

# Radio Communications Phraseology and Techniques

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## GENERAL

Radio communication is the link between our station and other stations. The link can be a strong bond between stations or it can be broken with surprising speed and disastrous results. Discussions here provide basic procedures for new operators and also highlight good operating concepts for all.

The single most important thought in communications is understanding. It is essential, therefore, that operators acknowledge each communication by using the station call sign. Brevity is important, and contacts should be kept as brief as possible. You must know exactly what you want to get across. Use whatever words are necessary to convey the message, but be specific and to the point at all times.

Good phraseology enhances communications and is the mark of the good operator. The phraseology glossary will be helpful in learning what certain words and phrases mean. Jargon, chatter, and CB slang have no place in good communications. Study the glossary and review it from time to time to sharpen your communications skills.

## RADIO TECHNIQUE

1. LISTEN before you transmit. Many times you can hear the information you want by monitoring the frequency. If someone else is talking, the keying of your transmitter will be futile and will cause them to have to repeat their call - further congesting the frequency. If you have just changed frequencies, pause, listen, and make sure the frequency is clear before proceeding.
2. THINK BEFORE keying your transmitter. Know exactly what you want to say and if it is lengthy, jot it down and read the text to cut down on the "uh, uh, ah, ah" taking up valuable time on the air.
3. The microphone should be very close to your lips. After pressing the transmit button, a slight pause may be necessary to be sure that the first word is transmitted. Speak in a normal conversational tone. Shouting at your microphone does not make reception at the other end easier.
4. If there is no response from the distant station, wait a few seconds before calling again. The receiving station may be jotting down your call, transmitting on a different frequency, or busy with the telephone. If you get no response after a reasonable amount of time, then make your call again.
5. Be alert to the sounds or LACK OF SOUNDS in your receiver. Check the volume, recheck the frequency, test the squelch, and make sure that your microphone is not stuck in the transmit position. Frequency blockage can, and has, occurred for extended periods of time due to unintentional transmissions. If the frequency is completely blocked by this type of interference, try using another frequency to establish communications.
6. Be sure that you are within the performance range of both yours and the receiving stations equipment. Remote sites do not always have the facilities of a base station. A different

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(better) antenna, different antenna orientation, more power output, a different frequency or repeater, a different band, or a relaying station may be necessary to get the messages through. Remember that higher elevation increases the VHF and UHF line of sight communication range.

## CONTACT PROCEDURES

The term “initial contact” or “initial callup” means the first radio call you make to a given station.

Use the following format:

- A) Name or callsign of station being called
- B) Your full station callsign
- C) Your possible tactical callsign
- D) Type of message or request to follow
- E) The word “OVER” if you are on HF or whenever needed for positive exchange ending.

Examples:

“OES, KE7HR, Red Cross, with formal traffic, over”

“N7VAK, KE7HR, Base Support, with times and mileage, over”

“WB6LGC, KE7HR, Search Base, request autopatch, over”

If radio reception is reasonably assured, inclusion of our request or type of traffic in the initial contact helps reduce frequency congestion. Use discretion and do not overload the receiving station with information that is not needed. If you do not get a response, check your radio or use another and keep the contact short.

If you are attempting to establish contact with a station and you are receiving on a different frequency than that transmitted, indicate the frequency upon which you expect a reply. (This does not apply to standard repeater offsets.)

Subsequent contacts with a station should use the same format as the initial contact. The station tactical call and the word “over” may be omitted if the message requires an obvious reply and there is no possibility for misunderstanding. You should acknowledge all messages with your call. This keeps the legal identification of transmissions within the required time frame and lets the other station know that the message was received by the proper station. Acknowledgment is made with one of the words “Wilco, Roger, Affirmative, Negative” or other appropriate remark and your station callsign.

## PHONETIC ALPHABET

The International Telecommunication Union (ITU) phonetic is the alphabet to be used when communications are such that the information cannot be readily received without their use. Use standard phonetics when making contact with an unfamiliar station to insure that your callsign is being received properly. Use the phonetic alphabet whenever two or more similar sounding callsigns are being used on the same frequency. Additionally, use the phonetic equivalents for single letters and to spell out groups of letters or difficult words during adverse conditions. We must all practice with and use this phonetic alphabet so that in a real emergency you are not searching for what to say and are “speaking the same language” as the receiving station.

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## ITU ALPHABET AND PHONETICS

A	ALFA	AL FAH
B	BRAVO	BRAH VOH
C	CHARLIE	CHAR LEE
D	DELTA	DELL TAH
E	ECHO	ECK OH
F	FOXTROT	FOKS TROT
G	GOLF	GOLF
H	HOTEL	HOH TELL
I	INDIA	IN DEE AH
J	JULIET	JEW LEE ETT
K	KILO	KEE LOH
L	LIMA	LEE MAH
M	MIKE	MIKE
N	NOVEMBER	NO VEM BER
O	OSCAR	OSS CAR
P	PAPA	PAH PAH
Q	QUEBEC	KEH BECK
R	ROMEO	ROW ME OH
S	SIERRA	SEE AIR RAH
T	TANGO	TANG GO
U	UNIFORM	YOU NEE FORM
V	VICTOR	VIK TOR
W	WHISKEY	WISS KEY
X	X-RAY	ECKS RAY
Y	YANKEE	YANG KEY
Z	ZULU	ZOO LOO

## FIGURES

Numbers should be transmitted by pronouncing each digit. Example:

6.....SIX  
10.....ONE ZERO  
27.....TWO SEVEN

Figures indicating hundreds and thousands in round numbers should be spoken in accordance with the following examples:

500.....FIVE HUNDRED  
4500.....FOUR THOUSAND FIVE HUNDRED  
10000....ONE ZERO THOUSAND  
14500....ONE FOUR THOUSAND FIVE HUNDRED

When a radio frequency or other number contains a decimal point, the decimal point position is spoken at "POINT" or "DECIMAL". Example:

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147.42.....ONE FOUR SEVEN POINT FOUR TWO  
446.00.....FOUR FOUR SIX DECIMAL ZERO ZERO

## TIME

The 24 hour clock system should be used in radiotelephone transmissions. The hour is indicated by the first two figures and the minutes by the last two figures. Example:

0000.....ZERO ZERO ZERO ZERO  
0920.....ZERO NINE TWO ZERO  
2000.....TWO ZERO ZERO ZERO (may also be done as TWENTY HUNDRED)

Normally local civil time is used in our activities. If sending traffic out of the area use Greenwich Mean Time (GMT - also known as UTC or ZULU time) for clarity. To convert time zones use the following table:

GMT	PST	PDT	MST	MDT	CST	CDT	EST	EDT
00	16	17	17	18	18	19	19	20
01	17	18	18	19	19	20	20	21
02	18	19	19	20	20	21	21	22
03	19	20	20	21	21	22	22	23
04	20	21	21	22	22	23	23	00
05	21	22	22	23	23	00	00	01
06	22	23	23	00	00	01	01	02
07	23	00	00	01	01	02	02	03
08	00	01	01	02	02	03	03	04
09	01	02	02	03	03	04	04	05
10	02	03	03	04	04	05	05	06
11	03	04	04	05	05	06	06	07
12	04	05	05	06	06	07	07	08
13	05	06	06	07	07	08	08	09
14	06	07	07	08	08	09	09	10
15	07	08	08	09	09	10	10	11
16	08	09	09	10	10	11	11	12
17	09	10	10	11	11	12	12	13
18	10	11	11	12	12	13	13	14
19	11	12	12	13	13	14	14	15
20	12	13	13	14	14	15	15	16
21	13	14	14	15	15	16	16	17
22	14	15	15	16	16	17	17	18
23	15	16	16	17	17	18	18	19

At no time should the letter O (OH) be spoken when meaning the number ZERO. This can be especially confusing when sending mixed number and letter groups. Numbers are numbers and letters are letters. Do NOT say one when meaning the other.

## EVERYDAY USE

If these techniques are used in everyday communications, then their use in emergency communications will be second nature.