



## S-130 Unit 15: Radio Communications

### Summary:

The intent of this unit is to provide a basic understanding of multichannel handheld radio operations. Recognizing the complexity of communication systems that firefighters utilize and understanding the proper utilization of radio frequencies, repeaters, tones, and other technology available are important in ensuring proper understanding of the message and receiving a prompt response.

### Incident Position Description (IPD) Alignment:

This unit aligns with the following FFT2 IPD specific duties  
(<https://www.nwcg.gov/positions/fft2/position-ipd>):

- Ensure basic understanding of multichannel radio operation. Use plain language and ICS terminology.
- Follow established processes and chain of command for collecting, producing, and distributing information.
- Report any changes in fire behavior or hazardous conditions to supervisor.

### Unit Objectives:

- Discuss the various tools used for communications and how they function.
- Discuss basic radio functions and demonstrate proper radio communication procedures.

### Unit at a Glance:

Topics	Method	Duration
The Maze of Communications	Presentation	20 Minutes
Basic Radio Use	Presentation	15 Minutes
Communication Procedures	Presentation	25 Minutes
<b>Total Unit Duration</b>		<b>1 Hour</b>

## Unit 15: Radio Communications

### Materials:

- *Incident Response Pocket Guide* (IRPG), PMS 461, <https://www.nwcg.gov/publications/461>
- Handheld radios
- Notebook for participants
- S-130 Student Evaluation Task Sheet
- Ability to display images and video on large screen
- White board or easel access for group breakout

# Unit 15: Radio Communications

## Slide 1



## Slide 2

### Objectives

Students will be able to:

- Discuss the various tools used for communications and how they function.
- Discuss basic radio functions and demonstrate proper radio communication procedures.

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- Review unit objectives.

### Slide 3



#### Pre-Video Discussion

- The two-way radio is one of the most common and basic communication tools. Prompt, dependable communication is a vital part of fire suppression activities. Radio communication is necessary, not only to communicate with other people on or around the fire line, but to provide information to supervisors or the support organization.

#### Play Video

**Title** Managing the Maze of Communications

**Summary** An overview of the proper utilization of radio frequencies, repeaters, tones, and other technology available.

**Time** (12:23)

**Audio**

#### Post-Video Discussion

- Discuss the difference between command and tactical frequencies.
- Discuss concept of line of sight for radio transmissions.
- Discuss when mobile device use is appropriate for fireline communication and when it is inappropriate.

## Slide 4

### Knowledge Check

True or False?

**Tactical information should be communicated via cell phone and not a radio frequency?**

**False.**

**Tactical information should be communicated via radio frequency so that others on the incident can hear.**



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**Question: True or False? Tactical information should be communicated via cell phone and not a radio frequency?**

*Answer: False. Tactical information should be communicated via radio frequency so that others on the incident can hear.*

### Slide 5



- Discuss that in most cases a FFT2 is not directly issued or tasked with utilizing a handheld radio. However, the knowledge of how information is communicated is a fundamental skillset that everyone responding to an incident, at all levels, should possess.

#### **Exercise**

- Divide students into groups.
- Assign a cadre member, with a handheld radio, to each group.
- Task assigned cadre member to discuss and demonstrate each of the following:
  - Antenna
  - Microphone
  - On-off switch
  - Volume control
  - Group and channel selection procedures
  - Push to talk button location and function
  - Battery location and installation

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## Slide 6



- Discuss that all radio users adhere to the following communication procedures:
  - Use clear speech to relay message. No CB talk.
  - Plan your message in advance before speaking and make your message brief, concise, and complete.
  - Use normal tone of voice.
  - Answer radio calls promptly.
  - Write down important messages you receive and repeat message word for word if necessary, to ensure it is understood.

### Exercise 1

- Assign two cadre members, each with a handheld radio, to come to the front of the class.
- Task assigned cadre members with demonstrating radio communication procedures:
  - Wait one full second after pressing transmit button before speaking.
  - Initiate a call by first transmitting the name of the person you are calling, followed by your name.
  - Respond to a call by first transmitting your name, followed by name of person calling or “go ahead”.
  - Use clear speech to relay message. No CB talk.

### Note to Instructor

Consider using a simplified fire sizeup as the basis of the cadre demonstration. Students can follow along by referencing Sizeup Report in the *Incident Response Pocket Guide (IRPG)*, PMS 461, <https://www.nwcg.gov/publications/461>.

### Exercise 2

- Assign two students, each with a handheld radio, to come to the front of the class.
- Task students with demonstrating radio communication procedures:

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- Wait one full second after pressing transmit button before speaking.
- Initiate a call by first transmitting the name of the person you are calling, followed by your name.
- Respond to a call by first transmitting your name, followed by name of person calling or “go ahead”.
- Use clear speech to relay message. No CB talk.

### **Note to Instructor**

Opportunities for students to practice radio communication procedures should be incorporated into the Unit 18 Incident Exercise.

## Slide 7

### Objectives

Students will be able to:

- Discuss the various tools used for communications and how they function.
- Discuss basic radio functions and demonstrate proper radio communication procedures.

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- Review unit objectives.