

ASRC OPERATIONS MANUAL
SECTION VIICOMMUNICATIONS POLICIES AND PROCEDURESA. Introduction

Communications will make or destroy a search and rescue mission. Trained searchers, rescuers, or medics are of little use unless they can be directed to the proper area, or redirected, if necessary. In order to have proper communications, there are two essential types of equipment and associated problems: hardware and software. First, the pieces of hardware (radios, field phones, etc.) require care, maintenance, proper usage, and repair. Secondly, the software must function correctly. The software consists of people and paper, and also require care, maintenance, and proper usage. Each person who will or might be involved in communications must be aware of, and follow, Standard Operating Procedures (SOP).

B. Radio SOP

1. When passing traffic (i.e. whenever you are handling a message to be recorded or passed to another) always write it down. . . . don't trust your memory. Some emergency might intervene, and the message might be lost. If you will not be handling the message to the person it is directed to, put "to" and "from" on it, with the date and time. Putting this on every message is probably a good idea.

When receiving a message, write it down, then always read it back for confirmation. When you are sending a message, remember that some person has to write it down; be concise; if possible, write it down first yourself.

2. Callsigns

Citizen's Band: KIU 0954 plus a number designator or the team letter designator.

VHF Emergency Band: KU 6516 plus number or team letter designator.

Amateur: Radio operator's callsign in the field or Communications Officer's callsign at COH.CTR.

3. Phonetic Alphabet (ICAO)

ALFA	NOVEMBER	ZERO (NOT "OH")
BRAVO	OSCAR	ONE
CHARLIE	PAPA	TWO
DELTA	QUEBEC	THREE
ECHO	ROMEO	FOUR
FOXTROT	SIERRA	FIVE (NOT "FIVER")
GOLF	TANGO	SIX
HOTEL	UNIFORM	SEVEN
INDIA	VICTOR	EIGHT
JULIETT	WHISKY	NINE
KILO	X-RAY	
LIMA	YANKEE	
MIKE	ZULU	

A. Standard Phrases

1. Do not use Ten-Codes
2. Do not use Q-Signals on fone

QW	PHONE	MEANING
C	AFFIRMATIVE	Yes
N	NEGATIVE	No
R	ROGER	I understand your entire previous message. Does <u>not</u> mean "yes", "okay", "I agree", "I'll do it", or anything else.
<u>K:KH</u> <u>SK</u>	OVER CLEAR	Invitation to transmit. This is my last transmission but I am still monitoring.
<u>CL</u>	OUT	I am leaving the air (do not say "Over and out.")
	PLEASE SPELL	Use phonetics.
	I SPELL	Spelling will follow.
	GO AHEAD	I am ready to receive your message.
?	SAY AGAIN	Repeat your entire previous transmission.
?AA...	SAY AGAIN ALL AFTER ...	Repeat the portion of your transmission following ...
?AB...	SAY AGAIN ALL BEFORE...	Repeat the portion of your transmission preceding...
<u>AS</u>	STAND BY	Wait a minute.

The use of other standard phrases is discouraged. Plain language is perfectly adequate and will be more easily understood by inexperienced Radio Operators. CW operators should use standard Q-Signals if the other operators are familiar with them.

- CODE 1: Victim found, alive and well.
 CODE 2: Victim found, needs emergency medical care and evacuation.
 CODE 3: Victim found, dead on arrival of searchers.

5. Identification

- Always put your call or name last.
 e.g. (100 MHz CB) "Chip, this is Carol, over."
 e.g. (Ham) :WB4Kxx/4, from WB4VGI/4, go ahead."
 e.g. (CB) "KIU0954, Base, this is team Alfa, over."
 Note that "this is" and "from" mean the same thing,

but that under good conditions nothing needs to separate the call signs at all.

- It is not necessary to identify every transmission, however you must identify at least once every ten minutes during a transmission and all exchanges must be identified. Always identify before saying "clear" or "out", and identify every ten minutes during a long transmission. Be conservative: it is better to sign too much than not enough. Under difficult conditions you may want to sign every transmission.

6. Relays.

A relay is a manned radio station which relays messages between stations which could not otherwise communicate. When using low power VHF in the mountains, relays will be very common. The trick to ensuring accuracy of a relayed message is to listen to the relay transmit your message and then correct his errors.

Sample (Team Bravo is in Weakley Hollow, Relay Delta is on Old Rag summit and Base Camp is on Route 231 at Etlan. Team Bravo has...

Instructions to work through the relay):

KIUØ954, relay Delta, this is team Bravo, over.

KIUØ954, team Bravo, this is relay Delta, go ahead.

I have a message for base. Can you relay? Over.

Affirmative. Go ahead.

We have completed a sweep of the Weakley Hollow Fire road as far as the Robertson Mountain Trail. We found nothing. I say again, we found nothing.

KIUØ954, team Bravo from relay Delta. Roger. KIUØ954, Base from relay Delta, over.

KIUØ954, relay Delta, this is Base, go ahead.

I have a message from team Bravo, over.

Roger, go ahead.

Team Bravo has completed a sweep of the Weakley Hollow Fire Road as far as the Corbin Mountain Trail. They found nothing. I say again, they found nothing. Team Bravo, is that correct?

KIUØ954, relay Delta, this is team Bravo. Negative. Change Corbin Mountain to Robertson Mountain, over.

Roger. KIUØ954, base this is relay Delta. Change Corbin Mountain to Robertson Mountain, over.

KIUØ954, relay Delta, this is Base. I have: Team Bravo has completed a sweep of Weakley Hollow Fire Road to Robertson Mountain Trail. Nothing found. KIUØ954, relay Delta from Base, clear.

Roger, that is correct. KIUØ954, team Bravo from relay Delta, your message is delivered, over.









KIUØ954, relay Delta from team Bravo. Roger, thank you. KIUØ954 relay Delta from team Bravo, clear.

KIUØ954, team Bravo and base from relay Delta, clear.

Note that the relay transmitted the sense of team Bravo's message rather than passing it on word for word. Under normal circumstances this is perfectly acceptable, however under severe conditions word for word retransmission should be the rule. One might well wonder if the error of transcription illustrated above crept in for this reason.

APPALACHIAN SEARCH AND RESCUE CONFERENCE COMMO CRIB SHEET
 For Internal ASRC Use Only 65

SIGNALS REQUIRE CONTRAST ** WATCH YOUR BACKGROUND

MEANING	WHISTLE/LIGHT/VOICE	HANDS/FLAGS/LIGHTS
TROUBLE HELP	— — — HELP HELP HELP	 (Obvious attention getter)
STATUS ONE (Victim found alive and well)	— . HEEY ONE	 Don't cross (Touchdown)
STATUS TWO (Victim found needs evac)	— . . HEEY TWO TWO	 (Similar to Trouble)
STATUS THREE (Victim found dead)	— . . . HEEY 3 3 3	 (Dead ball) Cross & Uncross
COME TO ME (or Send a Rescue Team)	. — — — COME HEEERE	 (Roll)
DON'T COME TO ME (or Don't Send a Rescue Team)	. . — — — DON'T COME HEEERE	 (Wave away)
AFFIRMATIVE	— . — . "C" IN MORSE	 (Nodding)
NEGATIVE	— . "N" IN MORSE	 (Shaking)

MORSE CODE







Light: Use hand over light for a shutter.
 Wiggles: Flag to sender's right is a dot; left dash.
SEND SLOWLY

1
2
3
4
5
6
7
8
9

SIERRA
TANGO
UNIFORM
VICTOR
WHISKEY
X-RAY
YANKEE
ZULU

JULIET
KILO
LIMA
MIKE
NOVEMBER
OSCAR
PAPA
QUEBEC
ROMEO

ALFA
BRAVO
CHARLIE
DELTA
ECHO
FOXTROT
GOLF
HOTEL
INDIA

Serious Injury	Require Medicine	Unable to Proceed	Require Food and Water	Indicate Direction to proceed	Am Proceeding this Direction
I	II	X	F	K	→
	LL	N	Y	JL	T
Safe to Land Here	All Well	Negative	Affirmative	Not Understood	Wind Direction
	I				
Require Map and Compass	Require Commo Equipment	Affirmative	Negative	Understood	Not Understood

GROUND-TO-AIR PANEL SIGNALS

