

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR OR TACAN STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>		
HRL	VOR Y OR TACAN RWY 31	2	HARLINGEN	TX		
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
36	36	VOR/DME Y OR TACAN RWY 31	1B	10/08/2020	9E	1965
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>		
BRO		11 JULY 2024	07/11/2024			

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
BRO VORTAC		ZOCKE/11.99 DME					311.16	11.99	2000
ZOCKE/11.99 DME	IF/IAF	RECOL/18.00 DME					311.16	6.01 (BRO R-311)	1700

MISSED APPROACH

MAP:

TOVBE/23.00 DME

MISSED APPROACH INSTRUCTIONS:

CLIMBING RIGHT TURN TO 2000 ON BRO R-311 TO ZOCKE/11.99 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
2. HOLD SE ZOCKE/11.99 DME, RT, 311.16 INBOUND, 2000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 311.16 **FAF:** RECOL/18.00 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 5.00
4. **MIN ALT:** ZOCKE/11.99 DME 2000, RECOL/18.00 DME 1700
8. **MSA FROM:** BRO VORTAC 240-360 2600, 360-240 1600

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BRO VORTAC AIRWAY RADIALS 258 CW 349.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PORT ISABEL ALTIMETER SETTING AND INCREASE ALL MDAS 60 FEET.

ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 376 TOWER (48-195046) 260801N/0973650W.
FAC CROSSES RWY C/L EXTENDED 832 FT FROM THLD.
RECOL TO RW31: 3.03/55.
CHART CIRCLING ICON.



MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA CAT A, B 1000-2, CAT C, D 1000-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-31	1000	3/4	964	1000	1	964	1000	2 1/2	964	1000	2 1/2	964			
CIRCLING	1000	1 1/4	964	1000	1 1/2	964	1000	3	964	1000	3	964			

CHANGES - REASONS

- TERMINAL ROUTES: SEGMENT ZOCKE TO RECOL, CHANGED FROM "ZOCKE" TO "ZOCKE/11.99 DME," ADDED (IF/IAF), CHANGED FROM "RECOL/17.99" TO "RECOL/18.00 DME", AND CHANGED DISTANCE FROM "6.00" TO "6.01" – HIL REQUIRES IF/IAF DESIGNATION/RECOL FIX MOVED.
- MISSED APPROACH INSTRUCTIONS: CHANGED FROM "CLIMBING RIGHT TURN TO 2000 VIA BRO R-311 TO ZOCKE/11.99 DME AND HOLD" TO "CLIMBING RIGHT TURN TO 2000 ON BRO R-311 TO ZOCKE/11.99 DME AND HOLD" – CURRENT FORMAT.
- EQUIPMENT REQUIREMENTS: ADDED "DME REQUIRED" – CURRENT NAMING CONVENTION.
- PROFILE LINE 1: REMOVED "PT NA" – NO LONGER REQUIRED.
- PROFILE LINE 2: ADDED "MAX 6000" – MAX ALTITUDE REQUIRED.
- PROFILE LINE 3: FAF CHANGED FROM "RECOL" TO "RECOL/18.00 DME," AND CHANGED DIST FAF TO THLD FROM "5.01" TO "5.00" – CURRENT FORMAT/RECOL MOVED.
- PROFILE LINE 4: MIN ALTITUDE CHANGED FROM "ZOCKE 2000, RECOL 1700" TO "ZOCKE/11.99 DME 2000, RECOL/18.00 DME 1700" – FIX RECOL MOVED/CURRENT FORMAT.
- PROFILE LINE 8: CHANGED MSA FROM "BRO VORTAC 360-240 1500, 240-360 2600" TO "BRO VORTAC 360-240 1600, 240-360 2600" – NEW CONTROLLING OBSTACLE.
- NOTES: ADDED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON BRO VORTAC AIRWAY RADIALS 258 CW 349" – TURNS GREATER THAN 120 DEGREES.
- ADDITIONAL FLIGHT DATA: CHANGED CHART FAS OBSTACLE FROM "306 TOWER 261245 / 0973517" TO "376 TOWER (48-195046) 260801N/0973650W" – NEW CONTROLLING OBSTACLE/NEW AIRPORT SURVEY.
- ADDITIONAL FLIGHT DATA: ADDED "FAC CROSSES RWY C/L EXTENDED 832 FT FROM THLD" – IAW 8260.191 8-6-10. G. (2).
- ADDITIONAL FLIGHT DATA: REMOVED MA HOLDING "HOLD SE, RT 311.161NBOUND" – SAME AS HOLD-IN-LIEU, NOT REQUIRED TO DOCUMENT HERE IAW 8460.19, 8-6-6. G.
- MINIMUMS: S-31 VISIBILITIES CAT A CHANGED FROM "1 1/4" TO "3/4", CAT B CHANGED FROM "1 1/2" TO "1", CATS C/D CHANGED FROM "3" TO "2 1/2" – CURRENT VIS CHARTS.

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZHU, HRL ATCT, VALLEY APP CON, AMGR

FLIGHT CHECKED BY

PENDING

Digitally signed by
CASIMIR L TABAKA
Apr 08, 2024

OFFICE

DATE

DEVELOPED BY

APRIL SARMENTO

Digitally signed by
APRIL T SARMENTO
Mar 29, 2024

OFFICE

AJV-A432

DATE

01/29/2024

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by
CASIMIR L TABAKA
Apr 08, 2024

OFFICE

AJV-A432

DATE

TITLE
MANAGER

