

BRONZE MEDALLION

PUA21010 Certificate II in Public Safety (Aquatic Rescue)

RADIO OPERATIONS

Chapter 7

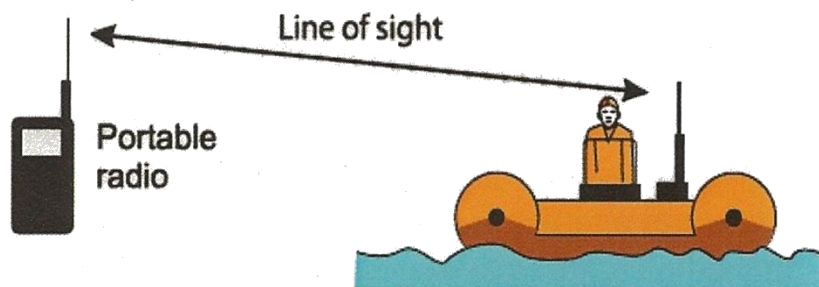
Learning Outcomes

- SLSA radio system network and equipment
- Transmitting and receiving procedures and call signs
- Rescue emergency procedures
- Pre and post-patrol radio procedures
- Radio maintenance procedures

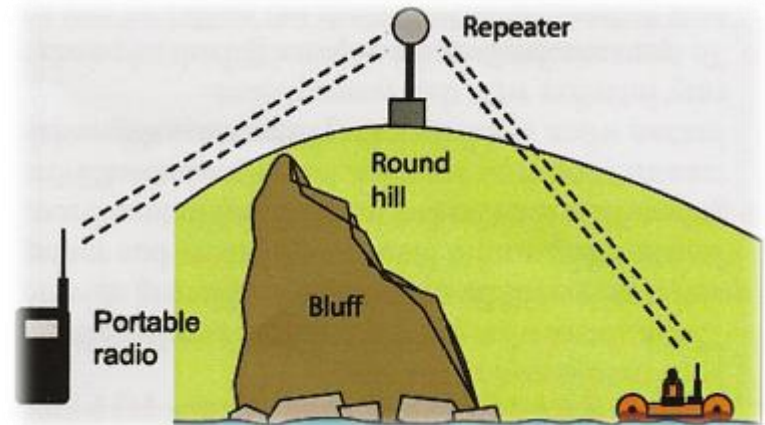


Network Overview

- Radios provide a quick and simple means of obtaining assistance during lifesaving operations
- **UHF** (ultra high frequencies) and **VHF**(very high frequencies) radios are used throughout surf lifesaving, as they have little static and clear sound
- UHF and VHF provides a **simplex service (line of sight)** as well as transmitting over long distances through **repeaters**



Check with your trainer for local radio channels



Radio Network Equipment

- Portable



- Mobile –vehicle/craft mounted



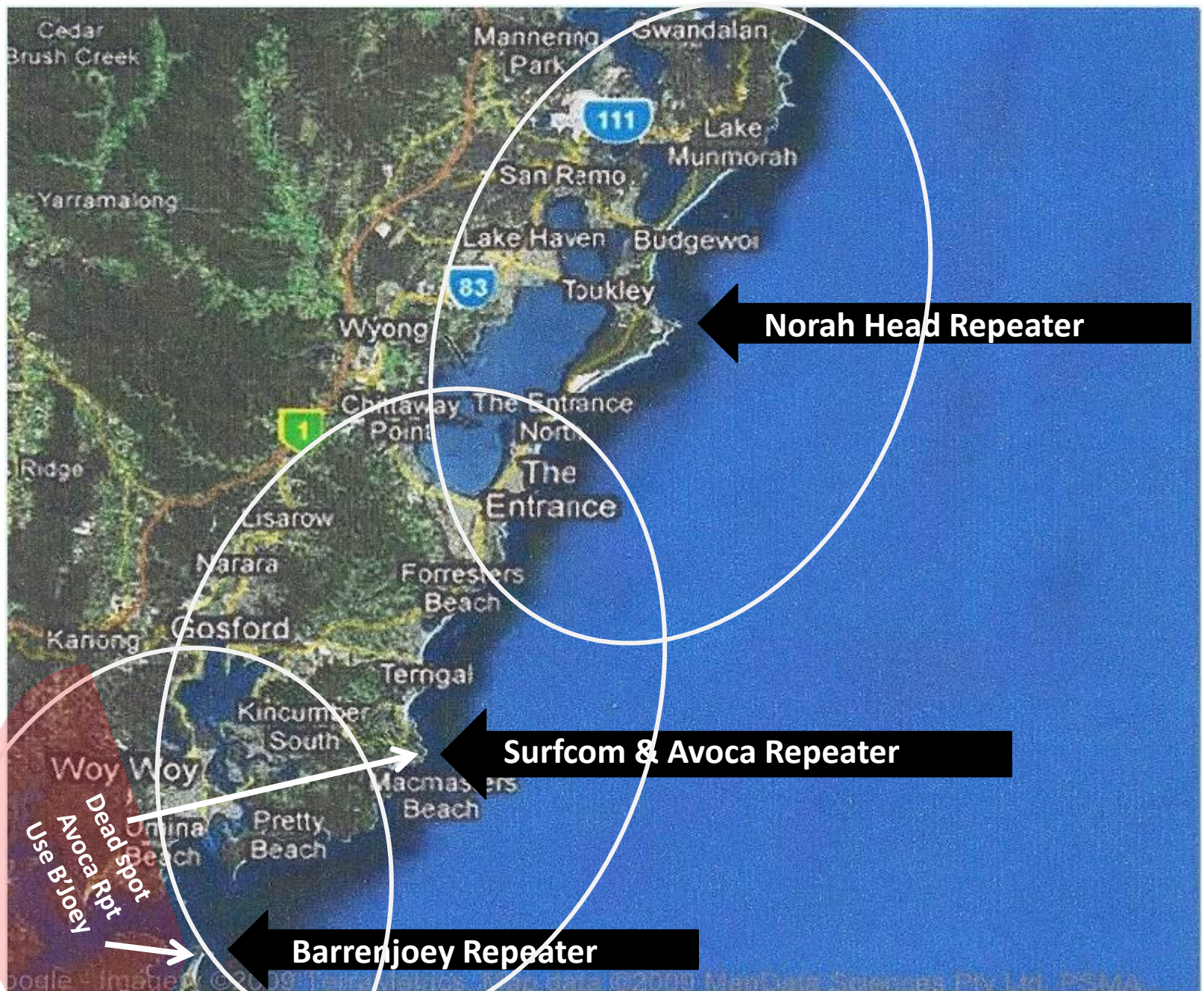
- Base station



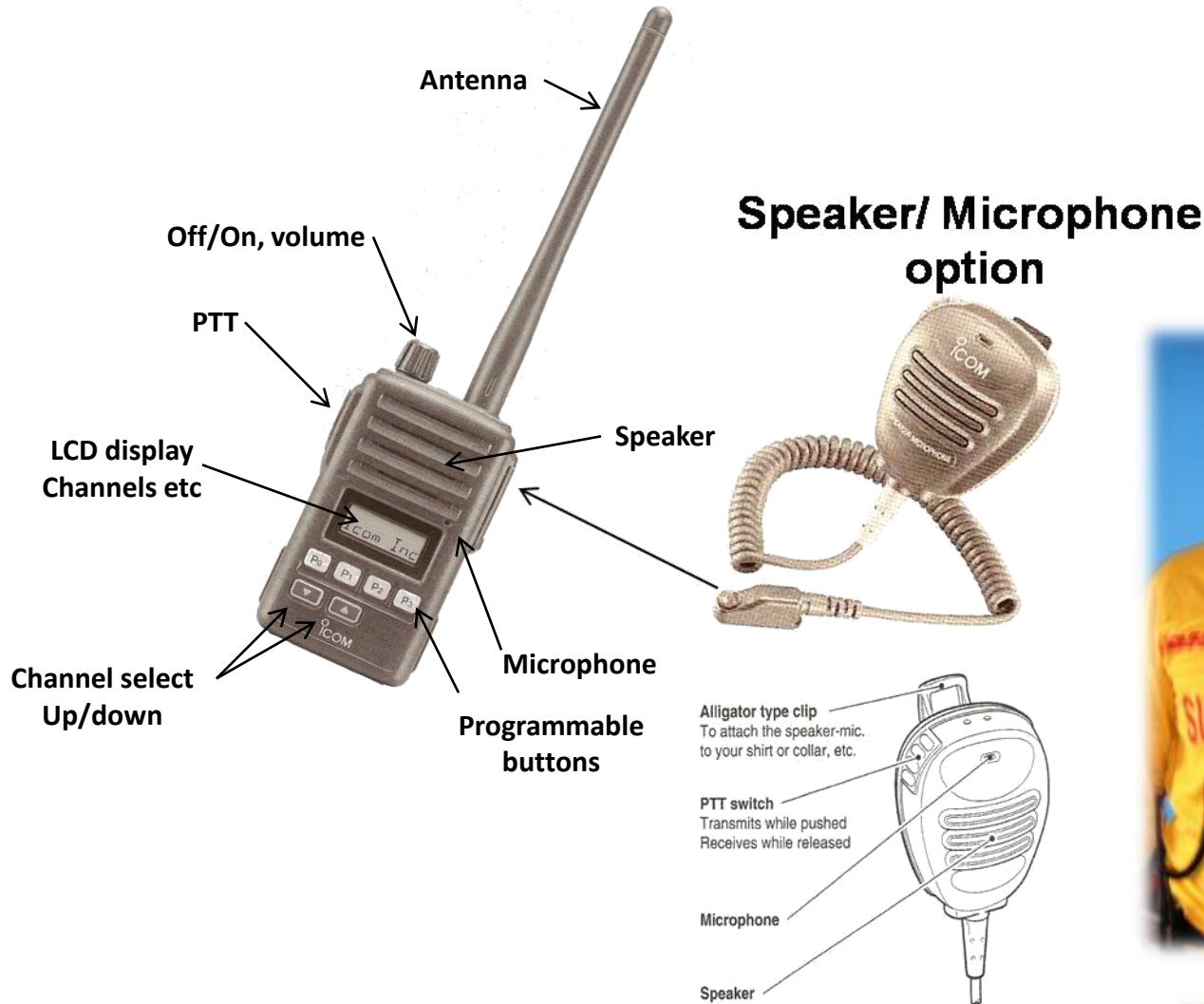
- Repeaters



Typical Radio Network



Portable Radio Equipment



Helmet (with
comms) option



Australian for life.



Radio Technique

- Hold the handset approximately 10cm from your mouth and to the side
- Think about what you are going to say
- Ensure channel is not in use
- Press PTT button, wait 1-2 seconds, then speak slowly and clearly, don't yell!
- Release PTT button when finished transmission
- Never press transmission button while receiving
- Shield microphone when talking into the wind



Communications Management

Surfcom

- Provide general information to lifesaving services
- Gather & record communication data
- Coordinate major incidents
- Liaison with emergency services

Club role

- Patrol Captain is in charge
- Keep communications brief & to the point
- Communications are recorded by SurfCom
- Written Radio Logs may be used locally
- Follow SOPs



Call Signs

Technique:

- Say called station twice then state own call sign, e.g.
 - *SurfCom, SurfCom, this is Bondi Patrol, over*

Examples of call signs between patrol units:

- “Bondi patrol, Bondi patrol this is Bondi tower”
 - “Bondi patrol, Bondi patrol this is Bondi IRB”
 - “Bondi patrol, Bondi patrol this is Bondi ATV”
 - “Bondi patrol, Bondi patrol let ski 3”
- Refer to local SOPs for local radio communication protocols

Never use “rescue” as part of a call sign, as this may be confused with the emergency call sign!

Prowords

(Procedural words)

- **Go ahead** Proceed with transmission
- **Stand By** Wait for response
- **Roger** Received and understood
- **Say again** Transmit again- Do not use repeat
- **Acknowledge** Confirm message received/understood
- **Correction** Error, correct message is...
- **Affirmative** Yes
- **Negative** No, permission not granted
- **Over** I have finished and expect a reply
- **Out, or Clear** I have finished and don't expect a reply

Radio Checks

Example

“North Steyne Patrol, North Steyne Patrol, this is North Steyne IRB, over”

“North Steyne IRB, this is North Steyne patrol go ahead, over”

“North Steyne patrol, request radio check over”

“North Steyne IRB, read you loud and clear, out”

Readability scale

- **loud and clear** - Can receive and understand
- **Unreadable** – Can receive but cannot understand
- **Nothing heard** – Squelch heard only

Incident Procedures

For any incident you should use the four P's to pass on accurate information

- **The four (4) P's are:**
 - Position
 - Problem
 - People
 - Progress
- **Emergency call: "Rescue, Rescue, Rescue"**
 - Is used: To clear network of routine traffic
 - To advise Surfcom, Club/s of an emergency situation

Radio Problems

- Network failure may include:
 - Repeaters
 - Transmission/signal jamming
 - Electrical storms
 - SLSA Policy 2.2 OH&S Lightning Policy
 - Radio unit failure (do radio check)

Landlines, mobiles and email may be used to contact Surfcom

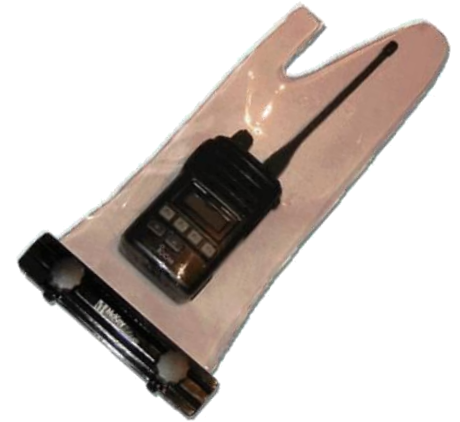
Radio Maintenance

All radios should be kept as dry as possible. Check radios before and after use.

Routine maintenance includes:

- Damage to radio or antenna
- Normal operation of controls & functions
- Sand penetration around battery and microphone
- water penetration

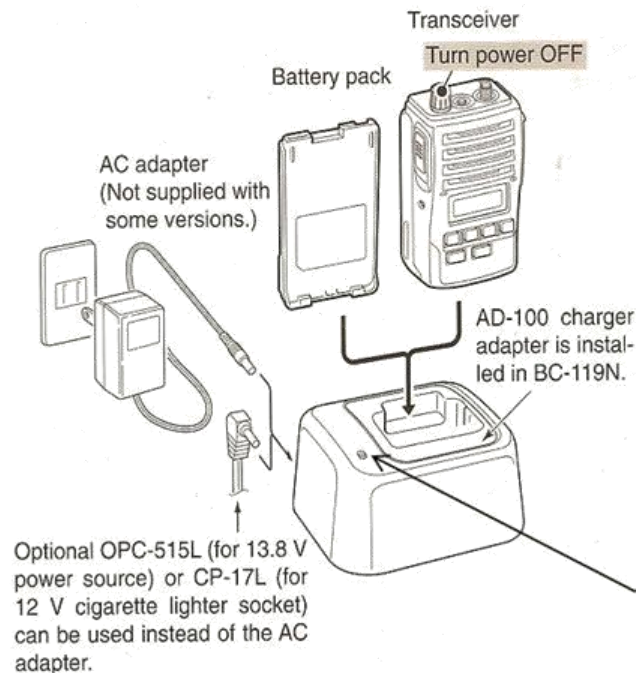
Note: Sand and water penetration can be minimised by keeping radios in protective bags



Radio Equipment Chargers

Battery charging

- turn radio off before charging
- Consult club radio officer for procedures



Multi Charger



Charging indicator light

- Orange - charging
- Green - trickle
- Light out - no charge

Emergency Maintenance

If the radio is dropped in water you must immediately:

- Turn off the radio
- Check for water penetration (radio/bag)
- Check for damage

If water has penetrated:

- Remove from bag
- Remove battery and antenna
- Submerge in fresh water (1 min)
- Shake and pat dry, air dry out of sun
- Advise patrol capt/radio officer
- Record in appropriate log



Practical

Working in pairs (one person functioning as Surfcom operator) and using radios (training channels), each participant will:

- Conduct a pre operational check, switch on and select channel
- Simulated a sign on/ sign off (complete log if appropriate)
- Simulate an emergency call
- Return radio to charger

Topic Summary

- The SLSA radio system network
- Radio and network components
- Basic transmitting and receiving procedures
- Rescue emergency procedures
- Pre-patrol and post-patrol procedures
- Routine maintenance and emergency maintenance procedures

Thank you

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