

Chapter 2 Procedures and Practices

[5 Exam Questions - 5 Groups] G2

Operating Rules

No one has priority access to frequencies, common courtesy should be a guide

Acknowledge a station in **distress** and determine **what assistance** may be needed

If you notice **increasing interference** from another station **move to another frequency**

Avoid harmful interference >> ask if the **frequency is in use**, followed by your **call sign**

Avoid harmful interference >> Send "**QRL?**" on CW, followed by your **call sign**

Follow the voluntary band plan for the operating mode you intend to use

"**CQ DX**" is looking for any station **outside their own country**

Break into phone by **saying call sign during a break** between other stations

RACES = Radio Amateur Civil Emergency Service

Service using **amateur stations** for emergency management or civil defense communications

The **FCC may restrict amateurs participating in RACES** when **War Emergency Powers** are invoked

When normal communications systems are not available an **amateur station** may **use any means** of radio communications at its disposal for essential communications in connection with immediate safety of **human life** and **protection of property**

The **Amateur Auxiliary** to the FCC are volunteers who **monitor for rules violations**

The Amateur Auxiliary **encourages self regulation**

DF skills are used to locate stations violating FCC Rules

Amateurs may communicate with any country **except those that object to the ITU**

Log Contact >> **Date, Time, Freq, Call Sign RST**

Why keep a log >> **To help with a reply if the FCC requests information**

60M other than a dipole antenna, you must **keep a record of the antenna gain**

A **unidirectional** (i.e. Beam) antenna is better for **minimizing interference**

"**LONG-PATH**" is opposite direction **180 degrees** from its **short-path heading**

A world map projection centered on a particular location is an **Azimuthal Projection map**

Digital Messages

RTTY means **Radioteletype**

RTTY uses a **170 Hz** frequency shift

LSB is used with **RTTY** via **AFSK** with an SSB transmitter

The **number of bits** varies data bits in a **PSK31 character**

The **Header** of a data packet contains the **routing and handling information**

Baudot code is a **5-bit code** with additional start and stop bits

Request the packet be **retransmitted** if **ARQ data mode packet contains errors**

Request the packet be **retransmitted** is meant by an **NAK response** to a transmitted packet

"**MFSK**" means Multi (or Multiple) Frequency Shift Keying

MFSK16 best choice in **weak signal** environments

14.070 - 14.100 MHz of the 20M is used for **data**

80M is frequency used for **data = 3570 – 3600 kHz**

20M is frequency used for **PSK-31 = 14.070 MHz**

SSB > Single Sideband is a form of Amplitude Modulated (AM) Signal

Most often used for **HF Voice**

USB is normally used for 30M (**10 MHz up**), VHF and UHF SSB

LSB is normally used for 40M & down (**7 MHz down**)

SSB uses **Less bandwidth** used and **higher power efficiency**

Only **one sideband is transmitted**; the other sideband **and carrier are suppressed**

SSB **VOX** operation allows "**hands free**" operation

Most often used for weak signal VHF and UHF

SSB **frequency separation** to minimize interference is **3 KHz**

SSB has a narrower (3 KHz) bandwidth than FM

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CW > Send Continuous Wave using; a Straight Key, an Electronic Keyer and a Computer Keyboards
Morse Code is used for CW

Reply to a CQ **at the speed the CQ was sent**

“**ZERO BEAT**” is matching TX frequency to the received signal

CW **frequency separation** to minimize interference is **150 to 500 Hz**

“**C**” added to an **RST** report means **Chirpy** or unstable signal

CW has the narrowest bandwidth (150 Hz)

Abbreviations and "Q" Signals

Can you hear me between your signals >>> **QSK**

I acknowledge receipt >>> **QSL**

I am ready to receive messages >>> **QRV**

Indicates send faster >>> **QSQ**

Indicates send slower >>> **QRS**

Indicates low power operation >>> **QRP**

Indicates that you are receiving interference from other stations >>> **QRM**

Indicates that you are changing frequency >>> **QSY**

Indicates listening only for a specific station >>> **KN**

Indicates Closing station >>> **CL**

Indicates the end of a formal message >>> **AR**