

RADIO FIX AND HOLDING DATA RECORD

NAME: BACAC

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 260649.36N/0973114.86W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
IAP

USE TITLE

RNAV (GPS) RWY 13

FAC

PAT

AIRPORT IDENT

KBRO

CITY

BROWNSVILLE

STATE

TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 05/26/2016

REASON FOR REVISION:

UPDATED FIX USE - CHANGED SIAP NAME FROM RUNWAY 13R TO 13 - PARALLEL RUNWAY CLOSED PERMANENTLY AT KBRO

DEVELOPED BY:

DATE: 06/17/2015

OFFICE: AJV-5422

NAME: JOHN ROSARIO

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC

FPO: CEN

ARTCC: ZHU

ATC FACILITY: BRO ATCT

OTHER: VALLEY APP CON



RADIO FIX AND HOLDING DATA RECORD

NAME: BROWNSVILLE VORTAC

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 255526.67N/0972230.98W

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	BROWNSVILLE	BRO	VORTAC	H						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	NE	BRO	VORTAC	062.00	242.00	R	1		1900	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-008391)	255749.00N/0971432.00W	400	5D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED
PAT 1 PER ATC REQUEST

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	J25					(US)
EN ROUTE	V13					(US)
EN ROUTE	V163					(US)
EN ROUTE	V17					(US)
EN ROUTE	V407					(US)
EN ROUTE	V70					(US)
IAP	ILS OR LOC RWY 13			KBRO	BROWNSVILLE	TX (US)
IAP	LOC BC RWY 31			KBRO	BROWNSVILLE	TX (US)
IAP	RNAV (GPS) RWY 13			KBRO	BROWNSVILLE	TX (US)
IAP	VOR OR TACAN -A		1	KBRO	BROWNSVILLE	TX (US)
IAP	LOC/DME BC RWY 35L			KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) RWY 35R			KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) Y RWY 35L			KHRL	HARLINGEN	TX (US)
IAP	VOR/DME RWY 35L			KHRL	HARLINGEN	TX (US)
IAP	VOR/DME Y OR TACAN RWY 31			KHRL	HARLINGEN	TX (US)
IAP	VOR/DME Z RWY 31			KHRL	HARLINGEN	TX (US)
IAP	VOR-A			KPIL	PORT ISABEL	TX (US)
IAP	VOR/DME-B			KPIL	PORT ISABEL	TX (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8

DATE OF REVISION: 05/26/2016

REASON FOR REVISION:

UPDATED FIX USE - KBRO RUNWAY NUMBERS CHANGED FROM 13R/31L TO 13/31 - RUNWAY 13L/31R CLOSED PERMANENTLY

DEVELOPED BY: DATE: 06/18/2015

OFFICE: AJV-5422

NAME: JOHN ROSARIO

APPROVED BY: DATE:

OFFICE: AJV-5420

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: BRO ATCT
OTHER: VALLEY APPROACH

QUALITY
22
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FIRTA

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 260317.84N/0973511.84W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	NW		WP	312.32	132.32	L	4	2000	6000	4	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-007992)	260303.00N/0973111.00W	549	5D

REASON FOR NONSTANDARD HOLDING:

PAT 1 AVOID MEXICAN BORDER

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 13		1	KBRO	BROWNSVILLE	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 05/26/2016

REASON FOR REVISION:

UPDATED FIX USE - CHANGED SIAP NAMES FROM RUNWAY 13R AND 31L TO 13 AND 31 - PARALLEL RUNWAY CLOSED PERMANENTLY AT KBRO

DELETED KBRO RNAV (GPS) RWY 31L FROM FIX USE - APPROACH DOES NOT EXIST

UPDATED FAC2 MAG BRG FROM 308.39 TO 312.39 - AIRPORT MAG VAR UPDATED FROM 7E TO 3E

UPDATED HOLDING PATTERN INBOUND HEADING FROM 128.39 TO 132.39 - AIRPORT MAG VAR UPDATE

HOLDING RESTRICTIONS - ADDED HOLDING LIMITED NOTE - CRITERIA

REMARKS - ADDED PRECIPITOUS TERRAIN REMARK - CRITERIA

DEVELOPED BY:

DATE: 06/17/2015

OFFICE: AJV-5422

NAME: JOHN ROSARIO

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: BRO ATCT
OTHER: VALLEY APP CON

QUALITY
22
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HARLINGEN VOR/DME

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 261345.21N/0973908.15W

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 FEET	MAA
1	HARLINGEN	HRL	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	S	HRL	VOR/DME	160.00	340.00	R	1		2000	14000	4	10
2	N	HRL	VOR/DME	013.00	193.00	R	1		1600	14000	4	10
3	S	HRL	VOR/DME	188.00	008.00	L	1		2000	14000	4	10
4	NW	HRL	VOR/DME	326.00	146.00	R	1		2000	14000	4	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-009045)	260920.52N/0974129.16W	533	2C
2	200	WINDMILL (48-026545)	261931.46N/0973845.92W	524	5D
3	200	TOWER (48-009045)	260920.52N/0974129.16W	533	2C
4	200	TOWER (48-010518)	261449.86N/0974622.38W	529	2C

REASON FOR NONSTANDARD HOLDING:

PAT 3 FLIGHT CHECK REQUESTED

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V17, V407					
IAP	ILS OR LOC RWY 13		4	KBRO	BROWNSVILLE	TX (US)
IAP	RNAV (GPS) RWY 13			KBRO	BROWNSVILLE	TX (US)
IAP	ILS OR LOC RWY 17R			KHRL	HARLINGEN	TX (US)
IAP	VOR/DME RWY 17L		3	KHRL	HARLINGEN	TX (US)
IAP	VOR/DME RWY 17R		1	KHRL	HARLINGEN	TX (US)
IAP	VOR/DME RWY 35L		2	KHRL	HARLINGEN	TX (US)
IAP	VOR/DME Z RWY 31		4	KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) RWY 13			KPIL	PORT ISABEL	TX (US)
IAP	VOR-A			KPIL	PORT ISABEL	TX (US)
IAP	VOR/DME-B			KPIL	PORT ISABEL	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12

DATE OF REVISION: 05/26/2016

REASON FOR REVISION:

UPDATED FIX USE - CHANGED KBRO IAP'S RUNWAY NUMBER FROM 13R TO 13 - RUNWAY 13L/31R CLOSED PERMANENTLY, RUNWAY 13R/31L RENUMBERED TO 13/31

FIX USE - REMOVED FAC 1 - NOT REQUIRED

DEVELOPED BY:

DATE: 06/18/2015

OFFICE: AJV-5422

NAME: JOHN ROSARIO

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: HRL ATCT, VALLEY APP CON, BRO ATCT
OTHER:

QUALITY
22
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: RELAX

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 261529.69N/0972312.66W

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 NM	FAC FEET	MRA	MAA
1	BROWNSVILLE	BRO	VORTAC	H	349.21	358.21	20.00	20.00		1800	17500
2	HARLINGEN	HRL	VOR/DME	L	078.03	083.03		14.42		1800	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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	N	BRO	VORTAC	349.21	169.21	L	1		2000	14000	4	11
2	N		WP	349.20	169.20	L		4	2000	14000	4	11
3	N		WP	355.21	175.21	L		4	1900	14000	4	11
4	N		WP	353.21	173.21	L		4	2000	14000	4	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-013761)	261931.00N/0972526.00W	510	5D
2	200	TOWER (48-013761)	261931.00N/0972526.00W	510	5D
3	200	TOWER (48-013761)	261931.00N/0972526.00W	510	5D
4	200	TOWER (48-013761)	261931.00N/0972526.00W	510	5D

REASON FOR NONSTANDARD HOLDING:

PAT 1 PROVIDE PROTECTION FROM V70
 PAT 2 PROVIDE PROTECTION FROM V70
 PAT 3 PROVIDE PROTECTION FROM V70
 PAT 4 PROVIDE PROTECTION FROM V70.

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

HARLINGEN (FAC 2) AND BROWNSVILLE (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	V163	1, 2				(US)
IAP	ILS OR LOC RWY 13	1, 2		KBRO	BROWNSVILLE	TX (US)
IAP	RNAV (GPS) RWY 13			KBRO	BROWNSVILLE	TX (US)
IAP	RNAV (GPS) RWY 18		3	KBRO	BROWNSVILLE	TX (US)
IAP	RNAV (GPS) RWY 17L		2	KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) RWY 35R			KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) Y RWY 17R		4	KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) Y RWY 31			KHRL	HARLINGEN	TX (US)
IAP	RNAV (GPS) Y RWY 35L			KHRL	HARLINGEN	TX (US)
IAP	RNAV (RNP) Z RWY 17R		4	KHRL	HARLINGEN	TX (US)
IAP	VOR-A	1, 2	1	KPIL	PORT ISABEL	TX (US)
IAP	VOR/DME-B	1, 2	1	KPIL	PORT ISABEL	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14

DATE OF REVISION: 05/26/2016

REASON FOR REVISION:

UPDATED FIX USE - CHANGED RUNWAY NUMBERS OF KBRO IAP'S - MAG VAR UPDATE AT KBRO CAUSED RUNWAY NUMBER CHANGE FROM 17/35 TO 18/36; RWY 13L/31R CLOSED PERMANENTLY, RUNWAY 13R/31L RENUMBERED TO 13/31
 HOLDING PATTERN 3 - UPDATED CRS INBOUND FROM 171.21 TO 175.21 - MAG VAR UPDATE

DEVELOPED BY: DATE: 06/18/2015 OFFICE: AJV-5422 NAME: JOHN ROSARIO

APPROVED BY: DATE: OFFICE: AJV-5420 NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION: NFDC
 FPO: CEN
 ARTCC: ZHU

QUALITY
22
CHECKED

ATC FACILITY: VALLEY APP CON, BRO ATCT
OTHER:



RADIO FIX AND HOLDING DATA RECORD

NAME: SANUE

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 255852.01N/0973021.10W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
IAP

USE TITLE
RNAV (GPS) RWY 13

FAC

PAT

AIRPORT IDENT
KBRO

CITY
BROWNSVILLE

STATE
TX (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 05/26/2016

REASON FOR REVISION:

UPDATED FIX USE - CHANGED IAP RUNWAY NUMBER FROM 13R TO 13 - RUNWAY 13L/31R CLOSED PERMANENTLY; RUNWAY 13R/31L RENUMBERED 13/31.

DEVELOPED BY:

DATE: 06/18/2015

OFFICE: AJV-5422

NAME: JOHN ROSARIO

APPROVED BY:

DATE:

OFFICE: AJV-5420

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: BRO ATCT, VALLEY APP CON
OTHER:

QUALITY
22
CHECKED