

# 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



# RADIO FIX AND HOLDING DATA RECORD

NAME: CFBRN

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 260318.77N/0973512.66W

TYPE: CNF

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE  
IAP

USE TITLE  
ILS OR LOC RWY 13

FAC

PAT

AIRPORT IDENT  
KBRO

CITY  
BROWNSVILLE

STATE  
TX (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

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: VALLEY APP CON  
OTHER:

QUALITY  
22  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: DEPOO LOM

STATE: TX

COUNTRY: US

LATITUDE/LONGITUDE: 255901.81N/0973031.71W

TYPE: 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	FAC FEET	MRA	MAA
1	DEPOO	BR	LOM								6000
2	BROWNSVILLE	I-BRO	LOC/DME		312.40	319.40	7.34	7.36		1900	4500

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	BR	LOM	312.40	132.40	L	1	1900 6000	4 5

## 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 AIRSPACE

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

## REMARKS:

COORDINATES REFLECT LOCATION ON LOC/AZ CENTERLINE ABEAM THE DEPOO OM.  
ACTUAL FACILITY LOCATION IS 255900.96N/0973032.66W.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED  
DME COORDINATES: 255345.29N/0972450.59W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 13	1, 2		KBRO	BROWNSVILLE	TX (US)
IAP	LOC BC RWY 31	1	1	KBRO	BROWNSVILLE	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

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  
UPDATED FAC2 MAG BRG FROM 308.39 TO 312.40 - AIRPORT MAG VAR UPDATED FROM 7E TO 3E  
UPDATED HOLDING PATTERN HEADING FROM 128.39 INBOUND TO 132.40 - AIRPORT MAG VAR UPDATE

DEVELOPED BY: DATE: 10/05/2015 OFFICE: AJV-5422 NAME: JOHN ROSARIO

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

SIGNATURE:

DISTRIBUTION:

NFDC  
FPO: CEN  
ARTCC: ZHU  
ATC FACILITY: KBRO 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 ALTITUDES MIN	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:**

