

R. RADIO COMMUNICATION PROCEDURES

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R.1. Introduction

The following is an overview of radio communication procedures that, when followed, will minimize radio time, make radio time more effective, and reduce misinterpretation of radio messages. The UNDAC team should always follow these procedures. It is important that all users of the radio net practice strict radio discipline at all times.

R.1.1. Preparing the set for operation

- Make sure that there is a power source, that it is sufficient and ensure correct connection to the radio set.
- Check the antenna and all cable connections ensuring tight and correct connection to all components.
- Connect the audio accessories, and check the proper operation of function switches.

R.1.2. Transmitting

- Decide on message before transmitting, ensuring it will be clear and brief.
- Make sure no one else is speaking before transmitting.
- Remember to divide your message into sensible phrases, make pauses and maintain a natural rhythm to your speech.
- Avoid excessive calling and unofficial transmissions.
- When ready to transmit, push the transmission key and wait a second before speaking. When finishing transmitting wait before releasing the key.
- Use standard pronunciation. Emphasize vowels. Avoid extremes of high pitch, speak in a moderately strong voice, and do not shout.
- Keep a distance of about 5 cm between the microphone and your lips. Shield your microphone from background noises.
- Remember: think, push, speak – not the other way around.

R.2. Procedures and tools

R.2.1. Phonetic alphabet and numbering

Phonetic Alphabet

Letter	Pronunciation
A	ALPHA
B	BRAVO
C	CHARLIE
D	DELTA
E	ECHO
F	FOXTROT
G	GOLF
H	HOTEL
I	INDIA
J	JULIET
K	KILO
L	LIMA
M	MIKE
N	NOVEMBER
O	OSCAR
P	PAPA
Q	QUEBEC
R	ROMEO
S	SIERRA
T	TANGO
U	UNIFORM
V	VICTOR
W	WHISKY
X	X-RAY
Y	YANKEE
Z	ZULU

Numbering

Digit	Pronunciation
0	ZERO
1	WUN
2	TOO
3	THUH-REE
4	FO-WER
5	FI-YIV
6	SIX
7	SEVEN
8	ATE
9	NINER

In general, numbers are transmitted digit by digit except that exact multiples of hundreds and thousands are spoken as such. Some examples of pronunciation of numbers may be seen below:

12 - TWELVE

44 - FO-WER FO-WER

90 - NINER ZERO

136 - WUN THU-REE SIX

500 - FI-YIV HUNDRED

7000 - SEVEN THOUSAND

16,000 - WUN SIX THOUSAND

1478 - WUN FO-WER SEVEN ATE

19A - WUN NINER ALPHA

R.2.2 Procedure words

The following is a list of the most common procedure words (pro-words) to be used and their meanings.

Pro-word	Meaning
ACKNOWLEDGE	Confirm that you have received my message and will comply.
AFFIRMATIVE - NEGATIVE	Yes/Correct - No/Incorrect.
ALL AFTER or ALL BEFORE	Everything that you (I) transmitted after... (Keyword). Everything that you (I) transmitted before... (Keyword).
CORRECT (THAT IS CORRECT)	What you have transmitted is correct.
CORRECTION	An error has been made in this transmission. It will continue with the last word (group) correctly transmitted. An error has been made in this transmission. Correct version is... That which follows is a correct version in answer to your request for verification.
WRONG	Your last transmission was incorrect. The correct version is...
DISREGARD THIS TRANSMISSION - OUT	This transmission is an error. Disregard it. This pro-word shall not be used to cancel any message that has already been completely transmitted and for which receipt or acknowledgement has been received.
DO NOT ANSWER - OUT	Station(s) called are not to answer this call, acknowledge this message, or otherwise to transmit in connection with this transmission.

Pro-word	Meaning
SILENCE - SILENCE - SILENCE	Cease all transmissions on this net immediately. Will be maintained until lifted.
SILENCE LIFTED	Silence is lifted. The net is free for traffic.
END OF MESSAGE - OVER (OUT)	This concludes the message just transmitted (and the message instructions pertaining to a formal message).
END OF TEXT	The textual part of a formal message ends. Stand by for the message instructions immediately following.
FETCH	I wish to speak on the radio to that person.
SPEAKING	Requested person is now using the radio himself.
FIGURES	Numerals or numbers will follow. (This pro-word is not used with the call signs, time definitions, grid references, bearings, distances, etc., especially in fixed-form reports.)
FROM	This is... The originator of this formal message is indicated by the address designation immediately following.
TO	The addressees whose designations will immediately follow are to take action on this formal message.
OVER	This is the end of my turn of transmitting. A message is expected. Go ahead.
THROUGH ME	I am in contact with the station you are calling; I can act as a relay station.
MESSAGE PASSED TO	Your message has been passed to...
ROGER	I have received your last transmission satisfactorily.
ROGER SO FAR?	Have you received this part of my message satisfactorily?
WILCO	I have received your message, understand it, and will comply. (To be used only by the addressee.) ROGER and WILCO are never used together.
UNKNOWN STATION	The identity of the station calling or with whom I am attempting to establish communication is unknown.
VERIFY	Verify entire message (or portions indicated) with the originator and send correct version. To be used only at discretion of or by the addressee to which the questioned message was directed.

Pro-word	Meaning
I VERIFY	That which follows has been verified at your request and is repeated. To be used only as a reply to VERIFY.
WAIT (WAIT-WAIT)	I must pause for a few seconds.
WAIT - OUT	I must pause longer than some seconds and will call you again when ready.
WORD AFTER	The word of the message to which I have reference is that which follows...
WORD BEFORE	The word of the message to which I have reference is that which proceeds...
WORDS TWICE	Communication is difficult. Transmit each phrase (group) twice. This pro-word can be used as an order, request or as information.
OUT	This is the end of my transmission to you. No answer or acknowledgement is expected.
OUT TO YOU	Do not answer, I have nothing more for you. I shall now call another station on the net.
READ BACK	Repeat the entire following transmission back to me exactly as received.
I READ BACK	The following is my reply to your request to read back.
SAY AGAIN	Repeat all of your last transmission. Followed by ALL AFTER, ALL BEFORE, WORD AFTER, WORD BEFORE etc. means: Repeat... (portion indicated).
I SAY AGAIN	I am repeating my transmission or portion indicated.
SEND	Go ahead with your transmission.
SEND YOUR MESSAGE	Go ahead, transmit; I am ready to copy.
SPEAK SLOWER	Reduce the speed of your transmission.
I SPELL	I shall spell the next word, group or equivalent phonetically. (Not used when transmitting coded groups only.)
RELAY TO	Transmit the following message to all addressees or to the address designation immediately following.
RELAY THROUGH...	Send this message by way of call-sign...

Example of radio conversation

1. ALPHA, THIS IS CHARLIE - MESSAGE, OVER
2. THIS IS ALPHA - SEND, OVER

3. THIS IS CHARLIE - WATCH FOR FALLEN ROCKS ON ROAD BIRKET - I SPELL - BRAVO, INDIA, ROMEO, KILO, ECHO, TANGO - BIRKET, OVER

4. THIS IS ALPHA - WILCO, OUT.

Example of formal message

Formal messages should be transmitted in the following order:

Preliminary call.

1. Pro-word MESSAGE FOLLOWS (SEND YOUR MESSAGE).
2. Abbreviated call with relay and transmission instructions, if any, e.g., READ BACK, RELAY ON, etc.
3. Message handling order = precedence (normally one of the following: FLASH, OPERATIONAL, IMMEDIATE, PRIORITY, or ROUTINE).
4. Date and time group, e.g., 140630z AUG, which is 14 August, 1430 [2 PM] GMT.
5. Pro-word FROM followed by originator call sign.
6. Pro-word TO followed by action addressee call sign.
7. Pro-word INFO followed by info addressee call sign.
8. Pro-word TEXT BEGINS.
9. Security classification (normally one of the following: UNCLASSIFIED, RESTRICTED, CONFIDENTIAL, or SECRET/UN).
10. The originator and the number of the message.
11. The actual text.
12. Pro-word END OF TEXT if final instructions are to follow, otherwise END OF MESSAGE.
13. Pro-word OUT if no answer is required, otherwise OVER.

R.2.3 Report of reception

The following phrases are for use when initiating and answering queries concerning signal strength and readability.

RADIO CHECK What is my signal strength and readability; how do you read me?

YOU ARE
(I READ YOU) Your signal strength and readability is as follows...

Report on signal strength

LOUD Your signal is strong.
 GOOD Your signal is good.
 WEAK I can only hear you with difficulty.
 VERY WEAK I can only hear you with great difficulty.
 NOTHING HEARD I cannot hear you at all.

Report on readability

CLEAR Excellent quality.
 READABLE Good quality, no difficulties reading you.
 DISTORTED I have trouble reading you.

WITH INTERFERENCE
NOT READABLE

I have trouble reading you due to interference.
I can hear that you transmit but cannot read you at all.

Example of radio check

ALPHA, THIS IS CHARLIE - RADIO CHECK, OVER
THIS IS ALPHA - YOU ARE LOUD AND READABLE, OVER
THIS IS CHARLIE - YOU ARE LOUD AND READABLE AS WELL, OUT.

R.3. Standard UN call signs

The UN has developed a system for the allocation of call signs that is applicable worldwide. It requires minimum administration, is easy to use, and uniquely defines stations and users. The system is applicable for both UN agencies and NGOs.

The UN radio room, that is responsible for setting up and operating the network, issues the call signs. A call sign consists of two letters and one to three digits indicating network location, agency, and position within agency.

The first letter indicates the location of the network. The first letter of the location name is usually designated. If this letter is already in use by another network within the country, the last letter is used. This continues until an available letter is found in the location name. For example, the network operating in Pakistan would use Mike for Multan, Delta for Muzaffarabad, and November for Manshera.

The second letter indicates the agency.

Letter	UN organization	Function
Alpha:	FAO	Agriculture
Bravo:	World Bank/IMF	Bank
Charlie:	UNICEF	Children
Delta:	UNDP	Development
Echo:	UNESCO	Education
Foxtrot:	WFP	Food
Golf:		
Hotel:	WHO	Health
India		
Juliet:		
Kilo:		
Lima:	UNJLC	
Mike:	IOM	Migration
November:	UNFPA	

Letter	UN organization	Function
Oscar:	OCHA/UNDAC	
Papa:	UNOPS	Projects
Quebec:	UNDPKO	
Romeo:	UNHCR	Refugees
Sierra:	UNDSS	Security
Tango:	UNHABITAT	
Uniform:	UN Secretariat	Offices of Special Representatives, Envoys, etc.
Victor:		
Whisky:		
X-ray:	Reserved for NGO's	
Yankee:	Reserved for NGO's	
Zulu:	Reserved for NGO's	

For example. OCHA staff working in Muzaffarabad would use Delta-Oscar as the two first letters of their call sign.

The first digit of the call sign indicates the position within the agency.

Digit	Department
1	Management and miscellaneous senior staff
2	Finance / Administration
3	Logistics
4	Program
5	Staff security / guards
6	Agency specific
7	Drivers
8	Technical support staff, e.g. Telecom, IT, etc.
9	Visitors / Agency specific

The last one or two digits indicate the different individuals in the department.

For example. UNDAC Team Leader in Muzaffarabad Delta-Oscar-1, deputy Delta-Oscar-11.