RADIO AIDS TO NAVIGATION

All IFR radio NAVAIDs that have been flight checked and are operational are shown on all IFR Enroute Charts. Very High Frequency/Ultrahigh Frequency (VHF/UHF) NAVAIDs, Very high frequency Omnidirectional Radio range (VORs), Tactical Air Navigation (TACANs) are shown in black, and Low Frequency/Medium Frequency (LF/MF) NAVAIDs, (Compass Locators and Aeronautical or Marine NDBs) are shown in brown.

On IFR Enroute Charts, information about NAVAIDs is boxed as illustrated below. To avoid duplication of data, when two or more NAVAIDs in a general area have the same name, the name is usually printed only once inside an identification box with the frequencies, TACAN channel numbers, identification letters, or Morse Code Identifications of the different NAVAIDs are shown in appropriate colors.

NAVAIDs in a shutdown status have the frequency and channel number crosshatched. Use of the NAVAID status "shutdown" is only used when a facility has been decommissioned but cannot be published as such because of pending airspace actions.

NAVIGATION AND COMMUNICATION BOXES - COMMON ELEMENTS	
LOW ENROUTE CHARTS	HIGH ENROUTE CHARTS
RCO Frequencies NAVAID Name FREQ, Ident, CH, Morse Code Latitude, Longitude Controlling FSS Name 000.0 NAME 000.0 IDT 000 :: N00°00.00 W000°00.00 NAME NAME NAME	RCO Frequencies NAVAID Name Frequency, Ident, Channel, Latitude, Longitude Controlling FSS Name 000.0 NAME 000.0 IDT 000 N00°00.00' W000°00.00' NAME NAME
COMMON ELEMENTS (HIGH AND LOW CHARTS)	
RCO FREQUENCY Single Frequency Multiple Frequencies	122.6
Frequencies transmit and receive except those followed by R and T: R - Receive Only T - Transmit Only	255.4 243.0 123.6 122.65 122.2 122.1R 121.5
NAVAID BOX Thin line NAVAID boxes without frequency(s) and FSS radio name indicates no FSS frequencies available.	VHF/UHF LF/MF
Shadow NAVAID box indicates NAVAID and Flight Service Station (FSS) have same name.	
FREQUENCY PROTECTION	
Frequency Protection usable range at 18,000' AGL - 40 NM	(L)
Frequency Protection usable range at 12,000' AGL - 25 NM	(T)
DISTANCE MEASURING EQUIPMENT	
Facilities that operate in the "Y" mode for DME reception	(Y)
VOICE COMMUNICATIONS VIA NAVAID	
Voice Transmitted	112.6
No Voice Transmitted	<u>111.0</u>
NAVAID SHUTDOWN STATUS	VHF/UHF LF/MF
PART TIME OR ON-REQUEST	VHF/UHF LF/MF ★ ★