR	BLUFI	1, 2		KOPF	MIAMI	FL (US)
STAR	BLUFI	1, 2		KTMB	MIAMI	FL (US)
STAR	BLUFI	1, 2		KPMP	POMPANO BEACH	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. ADDED WP TO FIX TYPE.
2. DELETED INT FROM FIX TYPE (DOES NOT MEET MIN DIVERGENCE ANGLE CRITERIA).
3. DELETED TREASURE (FAC2) FROM FIX COORDINATE ESTABLISHMENT REMARK.
3. UPDATED HOLDING OBSTACLE AC FROM 2C TO 4E (REASON: OVERWATER DTED).

DEVELOPED BY: DATE: 04/22/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY: DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
 FPO: EST
 ARTCC: ZMA
 ATC FACILITY: PBI APP CON
 OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HEATT

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 262927.39N/0795646.13W

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 NM	FAC FEET	MRA	MAA
1	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	45.62	45.62		5000	45000
2	FREEPORT	ZFP	VOR/DME	H	270.00	267.00	67.29	67.29		5000	45000
3	TREASURE	TRV	VORTAC	H	164.60	157.60	76.78	76.78		5000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
TRV	VORTAC	R-165	77	5000	14500
VKZ	VOR/DME	R-018	46	5000	14500
ZFP	VOR/DME	R-270	68	5000	14500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

VIRGINIA KEY (FAC 1) AND FREEPORT (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BUFIT (RNAV)			KPBI	WEST PALM BEACH	FL (US)
DP	PALM BEACH	1		KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	BR64V	1, 2, 3				(US)
EN ROUTE	J45	1, 2, 3				(US)
EN ROUTE	V295	1, 2, 3				FL (US)
IAP	RNAV (GPS) RWY 24			KPMP	POMPANO BEACH	FL (US)
STAR	BLUFI	1, 2, 3		KFLL	FORT LAUDERDALE	FL (US)
STAR	BLUFI	1, 2, 3		KFXE	FORT LAUDERDALE	FL (US)
STAR	BLUFI	1, 2, 3		KHWO	HOLLYWOOD	FL (US)
STAR	BLUFI	1, 2, 3		KHST	HOMESTEAD	FL (US)
STAR	BLUFI	1, 2, 3		KX51	HOMESTEAD	FL (US)
STAR	BLUFI	1, 2, 3		K07FA	KEY LARGO	FL (US)
STAR	BLUFI	1, 2, 3		KMIA	MIAMI	FL (US)
STAR	BLUFI	1, 2, 3		KOPF	MIAMI	FL (US)
STAR	BLUFI	1, 2, 3		KTMB	MIAMI	FL (US)
STAR	BLUFI	1, 2, 3		KPMP	POMPANO BEACH	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 16

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. DELETED BR54V, BR55V & BR68V FROM FIX USE.
2. ADDED IAP & MILITARY STAR TO REQUIRED CHARTING.
3. DELETED MILITARY IAP TO REQUIRED CHARTING.
4. UPDATED THE ESV RADIAL FOR TRV VTAC FROM R-162 TO R-165.

DEVELOPED BY:

DATE: 04/22/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: PBI APP CON
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

**INFO
ONLY**

NAME: HILEY

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 261515.81N/0800047.10W

TYPE: WP, 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	PALM BEACH	PBI	VORTAC	H	174.16	171.16	25.77	25.77		5000	17500
2	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23		31.02		5000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

PALM BEACH (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BUFIT (RNAV)			KPBI	WEST PALM BEACH	FL (US)
IAP	RNAV (GPS) Z RWY 26L			KMIA	MIAMI	FL (US)
IAP	RNAV (GPS) Z RWY 27			KMIA	MIAMI	FL (US)
IAP	RNAV (GPS) Z RWY 30			KMIA	MIAMI	FL (US)
IAP	RNAV (RNP) Y RWY 26L			KMIA	MIAMI	FL (US)
IAP	RNAV (RNP) Y RWY 27			KMIA	MIAMI	FL (US)
IAP	RNAV (RNP) Y RWY 30			KMIA	MIAMI	FL (US)
STAR	ANNEY	1, 2		KHST	HOMESTEAD	FL (US)
STAR	HILEY (RNAV)			KHST	HOMESTEAD	FL (US)
STAR	ANNEY	1, 2		KX51	HOMESTEAD	FL (US)
STAR	HILEY (RNAV)			KX51	HOMESTEAD	FL (US)
STAR	ANNEY	1, 2		K07FA	KEY LARGO	FL (US)
STAR	HILEY (RNAV)			K07FA	KEY LARGO	FL (US)
STAR	ANNEY	1, 2		KMIA	MIAMI	FL (US)
STAR	HILEY (RNAV)			KMIA	MIAMI	FL (US)
STAR	ANNEY	1, 2		KTMB	MIAMI	FL (US)
STAR	HILEY (RNAV)			KTMB	MIAMI	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 09/20/2012

REASON FOR REVISION:

1. ADDED REMARK, PALM BEACH (FAC 1) USED TO ESTABLISH FIX COORDINATES.
2. DELETED FAC 2 DME.

DEVELOPED BY:

DATE: 03/23/2012

OFFICE: AJV-352

NAME: DAVID SAUER

APPROVED BY:

DATE: 09/20/2012

OFFICE: AJV-352

NAME: DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MIA APP CON, PBI APP CON
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: KAINS

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 255746.99N/0800542.73W

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 NM	FAC FEET	MRA	MAA
1	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	13.03	13.03		2000	17500
2	DOLPHIN	DHP	VORTAC	H	058.56	054.56	16.85	16.85		5000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

VIRGINIA KEY (FAC 1) AND DOLPHIN (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HITAG (RNAV) DEPARTURE			KMIA	MIAMI	FL (US)
EN ROUTE	BR64V	1				(US)
EN ROUTE	V295	1, 2				(US)
STAR	BLUFI	1, 2		KFLL	FORT LAUDERDALE	FL (US)
STAR	BLUFI	1, 2		KFXE	FORT LAUDERDALE	FL (US)
STAR	BLUFI	1, 2		KHWO	HOLLYWOOD	FL (US)
STAR	ANNEY	1		KHST	HOMESTEAD	FL (US)
STAR	BLUFI	1, 2		KHST	HOMESTEAD	FL (US)
STAR	HILEY (RNAV)			KHST	HOMESTEAD	FL (US)
STAR	ANNEY	1		KX51	HOMESTEAD	FL (US)
STAR	BLUFI	1, 2		KX51	HOMESTEAD	FL (US)
STAR	HILEY (RNAV)			KX51	HOMESTEAD	FL (US)
STAR	ANNEY	1		K07FA	KEY LARGO	FL (US)
STAR	BLUFI	1, 2		K07FA	KEY LARGO	FL (US)
STAR	HILEY (RNAV)			K07FA	KEY LARGO	FL (US)
STAR	ANNEY	1		KMIA	MIAMI	FL (US)
STAR	BLUFI	1, 2		KMIA	MIAMI	FL (US)
STAR	HILEY (RNAV)			KMIA	MIAMI	FL (US)
STAR	BLUFI	1, 2		KOPF	MIAMI	FL (US)
STAR	ANNEY	1		KTMB	MIAMI	FL (US)
STAR	BLUFI	1, 2		KTMB	MIAMI	FL (US)
STAR	HILEY (RNAV)			KTMB	MIAMI	FL (US)
STAR	BLUFI	1, 2		KPMP	POMPANO BEACH	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. MOVED FIX 10.02 FEET NE TO AIRWAY CENTERLINE.
2. ADDED FAC2 TO ENROUTE V295 IN FIX USE.

DEVELOPED BY:

DATE: 04/22/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MIA APP CON
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: KUCEP

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 260949.52N/0800219.30W

TYPE: WP, 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	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	25.42	25.42		5000	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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	S		WP	201.23	021.23	R		4	2100	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	BLDG (12-003979)	260921.00N/0800602.00W	368	5D
1	310	TOWER (12-000668)	255935.28N/0801026.00W	1049	1A

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	RNAV (GPS) RWY 15	KPMP	POMPANO BEACH	FL (US)

REMARKS:

VIRGINIA KEY (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	BR64V					(US)
EN ROUTE	V295					(US)
IAP	RNAV (GPS) RWY 15		1	KPMP	POMPANO BEACH	FL (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. ADDED VIRGINIA KEY (VKZ) VDME TO FIX MAKE-UP FACILITIES (FAC1).
2. ADDED DME TO FIX TYPE.
3. FIX MOVED 0.61 FEET NE TO AIRWAY CENTERLINE.
4. ADDED FIX COORDINATE DETERMINATION REMARK.
5. REFORMATTED ENROUTE INFORMATION IN FIX USE.
6. ADDED PAT1 TO KPMP IAP RNAV (GPS) RWY 15 IN FIX USE.

DEVELOPED BY:

DATE: 04/22/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZTL
ATC FACILITY: MIA APP CON/PMP ATCT
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LIDRE

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 263213.11N/0795559.04W

TYPE: WP, 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	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	48.46	48.46		5000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
VKZ	VOR/DME	R-018	49	50	14500

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	SE		WP	141.26	321.26	R		4	3000	5000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	SHIP	263424.00N/0795821.00W	200	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

VIRGINIA KEY (FAC 1) USED TO ESTABLISH FIX COORDINATES
KPBI R31 DISPLACED THRESHOLD COORDINATES: 264044.85N / 0800523.87W.
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V295	1				FL (US)
IAP	RNAV (GPS) Y RWY 32		1	KPBI	WEST PALM BEACH	FL (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. UPDATED VKZ VDME ESV RADIAL FROM R-001 TO R-018.
2. ADDED FIX COORDINATE DETERMINATION REMARK.
3. MOVED HOLDING RESTRICTION REMARK TO HOLDING RESTRICTION SECTION.
4. UPDATED DISPLACED THRESHOLD REMARK LAT-LONG FROM 264044.92N-0800523.95W TO 264044.85N-0800523.87W PER AIRNAV.
5. UPDATED KPBI IAP FROM RNAV (GPS) Z RWY 32 TO RNAV (GPS) Y RWY 32.
6. ADDED PRECIPITOUS TERRAIN EVALUATION REMARK.
7. UPDATED HOLDING OBSTACLE AC FROM 2C TO 4E (REASON: OVERWATER).

DEVELOPED BY:

DATE: 04/22/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: ATL
ARTCC: ZMA
ATC FACILITY: PBI APP CON/PBI ATCT
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LONNI

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 262301.43N/0795835.49W

TYPE: WP, 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	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	39.00	39.00		5000	45000

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	S		WP	201.23	021.23	R		4	2000	5000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	SHIP MAST	261841.11N/0800106.28W	250	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

VIRGINIA KEY (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	BR64V					(US)
EN ROUTE	V295	1				FL (US)
IAP	RNAV (GPS) RWY 27R			KOPF	MIAMI	FL (US)
IAP	RNAV (GPS) RWY 6		1	KPMP	POMPANO BEACH	FL (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 9

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. ADDED FIX COORDINATE DETERMINATION REMARK.
2. UPDATED HOLDING OBSTACLE AC FROM 2C TO 4E (REASON: ENTIRE PAT1 OVERWATER).
3. REFORMATTED ENROUTE DATA IN FIX USE.

DEVELOPED BY: DATE: 04/22/2016 OFFICE: AJV-5412 NAME: MARK CIARLONE

APPROVED BY: DATE: OFFICE: AJV-5410 NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION: NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: MIA APP CON/ATCT
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: QEPRO

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 260226.86N/0800424.02W

TYPE: WP, 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	VIRGINIA KEY	VKZ	VOR/DME	H	018.23	014.23	17.83	17.83		5000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

VIRGINIA KEY (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	BR64V	1				(US)
EN ROUTE	V295	1				(US)
IAP	RNAV (GPS) RWY 33			KPMP	POMPANO BEACH	FL (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. ADDED FIX COORDINATE DETERMINATION REMARK.
2. REFORMATTED ENROUTE DATA IN FIX USE.

DEVELOPED BY:

DATE: 04/22/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: PBI / MIA ATCT
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: STOOP

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 271511.33N/0800753.03W

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	TREASURE	TRV	VORTAC	H	149.99	142.99	31.84	31.84	2000	17500
2	PAHOKEE	PHK	VOR/DME	H	046.71	046.71		41.14	2000	17500
3	PALM BEACH	PBI	VORTAC	H	359.00	356.00	34.37	34.37	3000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PHK	VOR/DME	R-047	42	2000	14600

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

PAHOKEE (FAC 2) AND TREASURE (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V295	1, 2, 3				FL (US)
EN ROUTE	V492	1, 2, 3				FL (US)
EN ROUTE	V537	1, 2, 3				FL (US)
IAP	RNAV (GPS) RWY 30			KSUA	STUART	FL (US)
IAP	RNAV (GPS)-B			KLNA	WEST PALM BEACH	FL (US)
IAP	TUXXI			KLNA	WEST PALM BEACH	FL (US)
STAR	CAYSL (RNAV)			KBCT	BOCA RATON	FL (US)
STAR	TUXXI			KBCT	BOCA RATON	FL (US)
STAR	FRWAY (RNAV)			K06FA	JUPITER	FL (US)
STAR	TUXXI			K06FA	JUPITER	FL (US)
STAR	FRWAY (RNAV)			KF45	WEST PALM BEACH	FL (US)
STAR	FRWAY (RNAV)			KPBI	WEST PALM BEACH	FL (US)
STAR	TUXXI			KPBI	WEST PALM BEACH	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. CHANGED FACILITIES USED TO ESTABLISH FIX COORDINATES FROM TREASURE (TRV) & PALM BEACH (PBI) TO TREASURE (TRV) & PAHOKEE (PHK) DUE TO MIN DIVERGENCE ANGLE.
2. REDESIGNATED FAC1 FROM PALM BEACH (PBI) TO TREASURE (TRV).
3. REDESIGNATED FAC3 FROM TREASURE (TRV) TO PALM BEACH (PBI).
4. FIX MOVED 33.02FT NW.
5. ADDED 3 MORE TUXXI STARS TO FIX USE.

DEVELOPED BY:

DATE: 04/25/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: PBI APP CON
OTHER:

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: TREASURE VORTAC

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 274042.33N/0802923.01W

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	TREASURE	TRV	VORTAC	H							45000

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	N	TRV	VORTAC	347.04	167.04	L	1-1 1/2		10000	24000	9	19
2	N	TRV	VORTAC	348.00	168.00	R	1-1 1/2		2000	24000	4	19
3	NW	TRV	VORTAC	336.95	156.95	R	1		2000	6000	4	5
4	S	TRV	VORTAC	167.05	347.05	R	1		2000	6000	4	5
5	N	WP	WP	348.10	168.10	L		10	10000	16000	15	16

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (12-002803)	274408.00N/0802726.00W	524	5D
2	200	TOWER (12-002803)	274408.00N/0802726.00W	524	5D
3	200	TOWER (12-002803)	274408.00N/0802726.00W	524	5D
4	200	TOWER (12-002803)	274408.00N/0802726.00W	523	5D
5	230	TOWER (12-002803)	274408.00N/0802726.00W	524	5D

REASON FOR NONSTANDARD HOLDING:

PAT 5 ATC REQUEST
PAT 1 AVOID ADJACENT AIRSPACE

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVAL COMPLETED.
PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER W-497B.
PAT 2 HOLDING ATC REQUEST.
PAT 4 ALTERNATE MISSED APPROACH HOLDING. (DO NOT CHART)

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MELBOURNE			KMLB	MELBOURNE	FL (US)
DP	CITRUS			KMCO	ORLANDO	FL (US)
DP	ORLANDO			KMCO	ORLANDO	FL (US)
DP	SANFORD			KSFB	ORLANDO	FL (US)
DP	PALM BEACH			KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	BR62V					(US)
EN ROUTE	J45					(US)
EN ROUTE	J79					(US)
EN ROUTE	V159					(US)
EN ROUTE	V225					(US)
EN ROUTE	V295					(US)
EN ROUTE	V3					(US)
EN ROUTE	V51					(US)
EN ROUTE	V537					(US)
IAP	ILS OR LOC RWY 10R			KFPR	FORT PIERCE	FL (US)
IAP	NDB RWY 28L			KFPR	FORT PIERCE	FL (US)
IAP	RNAV (GPS) RWY 10R			KFPR	FORT PIERCE	FL (US)
IAP	RNAV (GPS) RWY 28L			KFPR	FORT PIERCE	FL (US)
IAP	VOR/DME RWY 14		3	KFPR	FORT PIERCE	FL (US)
IAP	ILS OR LOC RWY 09R			KMLB	MELBOURNE	FL (US)
IAP	LOC BC RWY 27L			KMLB	MELBOURNE	FL (US)
IAP	RNAV (GPS) RWY 09L			KMLB	MELBOURNE	FL (US)
IAP	RNAV (GPS) RWY 09R			KMLB	MELBOURNE	FL (US)
IAP	RNAV (GPS) RWY 27L			KMLB	MELBOURNE	FL (US)
IAP	RNAV (GPS) RWY 27R			KMLB	MELBOURNE	FL (US)
IAP	RNAV (GPS) RWY 14			KOBE	OKEECHOBEE	FL (US)
IAP	RNAV (GPS) RWY 23			KOBE	OKEECHOBEE	FL (US)
IAP	RNAV (GPS) RWY 5			KX26	SEBASTIAN	FL (US)
IAP	VOR RWY 12R			KVRB	VERO BEACH	FL (US)
IAP	VOR/DME RWY 30L			KVRB	VERO BEACH	FL (US)
IAP	ILS OR LOC RWY 8R			KF45	WEST PALM BEACH	FL (US)
IAP	ILS OR LOC RWY 10L		4	KPBI	WEST PALM BEACH	FL (US)
STAR	GOOFY			KX04	APOPKA	FL (US)
STAR	CAYSL (RNAV)			KBCT	BOCA RATON	FL (US)
STAR	TUXXI			KBCT	BOCA RATON	FL (US)
STAR	BLUFI			KFLL	FORT LAUDERDALE	FL (US)

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STAR	FISEL (RNAV)		KFLL	FORT LAUDERDALE	FL (US)
STAR	GISSH		KFLL	FORT LAUDERDALE	FL (US)
STAR	BLUFI		KFXE	FORT LAUDERDALE	FL (US)
STAR	FISEL (RNAV)		KFXE	FORT LAUDERDALE	FL (US)
STAR	GISSH		KFXE	FORT LAUDERDALE	FL (US)
STAR	SHFTY (RNAV)		KFMY	FORT MYERS	FL (US)
STAR	BLUFI		KHWO	HOLLYWOOD	FL (US)
STAR	FISEL (RNAV)		KHWO	HOLLYWOOD	FL (US)
STAR	GISSH		KHWO	HOLLYWOOD	FL (US)
STAR	ANNEY	1	KHST	HOMESTEAD	FL (US)
STAR	BLUFI		KHST	HOMESTEAD	FL (US)
STAR	HILEY (RNAV)	5	KHST	HOMESTEAD	FL (US)
STAR	ANNEY	1	KX51	HOMESTEAD	FL (US)
STAR	BLUFI		KX51	HOMESTEAD	FL (US)
STAR	HILEY (RNAV)	5	KX51	HOMESTEAD	FL (US)
STAR	FRWAY (RNAV)		K06FA	JUPITER	FL (US)
STAR	TUXXI		K06FA	JUPITER	FL (US)
STAR	ANNEY	1	K07FA	KEY LARGO	FL (US)
STAR	BLUFI		K07FA	KEY LARGO	FL (US)
STAR	HILEY (RNAV)	5	K07FA	KEY LARGO	FL (US)
STAR	BAIRN (RNAV)		KLEE	LEESBURG	FL (US)
STAR	GOOFY		KLEE	LEESBURG	FL (US)
STAR	GOOFY		KCOI	MERRITT ISLAND	FL (US)
STAR	ANNEY	1	KMIA	MIAMI	FL (US)
STAR	BLUFI		KMIA	MIAMI	FL (US)
STAR	HILEY (RNAV)	5	KMIA	MIAMI	FL (US)
STAR	BLUFI		KOPF	MIAMI	FL (US)
STAR	FISEL (RNAV)		KOPF	MIAMI	FL (US)
STAR	GISSH		KOPF	MIAMI	FL (US)
STAR	ANNEY	1	KTMB	MIAMI	FL (US)
STAR	BLUFI		KTMB	MIAMI	FL (US)
STAR	HILEY (RNAV)	5	KTMB	MIAMI	FL (US)
STAR	BAIRN (RNAV)		KISM	ORLANDO	FL (US)
STAR	GOOFY		KISM	ORLANDO	FL (US)
STAR	BAIRN (RNAV)		KMCO	ORLANDO	FL (US)
STAR	GOOFY		KMCO	ORLANDO	FL (US)
STAR	BAIRN (RNAV)		KORL	ORLANDO	FL (US)
STAR	GOOFY		KORL	ORLANDO	FL (US)
STAR	BAIRN (RNAV)		KSFB	ORLANDO	FL (US)
STAR	GOOFY		KSFB	ORLANDO	FL (US)
STAR	BLUFI		KPMP	POMPANO BEACH	FL (US)
STAR	FISEL (RNAV)		KPMP	POMPANO BEACH	FL (US)
STAR	GISSH		KPMP	POMPANO BEACH	FL (US)
STAR	GOOFY		KTIX	TITUSVILLE	FL (US)
STAR	FRWAY (RNAV)		KF45	WEST PALM BEACH	FL (US)
STAR	TUXXI		KLNA	WEST PALM BEACH	FL (US)
STAR	FRWAY (RNAV)		KPBI	WEST PALM BEACH	FL (US)
STAR	TUXXI		KPBI	WEST PALM BEACH	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 20

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. DELETED KFMY STAR TYNEE FROM FIX USE.
2. ADDED TUXXI STAR TO FIX USE FOR K06FA, KLNA, & KBCT.
3. UPDATED HOLDING PAT4 FROM 123.00 TO 347.05 COURSE INBOUND.
4. INCREASED HOLDING PAT1 AIRSPEED FROM 200 TO 230 KIAS.
5. UPDATED HOLDING PAT4 CONTROLLING OBSTACLE FROM TOWER 12-003485 398 MSL TO TOWER 12-002803 524 MSL.

DEVELOPED BY: **DATE:** 04/26/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY: **DATE:**

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: EST
ARTCC: ZMA
ATC FACILITY: VRB ATCT
OTHER: DAB APP CON/MLB TWR

QUALITY
13
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: VIRGINIA KEY VOR/DME

STATE: FL

COUNTRY: US

LATITUDE/LONGITUDE: 254506.84N/0800915.99W

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	FAC FEET	MRA	MAA
1	VIRGINIA KEY	VKZ	VOR/DME	H							45000

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	VKZ	VOR/DME	120.00	300.00	L	1		2100	6000	4	5
2	SE		WP	120.00	300.00	L		4	3000	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (12-026968)	254643.83N/0801100.95W	1000	4D
1	310	TOWER (12-026968)	254643.83N/0801100.95W	1000	4D
2	200	TOWER (12-026968)	254643.83N/0801100.95W	1000	4D
2	310	TOWER (12-026968)	254643.83N/0801100.95W	1000	4D

REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUESTED
PAT 2 ATC REQUESTED.

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 9	KMIA	MIAMI	FL (US)
1	ILS OR LOC RWY 8R	KMIA	MIAMI	FL (US)
2	RNAV (RNP) Y RWY 12	KMIA	MIAMI	FL (US)
2	RNAV (GPS) Z RWY 12	KMIA	MIAMI	FL (US)
2	RNAV (RNP) Y RWY 8R	KMIA	MIAMI	FL (US)
2	RNAV (GPS) RWY 9	KMIA	MIAMI	FL (US)

REMARKS:

PAT 1 & 2 MAXIMUM PROPOSED BLDG HEIGHT 1010 MSL BY ZONING CODE PER EST FPO.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	FT. LAUDERDALE			KFLL	FORT LAUDERDALE	FL (US)
DP	FT. LAUDERDALE			KFXE	FORT LAUDERDALE	FL (US)
DP	MIAMI			KHWO	HOLLYWOOD	FL (US)
DP	EONNS (RNAV)			KMIA	MIAMI	FL (US)
DP	JONZI (RNAV)			KMIA	MIAMI	FL (US)
DP	MIAMI			KMIA	MIAMI	FL (US)
DP	MNATE (RNAV)			KMIA	MIAMI	FL (US)
DP	POTTR			KMIA	MIAMI	FL (US)
DP	SKIPS			KMIA	MIAMI	FL (US)
DP	SOUBY			KMIA	MIAMI	FL (US)
DP	MIAMI			KOPF	MIAMI	FL (US)
DP	MIAMI			KTMB	MIAMI	FL (US)
DP	FT. LAUDERDALE			KPMP	POMPANO BEACH	FL (US)
DP	PALM BEACH			KPBI	WEST PALM BEACH	FL (US)
EN ROUTE	AR11					(US)
EN ROUTE	AR17					(US)
EN ROUTE	BR53V					(US)
EN ROUTE	BR64V					(US)
EN ROUTE	BR66V					(US)
EN ROUTE	G430					(US)
EN ROUTE	J45					(US)
EN ROUTE	V159					(US)
EN ROUTE	V295					(US)
EN ROUTE	J113					FL (US)
IAP	ILS OR LOC RWY 28R			KFLL	FORT LAUDERDALE	FL (US)
IAP	ILS OR LOC RWY 9			KFXE	FORT LAUDERDALE	FL (US)
IAP	ILS OR LOC RWY 12		1	KMIA	MIAMI	FL (US)
IAP	ILS OR LOC RWY 26L			KMIA	MIAMI	FL (US)
IAP	ILS OR LOC RWY 27		1	KMIA	MIAMI	FL (US)
IAP	ILS OR LOC RWY 30 (ALT MA)			KMIA	MIAMI	FL (US)
IAP	ILS OR LOC RWY 8R		1	KMIA	MIAMI	FL (US)
IAP	ILS OR LOC RWY 9		1	KMIA	MIAMI	FL (US)
IAP	RNAV (GPS) RWY 9		2	KMIA	MIAMI	FL (US)

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IAP	RNAV (GPS) Z RWY 12	2	KMIA	MIAMI	FL (US)
IAP	RNAV (GPS) Z RWY 8R	2	KMIA	MIAMI	FL (US)
IAP	RNAV (RNP) Y RWY 12	2	KMIA	MIAMI	FL (US)
IAP	RNAV (RNP) Y RWY 8R	2	KMIA	MIAMI	FL (US)
IAP	ILS OR LOC RWY 27R		KOPF	MIAMI	FL (US)
IAP	ILS OR LOC RWY 9R	1	KTMB	MIAMI	FL (US)
IAP	RNAV (GPS) RWY 9L		KTMB	MIAMI	FL (US)
IAP	RNAV (GPS) RWY 9R		KTMB	MIAMI	FL (US)
STAR	BLUFI		KFLL	FORT LAUDERDALE	FL (US)
STAR	GISSH		KFLL	FORT LAUDERDALE	FL (US)
STAR	BLUFI		KFXE	FORT LAUDERDALE	FL (US)
STAR	GISSH		KFXE	FORT LAUDERDALE	FL (US)
STAR	BLUFI		KHWO	HOLLYWOOD	FL (US)
STAR	GISSH		KHWO	HOLLYWOOD	FL (US)
STAR	ANNEY		KHST	HOMESTEAD	FL (US)
STAR	BLUFI		KHST	HOMESTEAD	FL (US)
STAR	ANNEY		KX51	HOMESTEAD	FL (US)
STAR	BLUFI		KX51	HOMESTEAD	FL (US)
STAR	ANNEY		K07FA	KEY LARGO	FL (US)
STAR	BLUFI		K07FA	KEY LARGO	FL (US)
STAR	ANNEY		KMIA	MIAMI	FL (US)
STAR	FOWEE		KMIA	MIAMI	FL (US)
STAR	BLUFI		KOPF	MIAMI	FL (US)
STAR	GISSH		KOPF	MIAMI	FL (US)
STAR	ANNEY		KTMB	MIAMI	FL (US)
STAR	BLUFI		KTMB	MIAMI	FL (US)
STAR	BLUFI		KPMP	POMPANO BEACH	FL (US)
STAR	GISSH		KPMP	POMPANO BEACH	FL (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11

DATE OF REVISION: 09/15/2016

REASON FOR REVISION:

1. DELETED ENROUTE J20 FROM FIX USE.
2. DELETED TWO KFLL IAPS FROM FIX USE: ILS OR LOC RWY 10L & LOC/DME RWY 13.
3. DELETED KMIA IAP RNAV (GPS) RWY 8L FROM FIX USE.
4. DELETED KMIA STAR FLIPR (RANV) FROM FIX USE.
5. DELETED KMCO STAR GOOFY FROM FIX USE.
6. HOLDING CONTROLLING OBSTACLE UPDATED.
7. MODIFIED REMARKS TO BE MORE CONCISE.
8. INCREASED HOLDING PAT2 MIN ALTITUDE FROM 2100 TO 3000.

DEVELOPED BY: **DATE:** 04/26/2016

OFFICE: AJV-5412

NAME: MARK CIARLONE

APPROVED BY: **DATE:**

OFFICE: AJV-5410

NAME: MARLON ROBINSON

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: EST
ARTCC: ZMA
ATC FACILITY: MIA APP CON
OTHER:

QUALITY
13
CHECKED