

## Basic Steps to use Digital Radios

**1—Turn on power button**

**2—Set the volume button**

**3—Select the channel—usually channel 1**

**4—Hold radio properly to speak**

**5—Press talk button to speak; release button when done speaking**

**6—Always address recipient of call and caller by team/ID for every transmission**

**7—Do not talk when others are speaking—wait until clear**

# The Isles On Palmer Ranch

## Basic Portable Radio Operations

### “Radio Ops 101”

#### Introductions

#### Part 1: Anatomy & Physiology of the XPR 3300

- The Battery
- The Antenna
- Belt Clip
- Dust Cover (Accessory)
- On/Off/Volume Control
- Channel Selector Knob
- LED Indicator
- Push-to-Talk (PTT)
- Side Buttons #1 & #2
- Microphone
- Speaker

#### Part 2: Using a Portable Radio

- Install battery (\*radio off)
- Turn radio on
- Select channel
- Comms Plan channel list
- Volume Control
- PTT (press/wait/release)
- Re-charging batteries

#### Part 3: Speaking & Listening

[Pre-read handout #1, “Portable Radio User Guide”]

- Listen more than talk
- Speak across the “mike”
- Controlled voice
- Speak clearly & slowly
- Shield mike with hand
- Think first, then speak
- Speaking louder solves nothing

#### Part 4: Radio Protocol and Common Terms Explained

- Know your tactical call sign (Unit ID)
- “Hey you, it’s me”
- Clear text & no codes
- Know “essential” vs “non-essential”
- Use phonetic alphabet (Handout #3)
- Use the “echo principle”
- Monitor radio for comms & safety
- Use “pro” words (Handout #2)
- Be brief; then be quiet
- Use plain language
- Don’t all talk at once
- You can’t hear if you’re talking (release PTT)
- Wait for channel to clear before PTT
- Press then pause (1 sec.)
- Radio vertical, elevate, away from body

#### Part 5: How the Isles System Works

- Licensed by the FCC
- Our station call sign is WQSY350
- We have rules .....

*{insert our radio system diagram with tactical call signs}*

#### Part 6: Calling and Answering Exercise

*{remaining time of 90 min.}*

## Portable Radio User Guide

*When we talk on the radio, each of us subconsciously performs a process before we speak. Managing this process will provide more effective communications.*

- **Organization** — *Before speaking, formulate what information is being communicated and put the information in a standardized reporting template. For instance, a standard situational report might contain Unit ID, location, Conditions, Actions, and Needs (C-A-N). This method forces users to fill in the blanks, answer all the necessary questions, and filter out unneeded information.*
- **Discipline** — *Often, portable radio users are overwhelmed by excess information on the radio. Radio discipline at an incident will help to determine if information needs to be transmitted on the radio. If face-to-face communications are possible between members of a team and the information is not needed by the IC, stay off the radio.*
- **Microphone location** — *Placing a microphone too close to the mouth or exposing the microphone to other background noise may result in unintelligible communications. When transmitting in a high-noise environment, shield the microphone from the noise source. Hold the microphone a couple of inches from your mouth.*
- **Voice level** — *When speaking into a microphone use a loud, clear, and controlled voice. When users are excited, the speech often is louder and faster. These transmissions often are unintelligible and require the IC or Net Controller to ask for a rebroadcast of the information, resulting in more radio traffic on the channel.*

**Managing these human factors will have a positive impact on communications. Reporting should be complete, necessary, and in a controlled, clear voice. These actions will reduce the amount of repeat transmissions, reducing air time.**

# Procedural “Pro” Words

- “This is ..... “
- “Go ahead”
- “Say again”
- “That unit calling?” – If you miss the ID of the contacting person/station
- “Affirmative”
- “Negative”
- “Correction”
- “I spell .... “ - then say phonetical spelling
- “Figures” - followed by numbers
- “Over.” - I’ve finished speaking and now it’s your turn
- “Out.” - I’m finished and expect no reply

**Notes: The initiating station ends the contact.  
Don’t use “over & out” together!**

## Phonetic Alphabet

**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 Whiskey**

**X X-ray**

**Y Yankee**

**Z Zulu**

## Identifying Radio Controls

### Radio Controls



- 1 Channel Selector Knob
- 2 On/Off/Volume Control Knob
- 3 LED Indicator

- 4 Push-to-Talk (PTT) Button
- 5 Side Button 1<sup>[1]</sup>
- 6 Side Button 2<sup>[1]</sup>
- 7 Microphone
- 8 Speaker
- 9 Universal Connector for Accessories
- 10 Antenna

<sup>1</sup> These buttons are programmable.