

A man in a white uniform and headset is seated at a control console, looking at a computer monitor. The console is filled with various electronic equipment, including radios and control panels. The background is a blue wall with more equipment.

NS100

**Fundamentals of
Naval Science**

Radiotelephone Procedure

Objectives:

1. Understand the importance of security when communicating with radiotelephone.
2. Understand the purposes and differences between a directed and free net.
3. Understand the prowords used to report signal strength and readability.

Objectives:

5. Understand the proper procedure for conducting and responding to radio checks
6. Understand the differences between delayed and immediate executive methods for transmitting tactical signals.
7. Understand the procedure for transmitting a signal using the immediate executive format.

Lesson Background

- Preparation for LANTPAT.
- Only “real-time” mean of communication.
- No transmission security.
- Potential for poor communications
 - faulty equipment
 - **poor operator performance.**

Security

Short and concise transmissions

Radiowaves X enemy interception

With this in mind:

- No transmission will be made which has not been approved by proper authority.

Security (cont'd)

The following practices are specifically forbidden:

- Violation of radio silence.
- Unofficial conversation between operators.
- Transmitting on a directed net without permission.
- Excessive tuning and testing.
- Transmitting the operator's personal sign or name.

Security (cont'd)

The following practices are specifically forbidden (cont'd):

- Use of other than authorized prowords.
- Unauthorized use of plain language in place of applicable prowords or operating signals.

Security (cont'd)

The following practices are specifically forbidden (cont'd):

- Unauthorized use of plain language.



Security

(cont'd)

The following practices are specifically forbidden (cont'd):

- Linkage or compromise of classified call signs and address groups by plain language disclosures or association with unclassified call signs.
- Profane, indecent, or obscene language.

Security (cont'd)

The following practices are to be avoided:

- Use of excessive transmitting power.
- Excessive time consumed in tuning, changing frequency, or adjusting equipment.
- Transmitting at speeds beyond the capabilities of receiving operators.

Types of Nets

Net Control Station (NCS)

- Free
- Directed

COMMUNICATIONS LOG

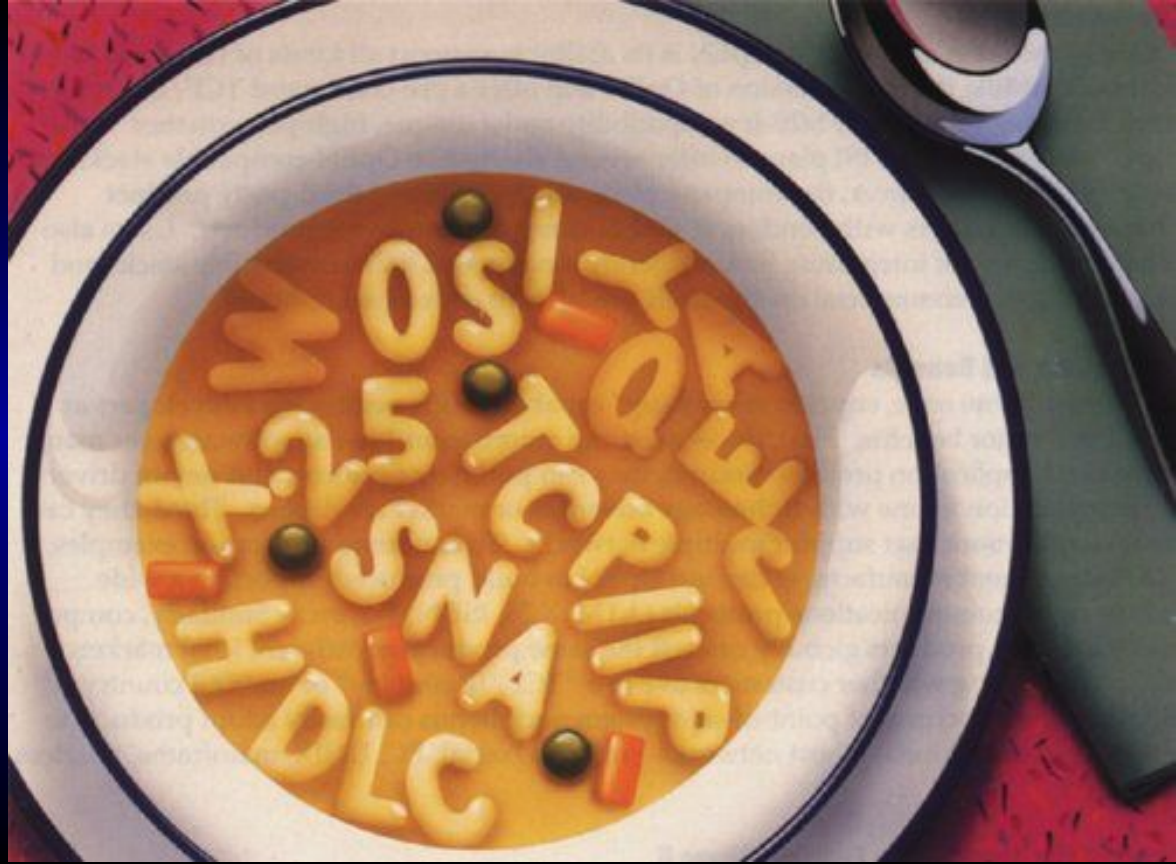
All incoming and outgoing transmissions are recorded in the Communications Log

COMMUNICATIONS LOG

YP :

Date :

TOR	TO	FROM	SIGNAL/TEXT	CKT	TOX



Radio Watches

Guard - Continuous receiver watch with transmitter ready for immediate use. Complete log is kept.

Cover - Continuous receiver watch. Transmitter tuned and available. Complete Log is kept.

Copy - Continuous receiver watch, with a complete log.

Listen - Continuous receiver watch, log is optional.

Phonetic Alphabet

Alfa	Bravo	Charlie	Delta
Echo	Foxtrot	Golf	Hotel
India	Juliet	Kilo	Lima
Mike	November	Oscar	Papa
Quebec	Romeo	Sierra	Tango
Uniform	Victor	Whiskey	X-ray
Yankee	Zulu		

Prowords

Pronounceable words or phrases which have been assigned meaning for the purpose of expediting radio conversations.

Prowords

- THIS IS Preface to your call sign
- ROGER Last transmission received OK
- OVER I'm done, go ahead
- OUT I'm done, bye
- WAIT I will be back in a few seconds
- SAY AGAIN Say that again
- CORRECTION Oops! I really meant to say
- WILCO ROGER and I will comply
- AFFIRMATIVE Yes

General Procedures

1. Listen before transmitting.
2. Speak clearly and distinctly.
3. Speak slowly.
4. Avoid extremes of pitch.
5. Be natural.
6. Use standard pronunciation.
7. Speak in a moderately strong voice.
8. Keep correct distance between lips and microphone.

General Procedures

9. Shield your microphone.
10. Keep the volume of a handset earpiece low.
11. Keep speaker volumes moderate.
12. Give an accurate evaluation for a radio check.
13. Pause occasionally.
14. Adhere strictly to prescribed procedures.

Call Signs

- Use International Call Sign in foreign ports.
- Use name of ship in U.S. ports.
- Local port authorities are identified by the port name and the word CONTROL
("Annapolis Harbor Control")

Establishing Communications

- Full call signs are used when establishing a net.
- To establish a net, the Net Control Station calls all stations.
- Stations answer in alphabetical order of the first letter/word of their call signs.

RADIO CHECKS

**Allow units to report
on the **signal strength**
and **readability** of
radio transmissions.**

RADIO CHECKS



SIGNAL STRENGTH

First part of
the report

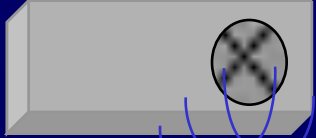
LOUD
GOOD
WEAK
VERY WEAK
FADING



READABILITY

Second part of
the report

CLEAR
READABLE
UNREADABLE
DISTORTED
W/INTERFERENCE
INTERMITTENT



RADIO CHECK

LOUD AND CLEAR

<Callups are used to initiate a radio check>

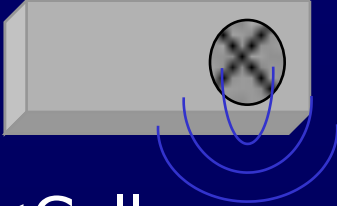
A1M this is AB, over.

<If the signal is loud and clear the proper response is>

This is A1M, roger, over.

<The station requesting the check then replies>

This is AB, roger, out.



RADIO CHECK

NOT LOUD AND CLEAR

<Callups are used to initiate a radio check>

A1M this is AB, over.

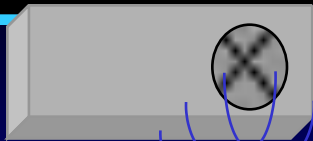
<Make a report on the signal strength and readability>

This is A1M, read you weak and unreadable, over.

<The station requesting the check then replies>

This is AB, roger out.

WHAT IF I MAKE A MISTAKE?



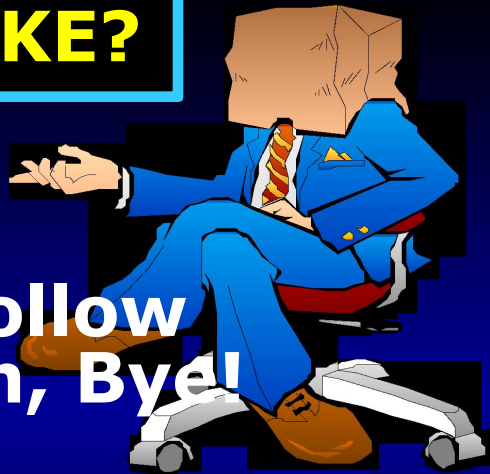
WRONG

AI this is AB, Execute to follow corpen 420, oops, um, uhh, Bye!



RIGHT

AI this is AB, Execute to follow corpen 420, Disregard this transmission, out.



WHAT IF I SENT A SIGNAL WRONG?

WRONG SIGNAL

AI this is AB, Corpen Port 180,
Over.

CANCELED SIGNAL

WITH CORRECTION

AI this is AB, **NEGAT Corpen**
Port 180. Break, Execute to
follow Corpen Port 180, over.



Acknowledgments

Only if the Commanding Officer heard, understood, and directed acknowledgment of a message may the proword **WILCO** be used.

ROGER and WILCO are not to be used together.

Tactical Signals

Delayed Executive

Immediate Executive

Delayed Executive

"RAMAGE, this is HAYLER. Execute to follow, Corpen starboard 130. Over"

(then, later)

"RAMAGE this is HAYLER. Corpen starboard, standby - execute. Over"

Immediate Executive

RAMAGE, this is HAYLER.

Immediate execute, Speed 6, I
say again, Speed 6.

Standby...Execute. Over."

Practical Exercise 3

- PE
- RT PE MTP

INTERROGATIVE