Using Radios For Voice Communication

The overall privileges and limits of the use of radio communication may vary from organisation to organisation, however it is strongly advised that each organisation establish and develop its own policies for the proper used of radio, and disciplinary plans for misuse of radio equipment.

Channels

When using any network sometimes there are separate calling channels used to establish communication with other radio users, who then specify another dedicated channel. As soon as such communication is established both radio stations should move to determined talking channel to leave calling channel for other stations to establish contact. The use of calling channels is used especially in networks with high volumes of shared traffic, or in networks hosted by third parties such as UN repeater networks which multiple humanitarian agencies might use.

Etiquette

In general, there are rules that should be followed when communicating via voice using two-way radio. These might include:

Use of Pro-Words

Procedural Words (Pro-Words) are a pre-defined set of short phrases with precise meanings that have been developed to help network users and operators keep their transmissions brief and prevent confusion and misunderstanding. It is important that one understands these words and their meaning, to be able to understand what is said on the radio network and to be able to send short and precise messages. The following are commonly used pro-words and their meanings:

Pro-Word Phrase	Meaning
Affirmative	Yes/Correct
Break, Break, Break	Interrupt ongoing transmission for an urgent message
Correct	You are correct, or what you have transmitted is correct
Negative	No/Incorrect
Negative Copy	Your last message was not understood

Pro-Word Phrase	Meaning
Wrong	Your last transmission was incorrect
Over	This is the end of my transmission to you and a response is expected. Go ahead and transmit.
Out	This is the end of my transmission to you and no answer is required **Do not use OVER and OUT together!**
Relay To	Transmit the following message to the identified addressees/recipients
Roger	I have received your last transmission satisfactorily
Say again	Repeat the last message. **Do not say "repeat" on the radio! Repeat is commonly used by militaries to request soldiers to continue firing a weapon.**
Stand-by	Do not transmit until contacted. I need extra time.

Use the NATO Phonetic Alphabet:

The NATO phonetic alphabet is frequently used to remove ambiguity from radio communications. Voice commands over radio can be difficult to understand or signal strength than be weak. To work around this, radio users will frequently use the NATO phonetic alphabet when spelling out words or discussing single letter codes. As an example, a mobile ambulance vehicle might have the call sign "Mobile Ambulance 1" or MA1 for short. When pronounced using the phonetic alphabet, it would be spoken as "Mike Alpha 1".

Letter	Phonetic	Letter	Phonetic
A	Alfa	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo

Letter	Phonetic	Letter	Phonetic
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-Ray
L	Lima	W	Yankee
M	Mike	Z	Zulu

Keep messages short - Messages sent over the radio must be brief and to the point. If

longer conversations cannot be avoided, they should be broken into segments. Long conversations may block other users from accessing the network as well.

Use Radios for Official Business Only – Communication should be kept to official business. No personal business should be conducted over radio waves, including personal conversations.

Making Calls - Before making a call, always verify that the intended radio channel is not in use by listening in for a few moments. If needed, increase the audio output.

The general procedure for making a call is as follows, with a radio user with the call-sign BF3 calling another user:

Example:

(BF3 Calling) - "BF31, BF31 (from) BF3"

(BF31 Responding) - "BF3 go ahead."

(BF3 Responding) - "Please give me the status of shipment 12345, over."

(BF31 Responding) - "12345 is packed and shipped already, over."

(BF3 Responding) - "Thanks, nothing further, BF3 out."

(BF31 Responding) - "BF31 out."

Adapted from International Medical Corps

If for some urgent reason an ongoing conversation needs to be terminated, the procedure is

as follows:

Example:

(Ongoing conversation) - (Talk)... over

(BF1 Breaking in) - Break, Break. BF3, BF3 (from) BF1

(BF3 Responding) - BF1 Move channel 3, over

(BF1 Responding) - Moving channel 3, BF1 out

(Ongoing conversation) - (Talk)... Over

Call Quality - To determine the quality of the audio connection, or if the transmission is already difficult, users should ask "How do you read?" To clarify radio strength and clarity, users may state "I read you loud and clear" however users may also state "I read you "X" by 5" where "X" is a number between one and five. Five corresponds to a loud and clear transmission and zero means complete lack of communications/signal.

Common Problems with Radio Communication

Radio Won't Turn on.	- Is the battery charged? - Is the radio connected to a power source? - Is the power source under powered or weak?
Transmissions are not being received, or no one is responding.	- Is the transmission being sent on the intended frequency? - Is the radio in a dead spot? - Is the radio within the expected transmission range? - Is the antenna connected properly? - Are the other radios possibly off?
Signal is weak or broken	- Are there atmospheric or environmental factors that may be interfering with the signal? - Is the radio being used indoors or around tall buildings or trees? - Is the radio being operated around power lines or other radio equipment.