EMERGENCY COMMUNICATIONS TEAM

OPERATIONAL GUIDELINES

Revised: May 2012

Cowichan Valley Regional District
175 Ingram Street, Duncan BC V9L 1N8
250.746-2500 / 1.800.665-3955

VISION

Working together with the people of the Cowichan Valley to become the safest, most resilient and sustainable communities in British Columbia.

MISSION STATEMENT

We engage and empower our communities to reduce potential risks and vulnerabilities to emergencies and disasters, through collaborative, cooperative and educational initiatives, by:

- ✓ Identifying, preventing and reducing risks;
- ✓ Planning and preparing;
- ✓ Responding;
- ✓ Recovering; and
- ✓ Building back better

VALUES – COWICHAN CARES

Concern for Others - We listen carefully, showing genuine concern and empathy while working together to create a better future.

Appreciation - We value the dedication, commitment, and contributions of all people who are working to ensure that our community is safe and resilient. We recognize their efforts and we are grateful.

Respect - We value our people, our community and our diversity. Respect starts with ourselves and continues to others.

Empowerment - We strive to provide people with knowledge, confidence and access to resources so that they may take responsibility and ownership of their safety and well-being.

Safety and Service Excellence - We value the safety, health and welfare of our community. We strive to provide an exceptional service that exemplifies our genuine concern and compassion for people.

TABLE OF CONTENTS

Vision, Mission and Values	**2**
Emergency Communications Team (ECT) Commitment	**4**
Introduction	**5**
ECT Services	**5**
Training Levels	**6**
Training Outline and Course Description	**7**
Call Out	**8**
Operations	**8**
BCERMS Priority Response Goals	**9**
EOC Organizational Structure	**9**
Communications Network Plan	**10**
Emergency Communications Network	**11**
Generic Checklist	**12**
Communications Group Coordinator Checklist	**13**
Emergency Communications Team Operator Checklist	**15**
Emergency Communications Potential Service Locations	**17**
Amateur Code	**18**
CVRD Emergency Communications Frequency Table	**18**
Radio Network and Net Control	**19**
Radio Procedures Reminder	**19**

EMERGENCY COMMUNICATIONS TEAM (ECT) COMMITMENT:

- **To maintain a personal level of preparedness**
- **To maintain a reliable and fully functioning radio station and Industry Canada Call Sign**
- **To participate regularly (e.g. weekly EC nets)**
- **To learn net control responsibility in rotation with all other radio operators**
- **To participate in training and exercises**
- **To respond during emergencies or disasters**
- **To provide prompt updates regarding changes to your contact information and availability**

INTRODUCTION

This Operational Guideline is for licensed amateur radio operators who are able to provide emergency communications support in the event of an emergency or disaster. Amateur Radio Operators, who willingly volunteer their time, radio equipment and expertise in aid of the local authority's emergency response and recovery effort are greatly appreciated.

The Cowichan Valley Regional District covers an area that is 3,473.12 km^2 and includes 9 Electoral Areas, 4 Municipalities and 8 First Nations with a population of approximately 85,000.

Operators are generally assigned to assist in the area in which they live, however, if emergency requirements call for it, may be requested to respond to another location if appropriate:

- In your neighbourhood, workplace or current location should you be traveling
- At various emergency response locations as directed by the Emergency Program at the time of the response including: ESS Reception Centres, Emergency Operations Centres, Incident Command Posts and other agencies.

ECT SERVICES

LEVEL 2 ECT Service

- Assist Neighbourhood, workplace or local community in determining what messages need to be sent, their priority and where to send them (i.e. Resident Accountability to ESS, Damage Assessments to EOC if activated)
- Input emergency related information into relevant format
- Determine best way to relay messages (i.e. phone, amateur radio/packet Airmail, runners, etc.)
- If radio transmission is not required, assist where needed

LEVEL 3 (Advanced) ECT Service

- Report in to Net Control and be prepared to send and receive emergency messages or mobilize to affected service or area (i.e. ESS Reception Centre). In the event that Net Control has not been established the first Operator on air will assume control and establish the net from his/her station until relieved
- If required, proceed to your assignment, report in to the person in charge (green vest) and sign in on the Task Registration Form
- Set up the Emergency Service Communications Station and get the equipment up and running
- Report to Net Control that you are at your assigned location and ready to send/receive message traffic
- Write or type up messages as needed and assign precedence for sending traffic
- If radio transmission is not required, assist where needed

LEVEL 3 (Leadership) ECT Service

- Take on Net Control and coordinate emergency communications as directed for the affected service or area (i.e. Reception Centre)
- If required, proceed to your assignment, report in to the person in charge (green vest) and sign in on the Task Registration Form
- Lead your team in setting up and managing the Emergency Service Communications Station
- Report to Net Control that you are at your assigned location and ready to send/receive message traffic as needed
- Provide support and guidance to Emergency Communications operators
- Provide hands on radio operator skills training for ECT operators
- Provide mentorship for newer ECT operators
- If radio transmission not required, assist where needed

TRAINING LEVELS

Amateur Radio Operators are invaluable at a number of levels and as a result, a service matrix has been developed to identify these levels along with the corresponding training and service expectations.

ECT Level 2	**ECT Level 3**	
	Advanced	***Leadership***
Basic Emergency Communications Setup & Operations	Advanced Station Setup and Management	Radio Communications Station Management
Emergency Communications Overview	Incident Command System 100	Public Safety Lifeline Leadership
Introduction to Emergency Management in BC	Emergency Program specific service courses	Emergency Operations Centre Training
Community Emergency Support Services Level 2	**Community Emergency Support Services Level 3**	

TRAINING OUTLINE AND COURSE DESCRIPTION

LEVEL 1

1. Basic Amateur Radio Operator License with Industry Canada Callsign

All ECT members must complete **LEVEL 1 Emergency Prepared (*LERN*)** training. Please refer to the *Volunteer Engagement Plan* for details.

LEVEL 2 ECT

1. Emergency Communications Overview

- Basic understanding of your role in personal and neighbourhood assistance and the type of information that you may need to transmit

2. Basic Emergency Communications Setup & Operations

- Radio Operation Techniques - terminology, phonetics and net traffic skills
- Setup / Configuration of personal communications equipment
- Basic knowledge of radio equipment, fault identification and remediation

3. Introduction to Emergency Management in British Columbia

- An introduction to current emergency management concepts and processes that can help communities to decrease the effects of a disaster (self-study or course)

LEVEL 3 (*Advanced*) ECT

1. Emergency Service Communications Station Setup and Management

- Essential emergency communications protocols at an ESS Reception Centre
- Radio Network Operation Techniques - terminology, phonetics and traffic skills
- Setup / Configuration and operation of communications equipment utilized by ESS and EOC
- Advanced knowledge of radio equipment, fault identification and remediation

2. Incident Command System 100

- The Incident Command System (ICS) Level 100 course introduces students to a proven incident site management system for emergencies or disasters

3. Emergency Program Specific Service Training

- See specific Emergency Program Service training such as Emergency Social Services and Community Recovery. Other services may be added in the future.

LEVEL 3 (*Leadership*) ECT

1. Radio Communications Station Management

- Guide to the key responsibilities, organization and operation of an emergency radio communications station at an EOC, ESS Reception Centre or PREOC

2. Public Safety Lifeline Leadership

- The fundamental components of effective leadership skills that can be applied to teams including Emergency Social Services, Search & Rescue & Emergency Communications

3. Emergency Operations Centre Training

- Instruction on the functioning and operations of an Emergency Operations Centre including volunteer roles and responsibilities.

CALL OUT

Emergency Program Coordinator
- Communications Group Coordinator
  - Net Control
    - Emergency Communications Team Operators

Within the Cowichan Valley region, amateur radio operators will activate their radios on the primary frequency **(145.470 MHz)** and **standby** for further information. ***If for any reason the 145.470 repeater is unavailable, all radio operators would go to the 146.680 repeater. If that repeater is also unavailable all radio operators would go to local simplex frequencies and stand by for instructions. It is essential that radio silence be maintained on all frequencies during this period in order to allow for the setup of command and control nets.***

Duties will be assigned via Net Control, using the primary or secondary frequencies. ECT operators with duties at designated communications sites (i.e. ESS Reception Centres, or Incident Command Posts) would proceed immediately to their duty position, advising Net Control accordingly.

Should emergency events be such that no ECT operator is contacted, but it is obvious to many that a serious occurrence has taken place, all local Amateur Radio Operators will activate their 2-Meter radios and tune in to 145.470 MHz.

The first Emergency Communications Team operator on the air, will assume control and establish the Net from his/her home station … retaining net control until such time as relieved by designated Net Control.

OPERATIONS

The British Columbia Emergency Response Management System (BCERMS) structure will be used to address the requirements of the situation. ECT operators are part of the Communications Group within the Logistics Section and will report to Net Control, who will report directly to the Communications Group Coordinator, Information Technology Branch Coordinator, or the Logistics Section Chief depending on which functions have been assigned.

If deployed to a communications site, you will receive direct supervision from the Incident Commander, Reception Centre Manager or ***LERN*** Neighbourhood Captain.

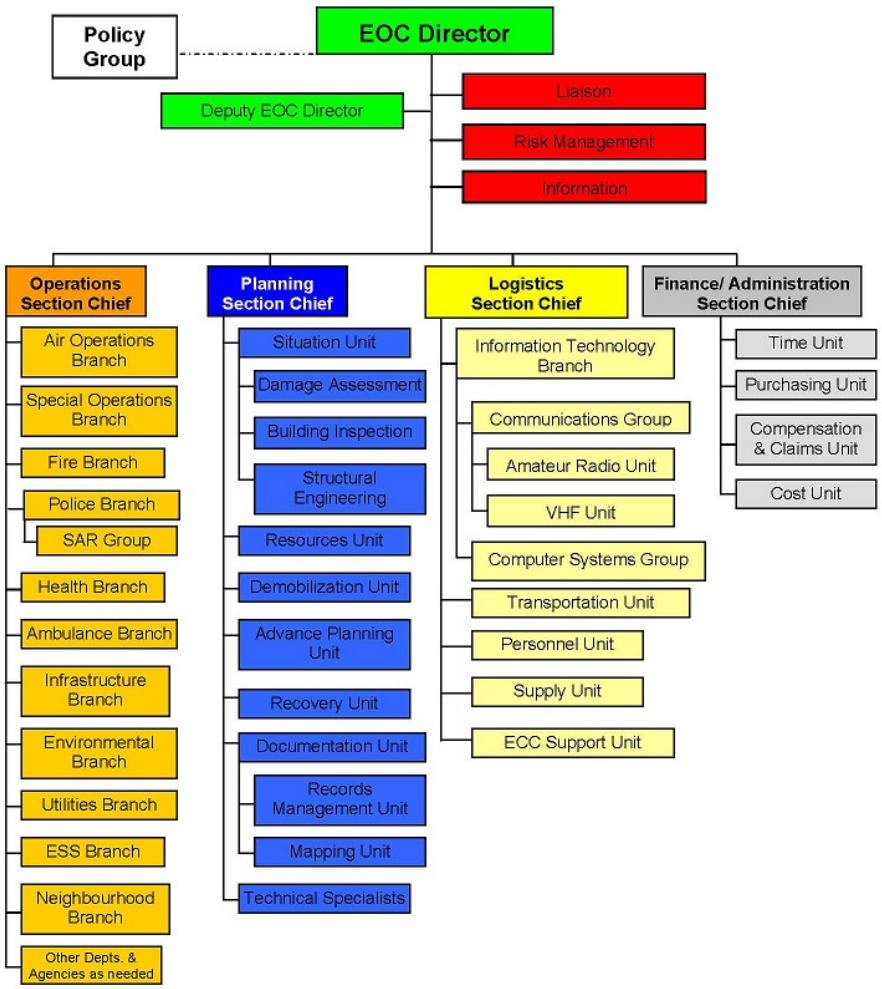
The guiding principle of successful emergency management requires all ECT operators (regardless of discipline) remain **Adaptable**, **Flexible** and **Creative** in all situations. *ECT operators are encouraged to cross-train in other disciplines such as Emergency Social Services or* ***LERN*** *Neighbourhood functions and to help out as needed when emergency communications are not required.*

BCERMS PRIORITY RESPONSE GOALS

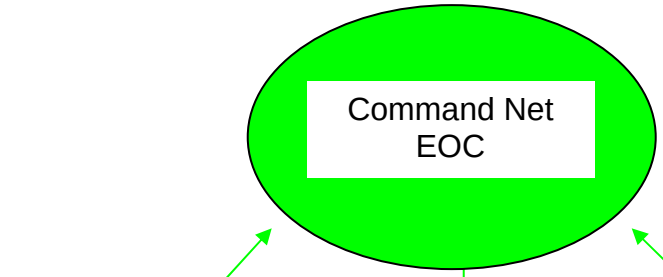
PRIORITY RESPONSE GOALS

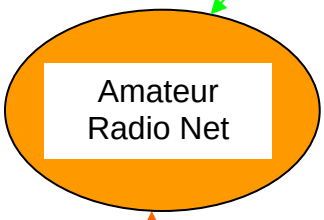
- Provide for the safety and health of all responders
- Save lives
- Reduce suffering
- Protect public health
- Protect government infrastructure
- Protect property
- Protect the environment
- Reduce economic and social losses

EOC ORGANIZATIONAL STRUCTURE



COMMUNICATIONS NETWORK PLAN





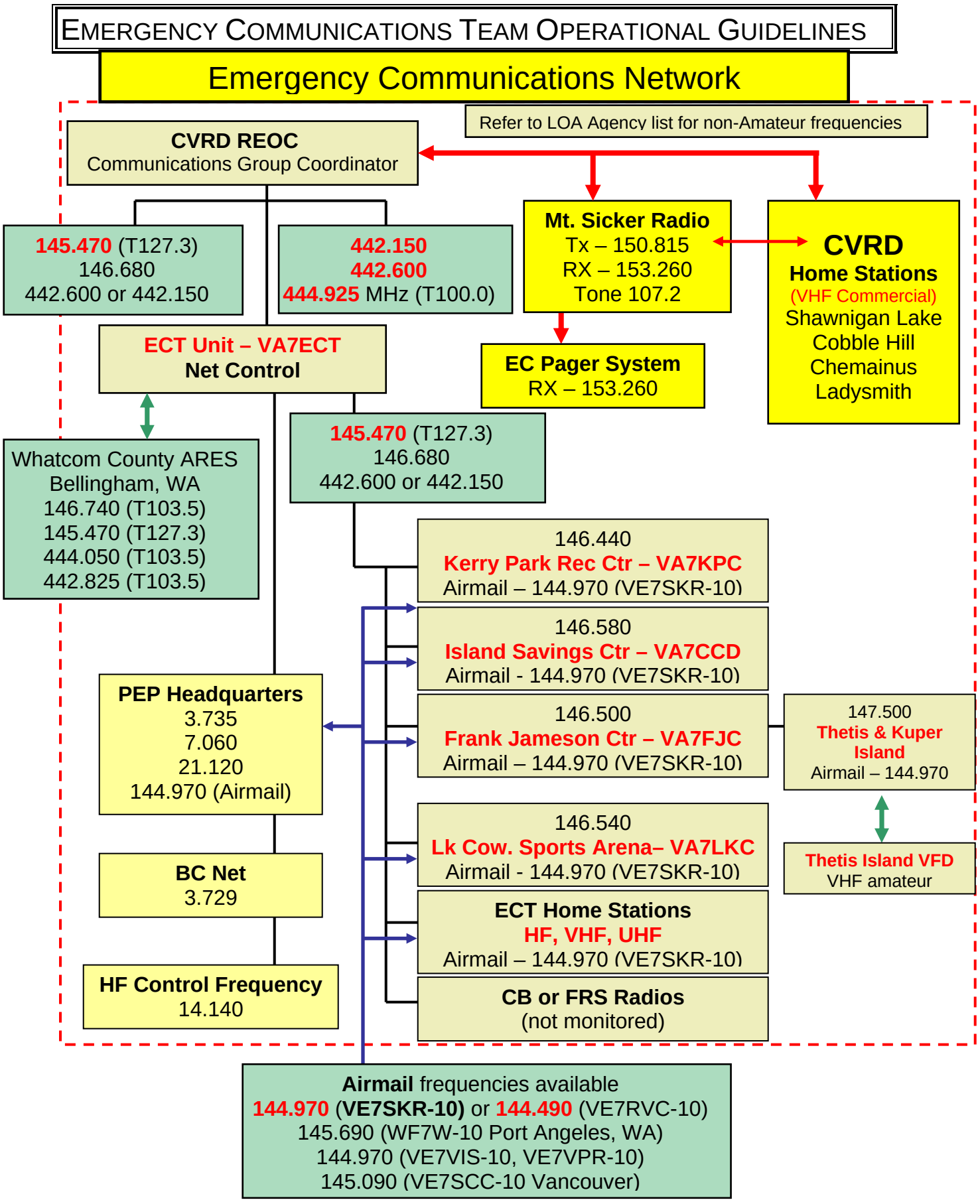
Facility/Site
ESS Reception Centres
ESS Group Lodging
Schools
LERN Neighbourhoods
Red Cross
Other

EOCs
Cowichan Valley Regional District
Municipality of North Cowichan
City of Duncan
Town of Ladysmith
Town of Lake Cowichan
Capital Regional District
Regional District of Nanaimo
City of Nanaimo
City of Parksville
Town of Qualicum Beach
Alberni-Clayquot Regional District
Comox Valley Regional District
Strathcona Regional District
District of Sooke
Provincial Regional EOC

AGENCY
RCMP - 4 detachment offices
BCAS - 4 stations
Public Works - 4 municipalities - Ministry of Transportation Contractors for CVRD areas
First Nations - Cowichan Tribes - Ditidaht First Nation - Halalt First Nation - Lake Cowichan First Nation - Lyackson First Nation - Malahat First Nation - Penelakut First Nation - Stz'uminus First Nation
Health - Vancouver Island Health Authority
Fire Departments - Zone 1 South – Mt Wood / Mt. Bruce - Zone 2 Central – Maple Mountain - Zone 3 North – Woodley Range - Zone 4 West – Lake Cowichan

NOTE: ECT operators will not initiate contact with stations other than those on the Amateur Radio Net unless directed by the Command Net Controller.

Emergency Communications Network



GENERIC CHECKLIST

(ECT OPERATORS DIRECTED TO AN EMERGENCY SERVICE LOCATION)

The Generic Checklist is to be used by all ECT operators when directed to serve at an Emergency Service Location (i.e. a Reception Centre). More specific Operational Phase items are listed in the operational checklists.

Activation Phase:

	Time	Init.
Bring your identification card and Grab 'n Go bag.		
Check in and sign In/Out on PEP Task Registration Form.		
Report to assigned supervisor to obtain current situation status and specific job responsibilities expected of you.		
Set up your workstation and review your position checklist, applicable contingency plan, current action plan forms and flowcharts.		
Adopt a proactive attitude. Think ahead and anticipate situations and problems before they occur.		
Participate in any facility/safety orientations as required.		
Establish and maintain Radio Station Logbook that chronologically describes the actions you take during your shift.		
Follow the Activation Phase tasks listed on your checklist.		
Date:	Time:	
Print Name:	Signature:	

Demobilization Phase:

	Time	Init.
Deactivate your assigned position and close out logs when authorized.		
Complete all required logs, forms, reports, and other documentation. All forms and paperwork should be submitted to your supervisor prior to your departure from your assigned location.		
Thoroughly brief your replacement before you leave your workstation.		
Clean up your work area before you leave. Return any materials or communications equipment issued to you.		
Leave a forwarding phone number where you can be reached.		
Follow checkout procedures and ensure that you sign out.		
Upon request, participate in formal post-operational debriefs.		
Access critical incident stress debriefings, as needed.		
Date:	Time:	
Signature:	Position:	

COMMUNICATIONS GROUP COORDINATOR CHECKLIST

Report to: Information Technology Branch Coordinator
or EOC Logistics Section Chief

Responsibilities:

1. Ensure an adequate number of radio operators are available to implement both voice and packet radio facilities as required for a given event.
2. Review all operational radio communication facilities.
3. Ensure communications are established with all required locations as well as designated home stations.
4. Ensure that adequate staff; both radio operators and support personnel are always available to maintain required radio communications.
5. Ensure the entire radio network is operational at all times.
6. Manage the available radio operator resources to ensure adequate coverage for all duties.
7. Maintain both privacy of information and the confidentiality of radio traffic related to a given event.
8. Perform all duties in a professional manner befitting the code of the amateur radio operator.

Activation Phase:

	Time	Init.
Follow the Generic Activation Phase Checklist (Page 12).		
Report to EOC facility and obtain a situation briefing from Information Technology Branch Coordinator or the Logistics Section Chief.		
Determine current communications requirements.		
Contact Net Control to advise them of the field communication requirements. Implement required call-out procedures.		
Based on current requirements, deploy radio operators to appropriate operational positions at Emergency Service locations.		
Date:	Time:	
Signature:	Position:	

Operational Phase:

	Time	Init.
Establish work schedule, shift rotation and post call out lists of all available operators. Update these lists on a regular basis.		
Ensure radio operator positions have all required logs, files and operational supplies.		
Once voice and packet radio communications have been established, advise the Information Technology Branch Coordinator or Logistics Section Chief giving a status update on numbers of operators available, radio conditions and any operational problems.		
Deal with any technical problems identified.		
Keep a log of all technical problems encountered and action taken.		
Ensure any shift change has a brief overlap to hand-off all current issues with a smooth transition of responsibilities.		
Provide communications related advice when requested.		
Date:	Time:	
Signature:	Position:	

Demobilization Phase:

	Time	Init.
Do a man-check of all field operators to ensure they are able to safely return to their point of origin. Log the results.		
Ensure any open actions are assigned to appropriate Logistics staff or other EOC Sections to follow-up on.		
Coordinate return of all communication resources no longer required.		
Ensure that all expenditures and financial claims have been coordinated through the Information Technology Branch Coordinator or the Logistics Section Chief to the Finance/Administration Section.		
Provide input towards the EOC After-Action Report.		
Follow the Generic Demobilization Phase checklist (Page 12).		
Date:	Time:	
Signature:	Position:	

EMERGENCY COMMUNICATIONS TEAM OPERATORS CHECKLIST

Report to: Assigned Net Controller

Responsibilities:

1. Bring voice and packet radio services on-line if available and required for a given event.
2. Contact the Communications Group Coordinator if problems are encountered with any in-house radio equipment or service.
3. Test and ensure that communications are established (as directed) between locations, designated home stations and other event-specific locations.
4. Ensure the location-specific radio network is operational at all times.
6. Maintain privacy of information and confidentiality in all radio traffic.
7. During shift change, ensure the incoming shift volunteers have a complete understanding of all current operational issues.
8. Perform duties in a professional manner befitting the code of the amateur radio operator.

Activation Phase:

	Time	Init.
Follow the Generic Activation Phase Checklist (Page 12).		
At an EOC, radio operators report to the respective facility as follows: • Report to the Communications Group Coordinator for a situation briefing on current communication requirements and work assignment.		
At all other locations, report to the appropriate facility and: • Check in and receive directions to the communications area. Request operational supplies from Logistics. Setup your radio equipment and secure your personal gear. • Check in with Net Control to let them know your station is operational and stand by for calls.		
Ensure the radio operator position has all required logs, files and operational supplies.		

Date:	Time:
Print Name:	Signature:

Operational Phase:

	Time	Init.
Maintain radio silence unless directed otherwise with outbound traffic. Stay on the operational frequency.		
Refer any technical problems to the Communications Group Coordinator.		
Keep a log of all technical problems encountered and actions taken.		
The radio operator should continually monitor all local (amateur radio) emergency frequencies to ensure they are ready to respond if needed.		
Establish a radio or packet link with other external agencies as directed.		
Handle all radio traffic (both inbound and outbound) via standard logging procedures. Log all radio traffic on standard log form provided.		
Ensure any shift change has a brief overlap to hand-off all current issues with a smooth transition of responsibilities.		
Log and refer all non-standard information requests to the Communications Group Coordinator.		
Provide communications related advice when requested.		
Refer any request for establishment of communications outside the amateur radio operational spectrum to the Communications Group Coordinator. Take no action without prior approval of the Communications Group Coordinator.		
Date:	Time:	
Print Name:	Signature:	

Demobilization Phase:

	Time	Init.
Ensure any open actions are forwarded to your supervisor to follow-up on.		
Complete all logs and documentation and forward to the Communications Group Coordinator.		
Coordinate return of all communication resources no longer required.		
Provide input towards the After-Action Report.		
Follow the Generic Demobilization Phase checklist (Page 12).		
Date:	Time:	
Print Name:	Signature:	

EMERGENCY COMMUNICATIONS – POTENTIAL SERVICE LOCATIONS

Reception Centre Locations

Primary Reception Centres

South Cowichan
Kerry Park Recreation Centre
1035 Shawnigan-Mill Bay Road, Mill Bay

Ladysmith, North Oyster/Diamond & Area
Frank Jameson Community Centre
810 – 6th Avenue, Ladysmith

Duncan/North Cowichan
Island Savings Centre
2687 James Street

Cowichan Lake
Centennial Hall
309 South Shore Road

Secondary Reception Centres – Zone 1

Shawnigan Lake East
Community Centre
2804 Shawnigan Lake Road

Cobble Hill
Cobble Hill Farmers Institute
3550 Watson Avenue

Shawnigan Lake West
Camp Pringle
2520 West Shawnigan Lake Road

Cowichan Bay
Coverdale Watson Park
Wilmot Road

Secondary Reception Centres – Zone 2

Cowichan Tribes
Siem Lelum Gymnasium
5574 River Road

Glenora
Glenora Community Hall
3660 Glenora Road

Chemainus
Chemainus Seniors Centre
9824 Willow Street

Crofton
Crofton Community Centre
8104 Musgrave Street

Secondary Reception Centres – Zone 3

Ladysmith
Ladysmith Eagles Hall
921 1st Avenue

Bethel Tabernacle
1149 - 4th Avenue

North Oyster /Yellow Point
North Oyster School
13470 Cedar Road

Saltair
Saltair Centennial Park
3826/3850 South Oyster School Road

Thetis Island
Forbes Hall
Mission Road

Secondary Reception Centres – Zone 4

Honeymoon Bay
Honeymoon Bay Community Hall
10022 Park Drive

Youbou
Youbou Community Hall
8550 Hemlock Street

Mesachie Lake
Community Hall
9315 South Shore Road

THE RADIO AMATEUR'S CODE

The Radio Amateur is:

CONSIDERATE...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...offers loyalty, encouragement and support to other amateurs, local clubs, and the Radio Amateurs of Canada, through which Amateur Radio in Canada is represented nationally and internationally.

PROGRESSIVE...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC...station and skill always ready for service to country and community.
--The original Amateur's Code was written by Paul M. Segal, W9EEA, in 1928.

CVRD EMERGENCY COMMUNICATIONS FREQUENCY TABLE

Local VHF Spectrum			
EOC Specific	**RX**	**TX**	**PL Tone**
CVRD/CVARS Mt. Sicker	145.470	144.870	127.3
CVARS Mt. Brenton	146.680	146.080	0
Zone 1	146.440	146.440	0
Zone 2	146.580	146.580	0
Zone 3	146.500	146.500	0
Thetis/Kuper Island	147.500	147.500	0
Zone 4	146.540	146.540	0
National – Calling Frequencies[1]	146.520	146.520	0
	147.570	147.570	0
Alternate Simplex Frequencies[2]	146.400	146.400	0
	146.460	146.460	0
	146.520	146.520	0

Notes:
1. 146.520 and 147.570 are National-calling frequencies. If you need to call on one of these frequencies, you should move to another frequency once contact is made.
2. These alternate frequencies are listed for information purposes only; any change from the network plan on page 11 of this document would be made by EOC Net Control.

RADIO NETWORK AND NET CONTROL

Radio Networks

A radio network is a number of radio stations operating on the same frequency to communicate with each other. A network may be either "free" or "controlled". In a free network, stations contact each other directly and pass messages as required. In a controlled network, a "master of ceremonies" called the Net Control Station (NCS) directs the exchange of messages. How well the network passes messages depends mainly on using standard procedures and circuit discipline.

Net Control Station

The Net Control Station will maintain a list of active stations, and **direct the exchange of messages, clearing immediate, priority and routine messages in that order.** All stations on the net must inform Net Control if they are leaving. Message traffic is important and stations need to be manned to ensure proper notification.

RADIO PROCEDURES REMINDER

Listen First

Before calling Control, the operator **should listen** long enough to ensure that he or she would **not cause harmful interference** to a transmission already in progress. If such interference seems likely, the operator will wait for the first break in the transmission to transmit. Higher precedence messages may interrupt a transmission of a lower precedence. The call must include the words **PRIORITY MESSAGE** or **IMMEDIATE MESSAGE**. When a station has a message for another station in the network, the station should call Control and request permission to pass the message directly.

Microphone – Always keep the correct distance between mouth and the microphone. Usually the operator's lips should not be more than an inch from the microphone.

Articulation – Speak all words plainly. End each word clearly to prevent running together of consecutive words. Avoid shouting, accenting syllables artificially, or talking too quickly.

Speed – Keep the tempo of your speech constant, neither too fast nor too slow. Remember that the operator receiving your message has to write it down.

Phrasing – Break the text of the message into natural sounding phrases and release the mike button for a fraction of a second between the phrases. This will help the receiving operator and allow him to break the transmission, if necessary.

Rhythm – Preserve the rhythm of ordinary conversation. Separate words so that they are not run together, and avoid words that don't belong, like "er" and "um".

Pitch – Remember that under most circumstances, a high pitched voice is more intelligible than low pitched ones.