

# Radio Communication



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Operační program Vzdělávání pro konkurenceschopnost

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## Warm-up

*Work in pairs*

- What do you know about radio communication?
- Are you familiar with some procedures for radio communication?
- What is military alphabet pronunciation?

Military communications - or "comms" - are activities, equipment, techniques, and tactics used by the military in some of the most hostile areas of the earth and in challenging environments such as battlefields, on land, underwater and also in air.

There are six categories of military comms: the alert measurement systems, cryptography, military radio systems, nuclear command control, the signal corps, and network-centric warfare.

While exchanging the messages over the radio you should follow some basic rules to comply with international standards, both in the civil and military conditions alike. Below you will find the basic, fixed radio phraseology used for the purpose of radio transmissions along with some military procedures to follow.

*Familiarize with the phonetic alphabet:*

**A = Alfa**

**B = Bravo**

**C = Charley**

**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 = Whiskey**

**X = X-ray**

**Y = Yankee**

**Z = Zulu**

## *Familiarize with the numerical pronunciation:*

To distinguish numerals from words similarly pronounced, the proword „FIGURES “may be used preceding such numbers.

It is a common practice to say numbers with each digit separately. For instance we say “CHARLIE TWO-THREE ” instead of “CHARLIE TWENTY THREE.”

When numerals are transmitted by radiotelephone, the following rules for pronunciation will be observed:

<b>Numeral</b>	<b>Spoken as</b>	<b>Numeral</b>	<b>Spoken as</b>
<b>0</b>	<b>Ze-ro</b>	<b>5</b>	<b>FIFE</b>
<b>1</b>	<b>WUN</b>	<b>6</b>	<b>SIX</b>
<b>2</b>	<b>TOO</b>	<b>7</b>	<b>SEV-EN</b>
<b>3</b>	<b>TREE</b>	<b>8</b>	<b>AIT</b>
<b>4</b>	<b>FOW-ER</b>	<b>9</b>	<b>NIN-ER</b>

Figure	Normal conditions	Radio communication
23	Twenty-three	FIGURES two three
50	Fifty	FIGURES five zero
146	One hundred and forty six	FIGURES one four six
200	Two hundred	FIGURES two zero zero
1009	One thousand and nine	FIGURES one zero zero nine
1630 hours	Sixteen thirty hours	FIGURES one six three zero hours
2 800	Two thousand eight hundred	FIGURES two eight zero zero
12 000	Twelve thousand	FIGURES one two zero zero zero

## Universal rules of radio communication

- 1) Before you press the transmission button, gather your thoughts about what you are going to say. Many people with radios have a tendency to talk and/or repeat too much. Say what you need to say without unnecessary repeats. Keep in mind that your message should go through the first time – you may not have any opportunity to repeat it.
- 2) Give the call sign of the unit you are calling first. It will alert the addressee to focus on the incoming message. There might be more listeners and radio network users so you must let them know that this time there will be a message for them, not a usual background noise.
- 3) Introduce yourself by your call sign. Do not use real names or nicknames.
- 4) Don't speak too fast especially if the message needs to be written down. Pause after logical phrases. High voice does not guarantee that you will be more readable.
- 5) Use “**CLEAR**”, “**OVER**”, “**OUT**” when you finish your message. It notifies the addressee that you finished your portion of information and wait for the response or just ended the transmission (“**OUT**” word).

## Universal rules of radio communication 2

- 6) When you have understood the message, acknowledge the receipt with the words “**COPY**“, “**RECEIVED**“, “**ROGER**” or “**ACKNOWLEDGED**.” The word “**COPY**” is preferred.
- 7) If the caller requires some actions you may use “**WILCO**” instead of “**ROGER**” to notify that you **WILL COMPLY** (=“**WILCO**”).
- 8) Use “**BREAK, BREAK**” whenever there is a radio traffic and you want to get through with your emergency message.
- 9) Answer each call to confirm reception. Use “**RECEIVED**“, “**COPY**“, “**ROMEO**” or “**ACKNOWLEDGED**.”
- 10) If you do not comprehend the message, do not confirm it. Use “**SAY AGAIN**“, “**REPEAT**“, “**STAND BY**” instead.
- 11) Whenever a word must be spelled use NATO code words for each letter. Do not invent your own words – they might be misleading and not comprehensive.
- 12) Use single, cardinal numbers, do not combine them into bigger numbers.



When you want to initiate radio exchange, first you must call out the addressee of your message. To notify the addressee about incoming message call him/her twice, giving his/her call sign:

Example: ***White Chicken 07, White Chicken 07...***

Then give your call sign:

Example: ***this is COYOTE, OVER.***

When you expect the other part to answer, finish your portion of message with a word “**OVER**”, like in the example above.

If there is a traffic on the air, use “**BREAK, BREAK**” to cut into the network. Only in case of higher priority of your message!

## Quality of transmission

In case of some interference or just to confirm how your message was received you may need to ask about the reception. In this instance we use “**HOW DO YOU COPY?**” or even shorter “**HOW COPY?**” To ask about general quality of the reception you may also ask “**HOW DO YOU READ?**”

There are two ways of responding to such questions. You may simply answer “**COPY LOUD AND CLEAR**” (=“**LIMA CHARLIE**”) or give the answerer the notion of the signal quality by giving the note from 1 to 5.

Example: ***COPY 3 out of 5***

## When repeat is needed

It may happen that due to poor transmission or distracting factors some pieces of information should be repeated to avoid misunderstandings. In that case you may request repeat by saying “**SAY AGAIN**.”

Likewise, when you want to stress the importance of the message or simply make sure that important data get through, you say your message and then use “**I SAY AGAIN**” and repeat the message.

EXAMPLE: *I need five more minutes, I SAY AGAIN, five more minutes...*

SOURCE:

KLOTZ, B. at al. Tactical English for Land Forces in PSO

BMATT presentations

<http://www.stanag6001.com/radio-communication-rules/>

# Questions? Suggestions?

## Thanks for your attention.



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