

## General Class Things to Know #2

1. The Upper Sideband is most commonly used for phone communications on the bands above 20 meters.
2. The Lower Sideband is commonly used on the 160, 75, and 40 meter bands.
- 3 The Upper Sideband is commonly used in the VHF and UHF bands.
4. The Upper Sideband is most commonly used for voice communications on the 17 and 12 meter bands.
5. SSB is the mode of voice communication that is most commonly used on the High Frequency Amateur bands.
6. Advantages of using single sideband as compared to other voice modes on the HF amateur bands is that less bandwidth is used and it has high power efficiency.
7. In single sideband (SSB) voice mode only one sideband is transmitted; the other sideband and carrier are suppressed.
8. Single sideband (SSB) voice mode is a form of amplitude modulation in which one sideband and the carrier are suppressed.
9. Most amateur stations use lower sideband on the 160, 75 and 40 meter bands because current amateur practice is to use lower sideband on these frequency bands.
10. In VOX operation, VOX allows "hands free" operation.
11. Anti-VOX, VOX Delay and VOX Sensitivity are all user adjustable controls that are usually associated with VOX circuitry.
12. The recommended way to break into a conversation when using phone is to say your call sign during a break between transmissions from the other stations.
13. The expression "CQ DX" usually indicate that the caller is looking for any station outside their own country.
- 14.** if the frequency on which a net normally meets is in use just before the net begins, the action that should be taken is to ask the stations if the net may use the frequency, or move the net to a nearby clear frequency if necessary.

15. If a net is about to begin on a frequency you and another station are using, you should move to a different frequency as a courtesy to the net.
16. If you notice increasing interference from other activity on a frequency you are using you should move your contact to another frequency.
17. The minimum frequency separation between CW signals that should be allowed to minimize interference is 150 to 500 Hz.
18. The minimum frequency separation between SSB signals that should be allowed to minimize interference is approximately 3 kHz.
19. The minimum frequency separation between 170 Hz shift RTTY signals that should be allowed to minimize interference is 250 to 500 Hz.
20. A band plan is a voluntary guideline for band use beyond the divisions established by the FCC
21. The "DX window" in a voluntary band plan is that portion of the band that should not be used for contacts between stations within the 48 contiguous United States.
22. To comply with good amateur practice when choosing a frequency for Slow-Scan TV (SSTV) operation, you should follow generally accepted band plans for SSTV operation.
23. To comply with good amateur practice when choosing a frequency for radio-teletype (RTTY) operation, you should follow generally accepted band plans for RTTY operation.
24. To comply with good amateur practice when choosing a frequency for HF PSK operation, you should follow generally accepted band plans for PSK operation.
25. A practical way to avoid harmful interference when selecting a frequency to call CQ using phone is to ask if the frequency is in use, say your callsign, and listen for a response.
26. A practical way to avoid harmful interference when calling CQ using Morse code or CW is to send "QRL? de" followed by your callsign and listen for a response.
27. When normal communications systems are not available, an amateur station may use any means of radiocommunication at its disposal to provide essential communications when there is an immediate threat to the safety of human life or the protection of property.
28. Only a person holding an FCC issued amateur operator license may be the control operator of an amateur station transmitting in RACES to assist relief operations during a disaster.

29. The FCC may restrict normal frequency operations of amateur stations participating in RACES when the President's War Emergency Powers have been invoked.

30. An amateur station is never prevented from using any means at its disposal to assist another station in distress.

31. A control operator would be making an unidentified transmission when transmitting out of the amateur band without station identification during a life threatening emergency.

32. The first thing you should do if you are communicating with another amateur station and hear a station in distress break in is to acknowledge the station in distress and determine what assistance may be needed.

33. You are never prohibited from helping any station in distress.

34. An amateur station may make whatever transmissions that is necessary to meet essential communications needs and to facilitate relief actions during a disaster.

35. Any mode of may be used to obtain assistance during a disaster.

36. The location and nature of the emergency is the information that should be given to a station answering a distress transmission.

37. You should use whatever frequency has the best chance of communicating the distress message when sending a distress call.

38. The Amateur Auxiliary to the FCC? Is Amateur volunteers who are formally enlisted to monitor the airwaves for rules violations.

39. The objectives of the Amateur Auxiliary are to encourage amateur self-regulation and compliance with the rules.

40. Direction-finding skills used to locate stations violating FCC Rules are learned during "Fox Hunts" and are of help to the Amateur Auxiliary.

41. An azimuthal projection map is a world map projection centered on a particular location.

42. The most useful type of map to use when orienting a directional HF antenna toward a distant station is an azimuthal projection map.

43. A directional antenna is pointed when making a "long-path" contact with another station a 180 degrees from its short-path heading.

44. A licensee must retain as part of their station records antenna gain calculations or manufacturer's data for antennas used on 60 meters.
45. Amateurs keep a log even though the FCC doesn't require it to help with a reply if the FCC requests information on who was control operator of your station at a given date and time .
46. Date and time of contact Band and/or frequency of the contact and Call sign of station contacted and the signal report given is information that is traditionally contained in a station log.
47. QRP operation is low power transmit operation, typically about 5 watts.
48. A unidirectional HF antenna would be the best to use for minimizing interference.
49. FCC rules require that if you are using other than a dipole antenna, you must keep a record of the gain of your antenna when operating in the 60 meter band.
50. When using a SSB transmitter with an Audio Frequency Shift Keying (AFSK) RTTY signal the LSB mode should be selected.
51. The number of data bits that are sent in a single PSK31 character varies.
52. The header is that part of a data packet that contains the routing and handling information.
53. The 14.070 - 14.100 MHz segment of the 20 meter band is most often used for most data transmissions.
54. Baudot RTTY is a 5-bit code with additional start and stop bits.
55. The most common frequency shift for RTTY emissions in the amateur HF bands is 170 Hz.
56. The abbreviation "RTTY" stand for Radio-Teletype.
57. The 3570 – 3600 kHz segment of the 80 meter band is most commonly used for data transmissions.
58. PSK signals on the 20 meter band are generally found around 14.070 MHz.
59. A major advantage of MFSK16 compared to other digital modes is that it offers good performance in weak signal environment without error correction.
60. The abbreviation "MFSK" stand for Multi (or Multiple) Frequency Shift Keying.

61. Full break-in telegraphy (QSK) describes incoming signals that are received between transmitted code character elements.
62. If a CW station sends "QRS" when using Morse code you should send slower.
63. When a CW operator sends "KN" at the end of a transmission it means listening only for a specific station or stations.
64. When a CW operator sends "CL" at the end of a transmission it means closing station.
65. The best speed to use answering a CQ in Morse code is the speed at which the CQ was sent.
66. The term "zero beat" in CW operation means matching the frequency of the transmitting station.
67. When sending CW, "C" when added to the RST report means a Chirpy or unstable signal
68. The prosign AR is sent using CW to indicate the end of a formal message.
69. The Q signal "QSL" when operating CW means I acknowledge receipt.
70. The Q signal "QRQ" when operating CW means to send faster.
71. The Q signal "QRV" when operating CW means I am ready to receive messages.