National Defence / Défense nationale

A-CR-CCP-922/PG-001

CANADIAN CADET ORGANIZATIONS

SMALL CRAFT OPERATOR PROGRAM (SCOP) MODULE 2 – RESTRICTED OPERATOR'S CERTIFICATE (MARITIME) (ROC[M])

(ENGLISH)

(Cette publication est disponible en français sous le numéro A-CR-CCP-922/PG-002)

Issued on Authority of the Chief of Defence Staff

OPI: D Cdts & JCR

Canada

National Defence / Défense nationale

A-CR-CCP-922/PG-001

CANADIAN CADET ORGANIZATIONS

SMALL CRAFT OPERATOR PROGRAM MODULE 2 – RESTRICTED OPERATOR'S CERTIFICATE (MARITIME) (ROC[M])

(ENGLISH)

(Cette publication est disponible en français sous le numéro A-CR-CCP-922/PG-002)

Issued on Authority of the Chief of the Defence Staff

OPI: D Cdts & JCR **2015-05-01**

Canada

FOREWORD AND PREFACE

1. **Issuing Authority.** This document was developed under the authority of the Director Cadets and Junior Canadian Rangers (D Cdts & JCR) in accordance with Cadet Administrative and Training Order (CATO) 14-19 *Small Craft Operator Program*, and is issued on the authority of the Chief of Defence Staff.

2. A-CR-050-878/PC-001*, Qualifying Standard (QS) for the Cadet Instructors Cadre Occupation MOSID 00232.01Restricted Operator's Certificate (Maritime) Instructor* is issued on the authority of the Chief of Reserves and Cadets.

3. This document supercedes A-CR-050-878/PC-001, *Qualification Standard (QS) for the Cadet Instructors Cadre Occupation MOSID 00232.01 Restricted Operator's Certificate (Maritime) Instructor* and is effective upon receipt.

4. **Development.** Development of this document was in accordance with the performance oriented concept of training outlined in the Canadian Forces Individual Training and Education System A-P9-050 Series, *Manual of Individual Training and Education*, with modifications to meet the needs of the Canadian Cadet Organization (CCO).

5. Industry Canada delegated the examination and administration of the ROC-M certification program to Canadian Power and Sail Squadrons (CPS). The CCO delivers the training and examination through CPS.

6. The document contains the training requirements for SCOP Module 2 – ROC(M) and requirements and assessment package for those who wish to become a ROC(M) Instructor. Students will receive their ROC(M) card upon successful completion which is one of the qualifications towards obtaining the Powerboat Operator qualification or the Sea Boat Coxswain qualification. ROC(M) Instructors will receive qualification 118634.

7. The Lesson Specifications (LSs) and Instructional Guides (IGs) in Chapter 4 are to be used by Technical Establishments (TEs) in conjunction with other resources to conduct SCOP Module 2 training.

8. **Suggested Changes.** Suggested changes to this document can be forwarded to cadettraining@forces.gc.ca.

TABLE OF CONTENTS

CHAPTER 1

GENERAL

AIM

1. The Small Craft Operator Program (SCOP) is the Canadian Cadet Organization's (CCO) training program for qualifying persons to operate small craft in support of Sea, Army, and Air Cadet, and Cadet Instructor Cadre (CIC) on-water training activities in accordance with (IAW) A-CR-CCP-030/PT-001, *Water Safety Orders*.

2. The training resulting from this document will develop in the student the knowledge and skills required to obtain SCOP Module 2 – Restricted Operator's Certificate (Maritime) (ROC[M]) With Digital Selective Calling (DSC) Endorsement, which is one of the requirements of the following three SCOP qualifications IAW CATO 14-19, *Small Craft Operator Program*:

a. Powerboat Operator,
b. Powerboat Rescue Operator, and
c. Sea Boat Coxswain.

3. The ROC(M) is administered by Industry Canada through the Canadian Power Squadron (CPS). The CCO has a Memorandum of Understanding with CPS to deliver the training and examination of the ROC(M) and appoint instructors.

PROGRAM DESIGN

4. SCOP training is designed in a modular format to allow personnel to complete only the training required to be qualified to operate a specific small craft in support of CCO on-water training activities. Each module of training has an associated performance objective (PO).

5. SCOP is designed for use in both cadet and CIC training.

TRAINING MODULES AND PO

6. The aim of Module 2 – ROC(M) is to provide the student with the knowledge to operate a marine radio and attain a ROC(M) with DSC card.

METHOD OF ACHIEVING OBJECTIVE

7. The majority of SCOP training is skills-related. Skills are acquired through practical periods of instruction and practice. In order to achieve the PO, a hands-on learning approach is essential. The following guidance may assist in the implementation of training:

a. Some theory is required for safety purposes and for introducing new material. However, most material can be taught using hands-on practical methods.

b. Ensure training is well organized and planned for in advance to allow instructors adequate time to prepare for the delivery / conduct of training. This includes reviewing lesson specifications and instructional guides and creating instructional materials as required.

c. Schedule training such that the material is presented in a manner to ensure a smooth flow from one activity to the next.

d. Take adequate time for students to reflect upon and be debriefed on training activities, to include discussing the ways that experience can benefit them in the future.

USE OF THIS DOCUMENT

8. This document shall be used as the primary authority governing the development, implementation, conduct, and evaluation of the training and standards for the SCOP Module 2 – ROC(M). It shall also be used by D Cdts & JCR as the primary reference for validation.

9. This document has been developed IAW *CPS Maritime Radio Course Student's Notes.*

QUALIFICATION CODES

10. The following qualifications will be awarded:

Qualification / MITE Code	Qualifications
118646	Powerboat Operator
118645	Powerboat Rescue Operator
118647	Sea Boat Coxswain
118634	ROC(M) Instructor

CHAPTER 2

TRAINING MANAGEMENT DETAILS

RESPONSIBLE AGENCY AND TRAINING ESTABLISHMENTS

1. The Designated Training Authority (DTA) for the SCOP is D Cdts & JCR. The conduct of said program is the responsibility of the Regional Cadet Support Units (RCSUs) through authorized Training Establishments (TEs), IAW CATO 14-19, *Small Craft Operator Program*. These TEs include:

a. Royal Canadian Sea Cadet Corps (RCSCC);

b. Cadet Training Centres (CTC);

c. Regional Cadet Instructor Schools (RCIS); and

d. Technical TEs, such as:

(1) Nautical Sites; and

(2) Other zone, detachment or regional TEs as authorized by the RCSU Commanding Officer (CO).

TRAINING DELIVERY

2. SCOP Module 2 – ROC(M) may be conducted for cadets and CIC of all three environments whose duties require them to operate a marine radio.

3. **Period Allocation.** Periods are 40 minutes in duration. Period allocation for SCOP Module 2 – ROC(M) is as follows:

EO No.	Performance Objective	No. Pd
PO 002 Attain the Restricted Radiotelephone Operator's Certificate (Maritime) With Digital Selective Calling (DSC) Endorsement		
002.01	Describe the Maritime Mobile Service (MMS)	1
002.02	Identify Voice Procedures	3
002.03	Utilize Distress, Urgency and Safety Calling Procedures	3
002.04	Describe the Global Maritime Distress and Safety System (GMDSS)	1
002.05	Describe Digital Selective Calling (DSC)	2
		2
	Total	12

TRAINING PREREQUISITES - OPERATOR

4. Students shall complete SCOP Module 1 – PCOC before undertaking SCOP Module 2 – ROC(M).

TRAINING PREREQUISITES – INSTRUCTOR

5. Prerequisites for ROC(M) Instructors are as follows:

   a. minimum 18 years old;

   b. member of the Canadian Armed Forces (CAF);

   c. held the ROC(M) for at least two years; and

   d. be selected for or employed in a position delivering the ROC(M) program.

INSTRUCTOR REQUIREMENTS AND TRAINING CAPACITY

6. SCOP Module 2 – ROC(M) shall be conducted by a SCOP Module 2 – ROC(M) IAW this document and CATO 14-19, *Small Craft Operator Program*.

7. The instructor to student ratio shall not exceed 1:25.

TRAINING ADMINISTRATION

8. Details on student evaluation and reports are found in Chapter 3.

9. SCOP certificates and cards shall be issued IAW CATO 14-19, *Small Craft Operator Program*.

RELATED DOCUMENTS

10. This QSP is to be used in conjunction with:

   a. Cadet Administration and Training Orders (CATOs);

   b. A-CR-CCP-030/PT-001, *Water Safety Orders*;

   c. A-CR-CCP-613/PG-001, *Royal Canadian Sea Cadets Intermediate Sail Qualification Standard and Plan*;

   d. A-CR-CCP-616/PG-001, *Royal Canadian Sea Cadets Ship's Boat Operator Qualification Standard and Plan*; and

e. A-CR-050-803/PH-001, *Training Plan (TP), Cadet Instructors Cadre (CIC) – Sea Environmental Training Course*.

RESOURCES

11. RCSU COs are responsible for ensuring that required equipment and supplies are available. A detailed list of material, audiovisual equipment, and training / learning aids required to conduct the training is located in each lesson specification found in Chapter 4.

CHAPTER 3

STUDENT EVALUATION – OPERATOR AND INSTRUCTOR

PURPOSE

1. The purpose of this chapter is to outline the specific evaluation requirements for achievement of each performance objective.

LEARNER EVALUATION

2. “Learner evaluation is the assessment of progress made by participants during an instructional programme (formative evaluation) and of their achievement at the end of the programme (summative evaluation).” (A-P9-050-000/PT-Z01, Manual of Individual Training and Education, Volume 1 (1), Glossary).

3. Formative evaluation, or assessment **for** learning, takes place during a phase of instruction and helps students and instructors recognize progress or lapses in learning. Through formative evaluation, the instructor can; identify when corrective or remedial action is required, plan the next steps in instruction, provide students with feedback so they can improve, and reinforce learning to aid the student in retaining information. Formative evaluation may also include opportunities for students to practice using Performance Checks (PCs) employed in summative evaluation. Details for assessment of learning are outlined within the applicable lesson specifications located in Chapter 4.

4. Summative evaluation, or assessment **of** learning, takes place to determine whether learners have achieved POs, or critical EOs (those deemed prerequisites to further individual training and education) and are used at the end of a phase of instruction. Details for assessment of learning are detailed within this chapter.

ASSESSMENT OF LEARNING PLAN

5. The Assessment of Learning Plan – SCOP Module 2 – ROC(M) located at Chapter 3, Annex A, provides an overall strategy for using assessment activities to determine if the student meets the outlined requirements. The Assessment of Learning Plan will:

a. provide an outline of each assessment of learning activity; including its purpose, when it will occur and details the assessment instrument(s) used to support the evaluation;

b. identify the learning target(s) associated with the PO and / or EO being assessed, to include:

(1) **Knowledge Mastery.** The facts, concepts and theory a student needs to know;

(2) **Reasoning Proficiency.** A student uses what they know to solve a problem, make a decision, make a plan, think critically, set goals, or self-assess;

(3) **Skills.** Performance demonstration; where the student demonstrates their ability to perform a skill. To be assessed, these performances must be demonstrated by the student and observed by an assessor;

(4) **Ability to Create Products.** A student uses their knowledge, reasoning and skills to create a concrete product; and / or

(5) **Attitudinal / Dispositional Changes.** A student's attitude about learning, safety, conduct, etc. Targets in this realm reflect attitude and feeling. They represent important affective goals we hold for a student as a by-product of their CP experience, and as such are not generally assessed for the purpose of attaining a qualification.

c. identify the assessment method(s) that best matches PO / EO learning targets, to include:

(1) **Selected Response.** A student selects the correct or best response from a list provided. Formats include multiple choice, true / false, matching, short answer, and fill-in-the-blank questions. Although short answer and fill-in-the-blank questions do require the student to generate an answer, they call for a very brief answer that is counted as right or wrong, so these have been included in the selected response category;

(2) **Extended Written Response.** A student is required to construct a written answer in response to a question or task rather than select one from a list. An extended written response is one that is at least several sentences in length;

(3) **Performance Assessment.** This assessment method is based on observation and judgment; we look at a performance or product is observed and a determination is made as to its quality; and / or

(4) **Personal Communication.** Gathering information about a student through personal communication; learning is assessed through interpersonal interaction with the student.

ASSESSMENT INSTRUMENTS

6. Specific assessment instruments have been designed to support the assessment activity within the assessment of learning plan. These are meant to standardize assessment activities and evaluation for all students.

a. Annex A consists of the assessment instructions and tools for SCOP Module 2 ROC(M) – Operator.

b. Annex B consists of the assessment instructions and tools for SCOP Module 2 ROC(M) – Instructor.

ADDITIONAL ASSESSMENT OF LEARNING ACTIVITIES

7. No additional student evaluations, eg, theory tests or performance checks, are to be used. Therefore, these national standards are not to be supplemented with additional standards.

MONITORING STUDENT PROGRESS

8. Instructors must closely monitor and keep students apprised of their progress using the provided assessment instruments. Assessment for learning should be provided through ongoing verbal feedback.

STUDENTS NOT MEETING THE STANDARD

9. A student who does not meet the standard for the PO shall be given a reasonable opportunity to achieve the standard. Unless otherwise specified in the Assessment of Learning Plan – SCOP Module 2 ROC(M) and associated assessment instruments, there is no limit to the number of additional opportunities that may be afforded to the student, provided it is within the time and resource limitations of the TE.

10. If, by the end of the course, a student has yet to successfully complete the PO, they will be assessed as “Incomplete”.

RECORDING AND REPORTING STUDENT ACHIEVEMENT

11. Recording and reporting of student achievement shall be IAW Annex A to this chapter, CATO 14-19, *Small Craft Operators Program* and any reporting procedures put in place by the Regional SCOP OPI.

CERTIFICATE OF COMPLETION

12. SCOP certificate shall be issued IAW CATO 14-19, *Small Craft Operators Program*.

Annex A

Assessment of Learning Plan – SCOP Module 2 ROC(M)

EC / PC	Scope	Purpose	Target	Method	How	When	Resources	Limitations
002 PC	PO 002	The purpose of this PC is to assess the student's knowledge of marine VHF radio and DSC operating procedures.	Knowledge	Performance Assessment and Selected Response	IAW the practices, standards and policies of Industry Canada and their authorized agent.	Upon completion of Lessons related to PO 002.	IAW the practices, standards and policies of Industry Canada and their authorized agent and the instructions located at Annex A, Appendix 1.	IAW the practices, standards and policies of Industry Canada and their authorized agent.
ROC(M) Instructor	PO 002.01	The purpose of this PC is to assess the instructor trainee's ability to instruct SCOP Module 2 – ROC(M).			Evaluated while conducting three periods of instruction.	Throughout ROC(M) – Operator course.	Annex B, Appendices 1 and 2.	Nil.

ANNEX A, APPENDIX 1

002 PC – ROC(M)

ASSESSMENT INSTRUCTIONS

GENERAL

This PC consists of two parts conducted IAW CPS and Industry Canada standards. Part 1 is written exam (selected response) and Part 2 is an oral exam (personal communication).

PRE-ASSESSMENT INSTRUCTIONS

1. Review the Assessment of Learning Plan – SCOP Module 2 - ROC(M).

2. Obtain the following from the Regional SCOP OPI:

   a. current version of the CPS ROC(M) exam booklet, one for each student,
   b. CPS ROC(M) answer sheet, one for each student,
   c. CPS ROC(M) exam marking key, and
   d. Application for a Restricted Operator's Certificate (Maritime), one for each student.

CONDUCT OF ASSESSMENT

PURPOSE

The purpose of this PC is to assess the student's knowledge of marine VHF radio and DSC operating procedures. Successful completion of this PC is required for issuance of a ROC(M) with DSC.

RESOURCES

- Current versions of the ROC(M) exam booklet and answer sheet.
- Current versions of the ROC(M) tests answer key.
- Application for a Restricted Operator's Certificate (Maritime), one for each student.

ASSESSMENT ACTIVITY LAYOUT

The test is to be conducted in a classroom or training area, free of distractions and large enough to accommodate the entire group.

The assessor to student ratio shall not exceed 1:25.

ASSESSMENT ACTIVITY INSTRUCTIONS

1. Seat the students in the testing area in such a way that limits any possible distractions.

2. Before the test begins provide the following verbal instructions to the students:

    a. This is a closed book test. No reference material is allowed;
    b. Do not write in the test booklet;
    c. All questions are to be answered on the answer sheet provided;
    d. During the test you may not speak with others in the room;
    e. If you have any questions during the test, raise your hand for assistance;
    f. Upon completion, your results will be discussed with you;
    g. You may not keep the test booklet or answer sheet. All materials must be returned upon completion;
    h. The pass mark is 70% (42/60) on Part 1 and 2 out of 3 correct answers on Part 2; and
    i. You have 60 min to complete Part 1.

- Allow students that finish Part 1 before the time limit to hand in their test and leave the room (if possible) as to not disturb the other students. Collect all remaining tests once the time limit expires.

- Mark Part 1 using the corresponding marking key.

- Conduct Part 2 of the exam with those students who were successful on Part 1. Part 2 shall be conducted with each student individually.

POST-ASSESSMENT INSTRUCTIONS

RECORDING ASSESSMENT RESULTS

- Have the student fill in their personal information and sign the Application for a Restricted Operator’s Certificate (Maritime) form.

- Fill in the exam / examiner information and sign the Application for a Restricted Operator’s Certificate (Maritime) form.

- Discuss the overall performance results with the student and provide them with a copy of the completed Application for a Restricted Operator’s Certificate (Maritime) form.

PROVIDING ASSESSMENT FEEDBACK

Discuss the overall performance results with the student and provide them with a copy of the completed Application for a Restricted Operator's Certificate (Maritime) form.

ADMINISTRATION AND REPORTING

Seal the completed answer sheets and a copy of the Application for a Restricted Operator's Certificate (Maritime) form in an envelope and forward to the Regional SCOP OPI for processing with CPS.

Any electronic recording of results and student information, as directed by the Regional SCOP OPI, should also be completed at this time.

The ROC(M) Test booklets must be inspected to ensure that they have not been marked in prior to them being used again.

ANNEX B

002 PC ROC(M) INSTRUCTOR

ASSESSMENT INSTRUCTIONS

Pre-Assessment Instructions:

1. Review the Assessment of Learning Plan – SCOP Module 2 – ROC(M), located at Annex A.

2. Photocopy the 002.01 PPC ROC(M) – Lesson Rubric, located at Annex B, Appendix 1, three copies for each instructor trainee.

3. Photocopy the 002.01 PPC – ROC(M) Instructor – Feedback and Summative Evaluation Form, located at Annex B, Appendix 2, one copy for each instructor trainee.

Requirements: Classroom equipped with a podium / table, whiteboard or chalkboard and projection equipment or flip chart suitable for instructional purposes. An additional room equipped with two chairs and a desk to be used for instructor debriefs.

Purpose of test: The purpose of this PPC is to assess the instructor trainee's ability to instruct ROC(M) with DSC.

Type of test: This PPC requires the instructor trainee to conduct three periods of instruction.

Description of how test will be conducted:

The instructor trainee will conduct three periods of instruction. These lessons are to be selected from the following Enabling Objectives (EOs):

- EO 002.01 – Describe the Maritime Mobile Service (MMS)
- EO 002.02 – Identify Voice Procedures
- EO 002.03 – Utilize Distress, Urgency and Safety Calling Procedures
- EO 002.04 – Describe Global Maritime Distress and Safety System (GMDSS)
- EO 002.05 – Describe Digital Selective Calling (DSC)

The evaluator will approve the instructional period choices based on a need to avoid duplicate lessons.

The evaluator will monitor the instruction and record the instructor trainee's performance on the 002.01 PPC ROC(M) Instructor – Lesson Rubric.

Time allowed for the test:

Each instructor trainee will be required to conduct one 40 minute periods of instruction, within the following time frame:

5 min – preparation / set-up
40 min – lesson delivery
5 min – debrief of student

Resources available or denied:

Available: The instructor trainee will be provided the following for training and evaluation:

- access to instructional guides and other lesson planning resources,
- blank lessons plans,
- access to training aids, and
- copies of the 002.01 PPC ROC(M) Instructor – Lesson Rubric (prior to evaluation only).

Denied: Nil.

Standard of achievement required to pass:

A pass standard is achieved if all elements on the evaluation form are checked “Yes” within the time allocated.

Re-Test: If an instructor trainee is unsuccessful on the first attempt, they are permitted a second attempt.

The instructor trainee shall be retested using a lesson selected by the evaluator, based on the training needs of the students.

Actions to be taken upon completion of test:

Record the lesson scores on the 002.01 PPC – ROC(M) – Feedback and Summative Evaluation Form.

Upon completion of the PPC, the instructor trainee shall be debriefed on their performance by the evaluator and provided feedback on their strengths and areas for improvement. The instructor trainee shall be advised if they have passed or failed. In the event of a failure, the instructor trainee should be fully advised in which areas they were unsuccessful and provided assistance in how to rectify these. However, in all cases, the circumstances of the instructor trainee’s inability to meet the standard shall be explained / recorded in the comments portion of the instructor trainee’s evaluation form.

The evaluation forms are to be forwarded to the Regional SCOP OPI to be placed on the instructor trainee's file. Instructor trainees are to have access to these forms, if requested.

ANNEX B, APPENDIX 1
002.01 PPC ROC(M) INSTRUCTOR – LESSON RUBRIC

INSTRUCTOR TRAINEE UNIT **INSTRUCTOR TRAINEE NAME** **SN (CIC ONLY)**

LESSON:_____

	CRITERIA				
	3	**2**	**1**	**0**	**SCORE**
PREPARATION					
Set-up of Training Environment	Set-up includes all of the following: functional seating formation, training area is clean, well-lit, training aids are prepared and ready for use.	The instructor missed one item in training environment set-up.	The instructor missed two items in training environment set-up.	The instructor missed more than two items, or no set-up of training environment is evident.	**/3**
Lesson Plan Content	The lesson plan contains sufficient detail to cover the teaching points (TPs) IAW the applicable QSP and includes the relevant details of how TPs are to be presented.	The lesson plan contains adequate detail to cover the teaching points (TPs) IAW the applicable QSP and includes some relevant detail of how TPs are to be presented.	The lesson plans contains insufficient material to cover the teaching points (TPs) IAW the applicable QSP and includes few details of how TPs are to be presented.	The instructor has no detail to support the delivery of an effective period of instruction or the lesson plan was not developed IAW the QSP.	**/3**
INTRODUCTION					
Introduction	The instructor stated **what** is being taught (teaching points), **why** it is important, **where** the lesson fits in.	The instructor missed one main item in their introduction.	The instructor missed two main items in their introduction.	The instructor missed more than two main items in their introduction.	**/3**
BODY OF THE LESSON					
Training Aids	A variety of visual training aids were used that were relevant, realistic, and assisted trainees in understanding the course material.	Training aids were relevant and assisted trainees in understanding course material.	Training aids were used but were limited in enhancing trainee understanding of the course material.	No training aids were used or if used hindered trainee learning.	**/3**
Method		The instructor selected one or more of the methods specifically listed for that lesson in the Instructor Guide (IG).	Method selected detracted from learning.	The instructor selected a method not condusive to learning.	**/2**
Comprehension	The instructor asked questions to confirm previous knowledge and during lesson to confirm understanding, adjusted instruction to trainee's reaction, and utilized handouts and assignments as learning activities (as applicable).	The instructor asked questions during lesson to confirm understanding, made some effort to adjust instruction to trainee's reaction, and utilized handouts and assignments as learning activities (as applicable).	The instructor asked a limited number of questions during the lesson and made little effort to adjust instruction to trainee's reaction.	The instructor asked no questions during the lesson, and did not make any effort to adjust or respond to trainee's reaction.	**/3**

	CRITERIA				
	3	**2**	**1**	**0**	**SCORE**
Participation	Students participated in the learning process through the use of thought-provoking questions, and the encouragement of expression and class solutions.	Students participated in the learning process through the use of thought-provoking questions.	Students participated in the learning process through the use of some questions.	Students did not participate in the class through the use of questions.	**/3**
Accomplishment		The instructor motivated and provided feedback to trainees consistently throughout the lesson.	The instructor motivated and provided feedback to trainees during some parts of the lesson.	The instructor did not motivate or provide feedback to trainees.	**/2**
Confirmation		The instructor consistently confirmed understanding of lesson material by conducting periodic progress checks using questions, and / or practice, exercises, assignments, group activities (as applicable) during the lesson.	The instructor confirmed understanding of lesson material by conducting periodic progress checks using questions, and / or practice, exercises, assignments, group activities (as applicable) for some parts during the lesson.	The instructor did not confirm understanding of lesson material.	**/2**
Lesson Development	The instructor introduced each stage, presented all the teaching points applicable to the stage, and confirmed understanding at the end of each stage.	The instructor missed either the intro or confirmation for one of the stages or did not cover all teaching points adequately within one stage.	The instructor missed all of the introductions or all of the confirmations for each stage.	The instructor missed all introductions and confirmations or missed the majority of teaching points of the lesson.	**/3**
CONCLUSION					
End of Lesson Check	The instructor confirmed the lesson by conducting an end of lesson confirmation / test, which covered all of the main teaching points in the lesson.	The instructor confirmed the lesson by conducting an end of lesson confirmation / test, which covered the majority of the main teaching points in the lesson.	The instructor confirmed the lesson by conducting an end of lesson confirmation / test, which covered only some of the main teaching points in the lesson.	The instructor did not conduct an end of lesson confirmation / test.	**/3**
COMMENTS:				**TOTAL**	**/30**
				SCORE REQUIRED: 18 / 30 (60%)	

INSTRUCTOR TRAINEE'S SIGNATURE
(I have read and discussed this evaluation)

DATE

EVALUATOR'S SIGNATURE

DATE

ANNEX B APPENDIX 2

002.01 PPC – ROC(M) INSTRUCTOR

FEEDBACK AND SUMMATIVE EVALUATION FORM

INSTRUCTOR TRAINEE UNIT | INSTRUCTOR TRAINEE NAME | INIT. | SN (CIC only)

EVALUATION LOCATION | EVALUATOR LAST NAME | INIT.

	The instructor trainee successfully conducted	YES	NO	REMARKS
1	Lesson 1:_____ (title)			Score: /30 PASS SCORE: 18 / 30 (60%)
2	Lesson 2: _____ (title)			Score: /30 PASS SCORE: 18 / 30 (60%)
3	Lesson 3: _____ (title)			Score: /22 PASS SCORE: 13 / 22 (60%)

All elements must be checked “Yes” in order for the student to be successful.

COMMENTS:

INSTRUCTOR TRAINEE’S SIGNATURE
(I have read and discussed this evaluation)

DATE

EVALUATOR’S SIGNATURE

DATE

CHAPTER 4

PERFORMANCE OBJECTIVES (POs) AND TRAINING PLAN

PURPOSE

1. The purpose of this chapter is to outline the specific POs and Training Plan for associated with the Module 2 – ROC(M) qualification.

PERFORMANCE OBJECTIVES

2. POs are a description of the student's ability after training is complete. They include a description, in performance terms, of what the individual must do, the conditions under which the performance must be completed, and the standard to which the performance must conform. These three elements are respectively defined as:

a. a performance statement;

b. a conditions statement; and

c. a standard.

TRAINING PLAN

3. This chapter also details the training plan that is designed to assist students to achieve the required POs using Enabling Objectives (EOs) and Lesson Specifications (LS) that are the key reference used for development of the Instructional Guides*.*

ENABLING OBJECTIVES

4. EOs are a description of the student's ability after each unit of learning is complete and constitute a major step towards achieving the PO. EOs may correspond to the major components identified in the first round of deconstructing POs or they may result from grouping several related components. They are composed of three essential parts:

a. a performance statement;

b. a conditions statement; and

c. a standard.

LESSON SPECIFICATIONS

5. LS describe the instructional strategy to be applied to each EO, and include:

a. supporting teaching points;
b. references;
c. learning activities;
d. estimated timings;
e. assessment directions; and
f. any remarks that further clarify the design intent.

INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATION

6. General information including age-appropriateness, definition, application, advantages and disadvantages for the various methods of instruction commonly accepted as appropriate for cadet training are located at Annex A.

ASSESSMENT FOR LEARNING

7. Formative evaluation, or assessment for learning, takes place during a phase of instruction and helps candidates and instructors recognize progress or lapses in learning. These assessments can also provide candidates with opportunities to practice PCs. This helps to diagnose candidate needs, eg, corrective action or remedial instruction, plan the next steps in instruction and provide candidates with feedback they can use to improve. It also reinforces learning so that it can be retained longer. Details for Module 2 – ROC(M) assessment for learning are outlined within the applicable lesson specifications.

PO 002

1. **Performance**: Attain the Restricted Operator's Certificate (Maritime) (ROC[M]) With Digital Selective Calling (DSC) Endorsement

2. **Conditions**:

   a. Given: Supervision.

   b. Denied: Assistance.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard**: The student will attain the ROC(M) with DSC IAW Industry Canada standards.

4. **Remarks**: Nil.

EO 002.01

1. **Performance**: Describe the Maritime Mobile Service (MMS)

2. **Conditions**:

   a. Given: Supervision.

   b. Denied: Assistance.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard**: The student shall describe MMS IAW Industry Canada standards, to include:

   a. primary users of the MMS; and
   b. MMS regulations, to include:

      (1) Restricted Operator's Certificate (Maritime) (ROC[M]),
      (2) radio station licenses,
      (3) radio station requirements,
      (4) governing authorities,
      (5) secrecy of communications,
      (6) international distress, safety and calling frequencies,
      (7) propagation, range of signal, signals and alarms,
      (8) general electronic information, and
      (9) alternative radio services.

4. **Teaching Points**:

TP	Description	Method	Time	Refs
TP1	Describe the requirements for operator certification and licensing, to include: a. MMS, b. ROC[M]) with DSC endorsement, and c. radio station licenses.	Interactive Lecture	5 min	7 (Mod. 1 pp. 3–4)
TP2	Describe radio station licenses and requirements, to include: a. log keeping, b. radio watchkeeping, and c. radio silence periods.	Interactive Lecture	5 min	7 (Mod. 1 p. 5)
TP3	Identify governing authorities.	Interactive Lecture	5 min	7 (Mod. 1 pp. 4–5)
TP4	Describe the requirement for secrecy of communications.	Interactive Lecture	5 min	7 (Mod. 1 p. 6)
TP5	Describe the international distress, safety and calling	Interactive	5 min	7 (Mod. 1

TP	Description	Method	Time	Refs
	frequencies.	Lecture		p. 7)
TP6	Describe propagation, range of signal, signals and alarms.	Interactive Lecture	5 min	7 (Mod. 1 pp. 7–8, 51)
TP7	Describe electronic information and alternative radio services, to include: a. general radio service (GRS) and citizen's band (CB), b. amateur radio service (HAM RADIO), c. family radio service, d. General Mobile Radio Service (GMRS), and e. cellular telephones.	Interactive Lecture	5 min	7 (Mod. 1 pp. 52–54)

5. **Time**:

a.	Introduction / Conclusion:	5 min
b.	Interactive Lecture:	35 min
c.	Total:	40 min

6. **Substantiation**: An interactive lecture was chosen to describe the primary users and the regulations of the MMS.

7. **References**: ISBN 0-9738142-6-8 Canadian Power & Sail Squadrons. (2006). *Maritime radio course: Student's notes*. Toronto, ON: Canadian Power & Sail Squadrons.

8. **Training Aids**:

   a. Presentation aids (eg, whiteboard / flip chart / OHP / multimedia projector) appropriate for the classroom / training area,

   b. ROC(M) PowerPoint presentation, and

   c. *Maritime Radio Course: Student's Notes*.

9. **Learning Aids**: *Maritime Radio Course: Student's Notes*

10. **Test Details**: This EO is assessed IAW Chapter 3, Annex A.

11. **Remarks**: Nil.

EO 002.02

1. **Performance:** Identify Voice Procedures

2. **Conditions:**

   a. Given: Supervision.

   b. Denied: Assistance.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard:** The student shall identify voice procedures IAW Industry Canada standards, by:

   a. describing violations in radio communications, to include:

      (1) false distress,
      (2) profane language, and
      (3) superfluous transmission;

   b. explaining transmission procedures, to include:

      (1) word spelling,
      (2) numerals,
      (3) procedural words and phrases,
      (4) time, and
      (5) date;

   c. identifying and describing types of calls, to include:

      (1) specific station,
      (2) single station,
      (3) Canadian Coast Guard Radio,
      (4) general,
      (5) multiple station,
      (6) radio checks, and
      (7) telephone;

   d. describing the characteristics of simplex and duplex modes; and

   e. describing control of communications and the priority of calls.

4. **Teaching Points:**

TP	Description	Method	Time	Refs
TP1	Describe violations in radio communications, to include: a. false distress b. profane language,and c. superfluous transmission.	Interactive Lecture	5 min	7 (Mod. 1 p. 11)
TP2	Identify the parts of a VHF radio.	Interactive Lecture	5 min	7 (Mod. 1 p. 17)
TP3	Explain speech transmission techniques.	Interactive Lecture	5 min	7 (Mod. 1 p. 12)
TP4	Explain the transmission procedures for the following: a. word spelling, b. numerals, c. procedural words and phrases, d. time, and e. date.	Interactive Lecture	20 min	7 (Mod. 1 pp. 12–14)
TP5	Explain, demonstrate and have the students practice transmitting the following types of calls: a. specific station, b. single station, c. Canadian Coast Guard Radio, d. general, e. multiple station, f. radio checks, and g. telephone.	Demonstration and Performance	65 min	7 (Mod. 1 pp. 15–18, and 21–22)
TP6	Describe the characteristics of simplex and duplex modes.	Interactive Lecture	5 min	7 (Mod. 1 pp. 19–21)
TP7	Describe control of communications and the priority of calls.	Interactive Lecture	5 min	7 (Mod. 1 pp. 22–23)

5. **Time**:

a. Introduction / Conclusion: 10 min
b. Interactive Lecture: 45 min
c. Demonstration and Performance: 65 min
d. Total: 120 min

6. **Substantiation:**

a. An interactive lecture was chosen for TPs 1–4 and 6–7 to introduce the regulations governing the use of VHF radios.

b. A demonstration and performance was chosen for TP 5 as it allows the instructor to demonstrate the different types of calls while allowing the students to practice them under supervision.

7. **References:** ISBN 0-9738142-6-8 Canadian Power & Sail Squadrons. (2006). *Maritime radio course: Student's notes*. Toronto, ON: Canadian Power & Sail Squadrons.

8. **Training Aids:**

   a. Presentation aids (eg, whiteboard / flip chart / OHP / multimedia projector) appropriate for the classroom / training area,

   b. SCOP Module 2 – ROC(M) PowerPoint,

   c. Phonetic Fill In handout,

   d. Parts of a VHF Radio handout,

   e. Priority of Calls handout, and

   f. *Maritime Radio Course: Student's Notes*.

9. **Learning Aids**:

   a. *Maritime Radio Course: Student's Notes*,
   b. Phonetic Fill In handout,
   c. Parts of a VHF Radio handout, and
   d. Priority of Calls handout.

10. **Test Details**: This EO is assessed IAW Chapter 3, Annex A.

11. **Remarks**: This EO should be taught in three consecutive periods.

EO 002.03

1. **Performance:** Utilize Distress, Urgency and Safety Calling Procedures

2. **Conditions**:

   a. Given: Supervision.

   b. Denied: Assistance.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard**: The student shall describe and utilize distress, urgency, and safety calling procedures, IAW Industry Canada, to include:

   a. distress signal, call and message,
   b. action by other ships in receipt of a distress message,
   c. distress traffic,
   d. imposing silence,
   e. urgency signal and message, and
   f. safety signal and call.

4. **Teaching Points:**

TP	Description	Method	Time	Refs
TP1	Explain the importance of following marine radio procedures.	Interactive Lecture	5 min	7 (Mod. 1 p. 27)
TP2	Explain what a distress call is and how to respond to a distress signal.	Interactive Lecture	30 min	7 (Mod. 1 p. 27)
TP3	Explain distress traffic and how to impose Seelonce Mayday and cancel a Mayday.	Interactive Lecture	30 min	7 (Mod. 1 pp. 27–32)
TP4	Explain the urgency signal, to include; a. priority of urgency signal, b. use of the urgency signal, c. urgency message, and d. cancellation of an urgency call.	Interactive Lecture	15 min	7 (Mod. 1 pp. 35–36)
TP5	Explain the safety signal, to include; a. priority of the safety signal, b. use of the safety signal, c. safety message, and d. examples of the safety call.	Interactive Lecture	15 min	7 (Mod. 1 pp. 39–40)
TP6	View the “It’s Good for Life” video.	Interactive Lecture	15 min	

5. **Time:**

   a. Introduction / Conclusion: 10 min

b.	Interactive Lecture:	110 min
c.	Total:	120 min

6. **Substantiation:** An interactive lecture was chosen to introduce the regulations governing the use of VHF radios.

7. **References**: ISBN 0-9738142-6-8 Canadian Power & Sail Squadrons. (2006). Maritime radio course: Student's notes. Toronto, ON: Canadian Power & Sail Squadrons.

8. **Training Aids:**

   a. Presentation aids (eg, whiteboard / flip chart / OHP / multimedia projector) appropriate for the classroom / training area,

   b. SCOP Module 2 – ROC(M) PowerPoint,

   c. *Maritime Radio Course: Student's Notes*, and

   d. Radio Procedure Exercises handout.

9. **Learning Aids:**

   a. *Maritime Radio Course: Student's Notes*, and
   b. Radio Procedure Exercises handout.

10. **Test Details:** This EO is assessed IAW Chapter 3, Annex A.

11. **Remarks:** Nil.

EO 002.04

1. **Performance**: Describe Global Maritime Distress and Safety System (GMDSS)

2. **Conditions**:

   a. Given: Supervision.

   b. Denied: Assistance.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard**: The student shall describe GMDSS and DSC radio procedures, IAW Industry Canada standards by explaining:

   a. the basic concept of the GMDSS, to include:

      (1) carriage requirements,
      (2) distress frequency monitoring,
      (3) sea areas, and
      (4) equipment requirements; and

   b. Maritime Mobile Service Identity (MMSI) number.

4. **Teaching Points**:

TP	Description	Method	Time	Refs
TP1	Explain the basic concept of the GMDSS, to include: a. carriage requirements, b. distress frequency monitoring, c. sea areas, and d. equipment requirements.	Interactive Lecture	30 min	7 (Mod. 2 pp. 11–17)
TP5	Explain MMSI.	Interactive Lecture	5 min	7 (Mod. 2 p. 5)

5. **Time**:

   a. Introduction / Conclusion: 5 min
   b. Interactive Lecture: 35 min
   c. Total: 40 min

6. **Substantiation**: An interactive lecture was chosen to introduce the students to the GMDSS.

7. **References**: ISBN 0-9738142-6-8 Canadian Power & Sail Squadrons. (2006). *Maritime radio course: Student's notes*. Toronto, ON: Canadian Power & Sail Squadrons.

8. **Training Aids**:

   a. Presentation aids (eg, whiteboard / flip chart / OHP / multimedia projector) appropriate for the classroom / training area, and

   b. *Maritime Radio Course: Student's Notes*.

9. **Learning Aids**:

   a. *Maritime Radio Course: Student's Notes*, and
   b. DSC Calling Procedures handout.

10. **Test Details**: This EO is assessed IAW Chapter 3, Annex A.

11. **Remarks**: Nil.

EO 002.05

1. **Performance**: Describe Digital Selective Calling (DSC)

2. **Conditions**:

   a. Given: Supervision.

   b. Denied: Assistance.

   c. Environmental: Classroom or training area large enough to accommodate the entire group.

3. **Standard**: The student shall describe DSC radio procedures, IAW Industry Canada standards by:

   a. explaining the DSC radio, to include

      (1) ease of communication
      (2) classes,
      (3) functions, and
      (4) procedures;

   b. explaining the function of an emergency position-indicating radio beacon (EPIRB);

   c. explaining the SARSAT-COSPAS satellite system; and

   d. identifying other GMDSS equipment, to include:

      (1) medium frequency (MF) DSC radio,
      (2) portable very high frequency (VHF) DSC radio,
      (3) navigational telex (NAVTEX) receiver, and
      (4) search and rescue transponder (SART).

4. **Teaching Points**:

TP	Description	Method	Time	Refs
TP1	Explain the DSC radio, to include a. ease of communication, b. classes, c. functions, and d. procedures.	Interactive Lecture	40 min	7 (Mod. 2 pp. 21–25)
TP2	Explain the function of an EPIRB.	Interactive Lecture	15 min	7 (Mod. 2 pp. 29–30)
TP3	Explain the SARSAT-COSPAS satellite system.	Interactive Lecture	5 min	7 (Mod. 2 p. 30)

TP	Description	Method	Time	Refs
TP4	Identify other GMDSS equipment, to include: a. MF DSC radio, b. portable VHF DSC radio, c. NAVTEX receiver, and d. SART.	Interactive Lecture	10 min	7 (Mod. 2 pp. 33–35)

5. **Time**:

a.	Introduction / Conclusion:	10 min
b.	Interactive Lecture:	70 min
c.	Total:	80 min

6. **Substantiation**: An interactive lecture was chosen to introduce the students to the DSC radio.

7. **References**: ISBN 0-9738142-6-8 Canadian Power & Sail Squadrons. (2006). *Maritime radio course: Student's notes*. Toronto, ON: Canadian Power & Sail Squadrons.

8. **Training Aids**:

   a. Presentation aids (eg, whiteboard / flip chart / OHP / multimedia projector) appropriate for the classroom / training area,

   b. DSC Calling Procedures handout, and

   c. *Maritime Radio Course: Student's Notes*.

9. **Learning Aids**:

   a. *Maritime Radio Course: Student's Notes*, and
   b. DSC Calling Procedures handout.

10. **Test Details**: This EO is assessed IAW Chapter 3, Annex A.

11. **Remarks**: Nil.

SMALL CRAFT OPERATOR PROGRAM

MODULE 2 – ROC(M)

INSTRUCTIONAL GUIDE

SECTION 1

PO 002 – ATTAIN THE RESTRICTED OPERATOR'S CERTIFICATE (MARITIME) (ROC[M]) WITH THE DIGITAL SELECTIVE CALLING (DSC) ENDORSEMENT

PREPARATION

PRE-LESSON INSTRUCTIONS

This IG supports PO 002 (Attain the Restricted Operator's Certificate (Maritime) (ROC[M] with the Digital Selective Calling (DSC) Endorsement).

This IG covers the following EOs:

002.01 – Describe the Maritime Mobile Service (MMS)
002.02 – Identify Voice Procedures
002.03 – Utilize Distress, Urgency and Safety Calling Procedures
002.04 – Describe Global Maritime Distress and Safety System (GMDSS) and
002.05 – Describe Digital Selective Calling (DSC)

Photocopy Attachments A–E for each student.

Attachment F has been included for those students who do not have the *SCOP Reference Cards.*

Where possible, have the students practice the radio calls using hand-held radios.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An interactive lecture was chosen to introduce the regulations that govern the use of VHF marine radios, the GMDSS and DSC radio procedures.

A demonstration and performance was chosen to allow the instructor to demonstrate the different types of calls while allowing the students to practice them under supervision.

INTRODUCTION

REVIEW

Nil.

OBJECTIVES

By the end of this lesson the student shall have attained the ROC(M) with DSC Endorsement.

IMPORTANCE

It is important for students to attain the ROC(M) with DSC because it allows them to operate the Very High Frequency (VHF) marine radio under any conditions. It will also prepare the students for advanced training opportunities at CTCs and nautical sites.

EO 002.01 **Describe the Maritime Mobile Service (MMS).**

Time: 40 min Method: Interactive Lecture

Instruct the EO following the PowerPoint.

EO 002.02 **Identify Voice Procedures**

Time: 120 min Method: Interactive Lecture

Instruct the EO following the PowerPoint.

Distribute the Parts of a VHF Radio handout located at Attachment A for each student.

Distribute the Phonetic Fill In located at Attachment B for each student.

Distribute the Priority of Calls handout located at Attachment C to each student.

EO 002.03 **Utilize Distress, Urgency and Safety Calling Procedures**

Time: 120 min Method: Interactive Lecture

Instruct the EO following the PowerPoint.

Distribute the Radio Procedure Exercises located at Attachment D for each student.

Play the *Its Good For Life* video file located on the CPS Student Study CD.

EO 002.04 **Describe Global Maritime Distress and Safety System (GMDSS).**

Time: 40 min Method: Interactive Lecture

Instruct the EO following the PowerPoint.

EO 002.05 **Describe Digital Selective Calling (DSC)**

Time: 80 min Method: Interactive Lecture

Instruct the EO following the PowerPoint.

Distribute the DSC Calling Procedures handout located at Attachment E to each student.

END OF LESSON CONFIRMATION

The student's participation in the activities will serve as the confirmation for this lesson.

CONCLUSION

METHOD OF EVALUATION

This PO is assessed IAW Chapter 3, Annex A.

CLOSING STATEMENT

Proper operation of a VHF marine radio is important as you may be called upon to react to radio communications while on the water. It will also help prepare you for advanced training opportunities at the training establishment.

INSTRUCTOR NOTES / REMARKS

Nil.

REFERENCES

C1-101 ISBN 0-9738142-6-8 Canadian Power and Sail Squadrons. (2006). *Maritime radio course: Student's notes*. Toronto, ON: Canadian Power and Sail Squadron.

PARTS OF A VHF RADIO

Label the parts indicated by the arrows.

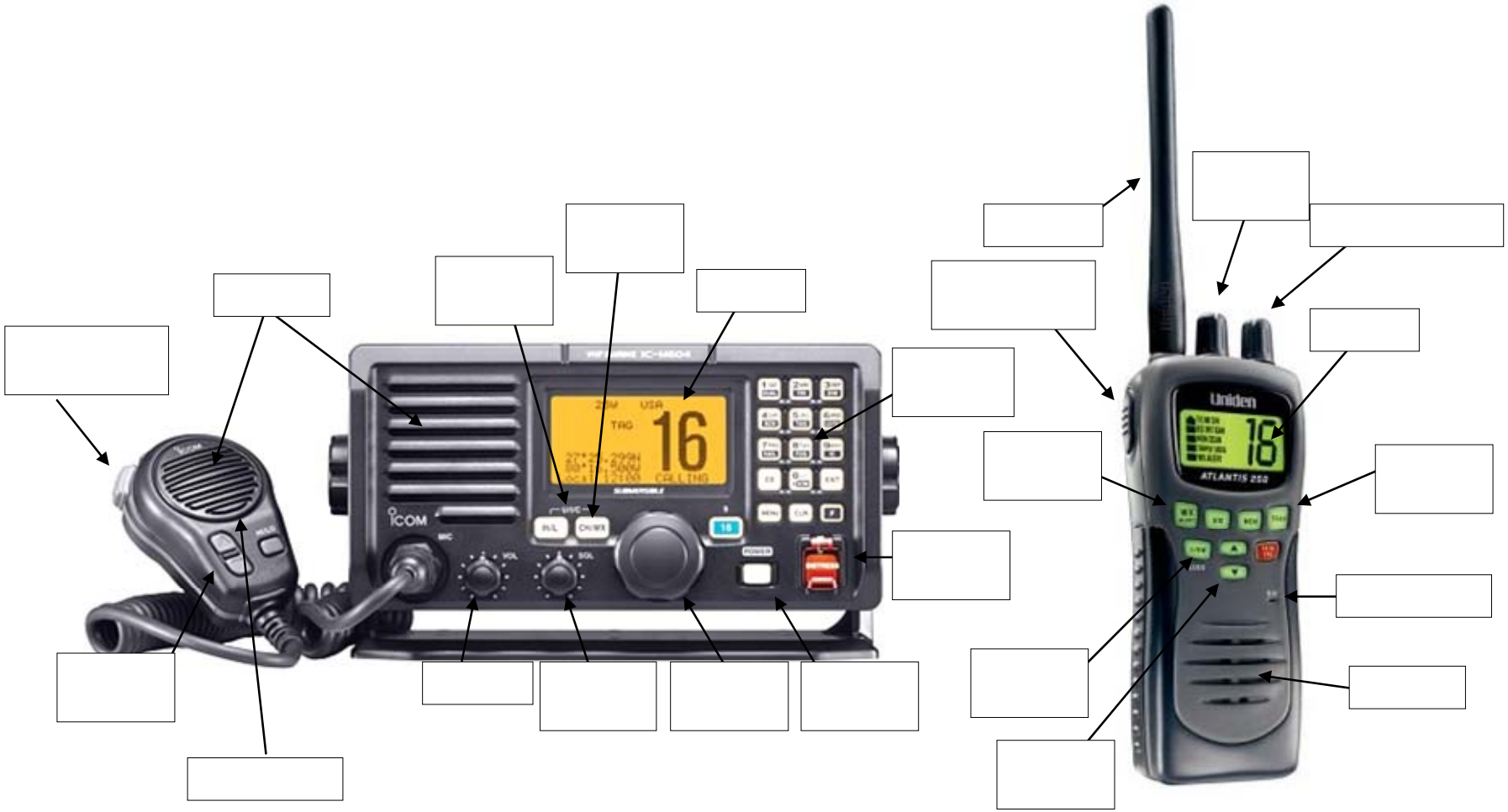

Figure A-1 Parts of a VHF Radio

PHONETIC FILL IN

Please fill in the following table. Use the highlighted letters to determine the secret phrase.

C	__ __ __ __ __ __ __
__	ZULU
__	ECHO
I	__ __ __ __ __
__	ROMEO
V	__ __ __ __ __ __
__	OSCAR
__	NOVEMBER
__	QUEBEC
M	__ __ __ __
S	__ __ __ __ __ __
W	__ __ __ __ __ __ __

SECRET CODE

Radio communication should be

___ ___ ___ ___ ___ and ___ ___ ___ ___ ___ ___ ___

PRIORITY OF CALLS

Label the following messages in order of priority from 1 to 9.

URGENCY communications.	
Messages containing exclusively meteorological (weather) observations destined to an official meteorological office.	
DISTRESS communications.	
Service messages relative to the working of the radiocommunications service or to messages that have been previously transmitted.	
All other communications.	
Communications related to the application of the United Nations Charter.	
Communications relative to the navigation, movement and needs of aircraft engaged in search and rescue operations.	
Communications relative to direction-finding bearings.	
SAFETY communications.	

RADIO PROCEDURE EXERCISES

Read the scenarios below and write out the messages in the space provided using proper VHF marine radio procedure. With a partner, practice transmitting and receiving the messages.

1. You have just turned on your radio and want to test it. Perform a radio check with Victoria Coast Guard Radio.

2. You are the captain of the vessel TRILLIUM and have just sighted a large log floating 2 NM due West of Snake Island Light. Since the log is in the narrow approaches to the harbour, it is a menace to navigation. Transmit a SAFETY message.

3. Your powerboat runs out of gas just outside the harbour. Your current position puts you in the path of the Wolfe Island ferry which will be along in 1 hour. Transmit an URGENCY message.

4. While out for the day with your family, you notice that there are flames coming from the engine compartment of your 10 m cabin cruiser. The boat is white with a bold green stripe on the side. There are enough life jackets for everyone but there is no life raft or

dinghy. You notice that you are 1 NM South of Gooch Island. Transmit a DISTRESS call and message. Transmit a relay of the same DISTRESS message.

5. Answer the following questions using a hand-held radio:

Q1. What is the age of your partner?

A1. _____

Q2. What province is your partner from?

A2. _____

Q3. What is the name of your partner's unit?

A3. _____

Q4. Does your partner have a family pet?

A4. _____

Q5. What is your partner's favourite colour?

A5. _____

Q6. What are your partner's favourite hobbies?

A6. _____

Q7. How long has your partner been a Sea Cadet?

A7. _____

DSC CALLING PROCEDURES

The sequence and operation of VHF (M) / DSC radios from different manufacturers may vary somewhat from those listed here. Refer to the user manual for the radios in use at the CTC.

DISTRESS Call

The following steps should be followed to transmit a DSC DISTRESS call:

1. Determine that grave and imminent danger threatens a vessel or person and immediate assistance is required.
2. Lift the protective cover and press the red DISTRESS button.
3. If time permits, select the nature of the distress.
4. Press and hold down the red DISTRESS button for 5 seconds.
5. Monitor Channel 16.

DISTRESS Call

- MAYDAY, MAYDAY, MAYDAY
- This is
- Wave Skimmer, Wave Skimmer, Wave Skimmer
- MAYDAY
- Wave Skimmer
- Position two miles south of Black Island
- Have struck a log and taking on water. Engine seized
- Two seven foot Bayliner, white with orange strip
- Three people on board, one injured
- Preparing to abandon ship with lifejackets, but no dinghy
- Wave Skimmer
- Over

URGENCY Call (All Stations)

The following steps should be followed to transmit a DSC URGENCY call:

1. Determine that an URGENCY situation related to the safety of a vessel or person exists.
2. Select URGENCY from the DSC menu.
3. Select Channel 16 as the default channel.
4. Press the ENTER key.
5. Wait briefly for other vessels to switch to Channel 16.
6. On Channel 16, transmit:

PAN PAN, PAN PAN, PAN PAN
ALL STATIONS ALL STATIONS ALL STATIONS
This is (the vessel call sign or MMSI) followed by the Urgency message.

SAFETY Call (All Stations)

The following steps should be followed to transmit a DSC SAFETY call:

1. Determine that a SAFETY situation concerning navigation or weather exists.
2. Select SAFETY from the DSC menu.
3. Select Channel 06 as the default channel.
4. Press the ENTER key.
5. Wait briefly for other vessels to switch to Channel 06.
6. On Channel 06, transmit:

SECURITÉ, SECURITÉ, SECURITÉ
ALL STATIONS ALL STATIONS ALL STATIONS
This is (the vessel call sign or MMSI) followed by the SAFETY message.

Routine Call (All Stations)

The following steps should be followed to transmit a DSC routine call:

1. Select ROUTINE from the DSC menu.
2. Enter the MMSI or select a station from the directory.
3. Select the desired working channel.
4. Press the ENTER key.

ACKNOWLEDGING CALLS

DISTRESS

Mute the alarm and note the MMSI, position, time and nature of the DISTRESS.

If a Coast Station does not acknowledge the DISTRESS call within 5 minutes and you are in a position to assist, attempt to contact the vessel in DISTRESS on Channel 16. Attempt to contact the Coast Station on Channel 16 as well.

VERY IMPORTANT

Even if your radio has the ability to digitally acknowledge a DISTRESS call via DSC, do not attempt to do so. This will cancel the DISTRESS transmissions.

All Stations

Mute the alarm and respond to the receipt of an ALL STATIONS alert by switching to the channel specified by the station initiating the call.

Routine

Mute the alarm and an acknowledgement will be sent digitally to the station initiating the call. If the radio does not automatically change to the requested working channel, do so manually and proceed with the call.

VHF Marine RADIO - Common Phrases	
Word	**Phrase Meaning**
ACKNOWLEDGE	Let me know that you have received and understood this message.
AFFIRMATIVE	Yes, or permission granted.
BREAK	To indicate the separation between portions of the message. (To be used where there is no clear distinction between the text and other portions of the message.)
CHANNEL	Change to channel ..... before proceeding.
CONFIRM	My version is _____. Is that correct?
CORRECTION	An error has been made in this transmission (message indicated). The correct version is _____.
GO AHEAD	Proceed with your message.
HOW DO YOU READ?	How well do you receive me?
I SAY AGAIN	Self-explanatory (use instead of “I repeat”).
MAYDAY	The spoken word for the distress signal.
MAYDAY RELAY	Is the spoken word for the distress relay signal.

VHF Marine RADIO - Common Phrases (cont 1)	
Word	**Phrase Meaning**
NEGATIVE	No, or that is not correct, or I do not agree.
OVER	My transmission is ended and I expect a response from you.
OUT	Conversation is ended and no response is expected.
PAN PAN	The spoken word for the urgency signal.
PRUDONCE	During long distress situations, communications can resume on a restricted basis. Communication is to be restricted to ship's business or messages of a higher priority.
READBACK	Repeat all of this message back to me exactly as received after I have given OVER. (Do not use the word “repeat”.)
ROGER	I have received all of your last transmission.
ROGER NUMBER	I have received your message number ...
STANDBY	I must pause for a few seconds or minutes, please wait.
SAY AGAIN	Self-explanatory. (Do not use the word “repeat”.)
SÉCURITÉ	Is the spoken word for the safety signal.

VHF Marine RADIO - Common Phrases (cont 2)	
Word	**Phrase Meaning**
SEELONCE	Indicates that silence has been imposed on the frequency due to a distress situation.
SEELONCE DISTRESS	Is the international expression to advise that a distress situation is in progress. This command comes from a vessel or coast station other than the station in distress.
SEELONCE FEENEE	Is the international expression for distress cancellation.
SEELONCE MAYDAY	Is the international expression to advise that a distress situation is in progress. The command comes from the ship in distress.
THAT IS CORRECT	Self-explanatory.
VERIFY	Check coding & text with originator & send correct version.
WORDS TWICE	a) As a request: Communication is difficult, please send each word twice. (b) As information: Since communication is difficult, I will send each word twice.

PHONETIC ALPHABET					
	SYMBOL	**SOUND**		**SYMBOL**	**SOUND**
A	ALPHA	AL-FAH	**N**	NOVEMBER	NO-VÈM-BER
B	BRAVO	BRAH-VOH	**O**	OSCAR	OSS-CAR
C	CHARLIE	CHAR-LEE	**P**	PAPA	PAH-PAH
D	DELTA	DELL-TAH	**Q**	QUEBEC	KÉH-BECK
E	ECHO	ECK-OH	**R**	ROMEO	ROW-ME-OH
F	FOXTROT	FOKS-TROT	**S**	SIERRA	SEE-AIR-RAH
G	GOLF	GOLF	**T**	TANGO	TANG-GO
H	HOTEL	HOH-TÈLL	**U**	UNIFORM	YOU-NEE-FORM
I	INDIA	IN-DEE-AH	**V**	VICTOR	VIK-TAR
J	JULIETT	JEW-LEE-ÈTT	**W**	WHISKEY	WISS-KEY
K	KILO	KEY-LOH	**X**	X-RAY	ECKS-RAY
L	LIMA	LEE-MAH	**Y**	YANKEE	YANG-KEY
M	MIKE	MÏ-KE	**Z**	ZULU	ZOO-LOO

ANNEX A
INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

The various methods of instruction commonly accepted as appropriate for cadet training is outlined below.

METHOD	DEVELOPMENTAL PERIOD ONE AGES 12 – 14 EXPERIENCE-BASED	DEVELOPMENTAL PERIOD TWO AGES 15 – 16 DEVELOPMENTAL	DEVELOPMENTAL PERIOD THREE AGES 17 – 18 COMPETENCY
Case Study	Not applicable	Applicable	Applicable
Demonstration and Performance	Applicable	Applicable	Applicable
Experiential Learning	Applicable	Applicable	Applicable
Field Trip	Applicable	Applicable	Applicable
Game	Applicable	Applicable	Applicable
Group Discussion	Applicable	Applicable	Applicable
Guided Discussion	Not applicable	Not applicable	Applicable
In-class Activity	Applicable	Applicable	Applicable
Interactive Lecture	Applicable	Applicable	Applicable
Lecture	Applicable	Applicable	Applicable
On-the job Training (OJT)	Not applicable	Not applicable	Applicable
Peer Learning	Not applicable	Not applicable	Applicable
Practical Activity	Applicable	Applicable	Applicable
Role Play	Not applicable	Applicable	Applicable
Self-Study	Not applicable	Not applicable	Applicable
Simulation	Not applicable	Not applicable	Applicable
Tutorial	Not applicable	Not applicable	Applicable

ANNEX A
INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

General information follows on each method for its age-appropriateness, definition, application, advantages and disadvantages.

METHOD(S)	APPLICATIONS	ADVANTAGES	DISADVANTAGES
DEMONSTRATION AND PERFORMANCE Cadets observe the instructor performing the task in a demonstration, and rehearse it under the supervision of the instructor. **Demonstration Method** A method of instruction where the instructor, by actually performing an operation or doing a job, shows the cadet what to do, how to do it and through explanations brings out why, where and when it is done. **Performance Method** A method in which the cadet is required to perform, under controlled conditions, the operations, skill or movement being taught.	**Demonstration Method** 1. To teach hands-on operations or procedures. 2. To teach troubleshooting. 3. To illustrate principles. 4. To teach operation or functioning of equipment. 5. To set standards of workmanship. 6. To teach safety procedures. **Performance Method** 1. To teach hands-on operations or procedures. 2. To teach operations or functioning of equipment. 3. To teach team skills. 4. To teach safety procedures.	**Demonstration Method** 1. Minimizes damage and waste. 2. Saves time. 3. Can be presented to large groups. **Performance Method** 1. Builds confidence. 2. Enables learning evaluation. 3. Reduces damage and waste. 4. Promotes safety.	**Demonstration Method** 1. Requires careful preparation and rehearsal. 2. Requires special classroom arrangements. 3. Requires equipment and aids. **Performance Method** 1. Requires tools and equipment. 2. Requires large blocks of time. 3. Requires more instructors.

ANNEX A
INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

METHOD(S)	APPLICATIONS	ADVANTAGES	DISADVANTAGES
EXPERIENTIAL LEARNING Learning in the cadet program is centred on experiential learning. This involves learning knowledge and skills from direct experience. People learn best from their own experiences and can then apply the knowledge and skills in new situations. The four stages of the cycle may be considered and applied to all activities within the Cadet Program, regardless of methodology chosen. **Stage 1: Concrete Experience:** Cadets have an experience and take time to identify and define what the experience is. Sample activities: direct observations, simulations, field trips, and reading. **Stage 2: Reflective Observation:** Cadets need to reflect on and examine what they saw, felt and thought while they were having the experience. Sample activities: discussion, journals / logs, and graphs. **Stage 3: Abstract Conceptualization:** Cadets work to understand and make connections from the experience to new or different situations. Sample activities: interview, discussion, model building, analogies and planning. **Stage 4: Active Experimentation:** Cadets look ahead to and plan the application of skills and knowledge acquired to future experience.	1. To teach practical skills. 2. To learn how to learn. 3. To teach transferable skills. 4. To teach a process or principle. 5. To teach problem solving.	1. Knowledge is shared and created by collectively by all participants. 2. Everyone is actively involved in the teaching – learning process. 3. Appeals to many learning styles. 4. Student centred.	1. Resource intensive. 2. Requires significant planning, preparation and organization prior to activity. 3. The instructor must master the subject developed. 4. Instructor needs very good pedagogical skills. 5. May not be a good process for learning details. 6. The instructor must be a good facilitator to carry out an effective reflective session in stage 2 &3 of this method.

ANNEX A
INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

METHOD(S)	APPLICATIONS	ADVANTAGES	DISADVANTAGES
Sample activities include: simulation, fieldwork. Note: The cycle is ongoing as each learning experience builds on another.			
FIELD TRIP Theoretical knowledge is reinforced through participation in an activity in a real-life setting. Prior planning helps to ensure all pre-training and safety standards are met. Field trip activities are planned and carried out to achieve clear instructional objectives that are understood by the cadets. Examples can include trips to areas of local interest, flying / gliding, hiking or sailing.	To introduce / illustrate and confirm topics. To allow for familiarization activities.	Immerses cadets in a specific environment.	May require additional staff to ensure adequate supervision. Requires significant planning, preparation and organization prior to activity. May have cost implications.
GAME Games are used with one or more participants to practice skills, apply strategies and enhance teams. It is critical that the game supports learning through the provision of a challenging activity that allows for the skill practice or knowledge confirmation.	1. To introduce a topic. 2. To discover concepts and principles. 3. To review and confirm.	1. Fun and interesting. 2. Creates ownership. 3. Highly participative.	1. May stratify the group by creating a winner and a loser. 2. May be difficult in providing instructor feedback.
GROUP DISCUSSION Cadets discuss issues, share knowledge, opinions and feelings about a topic in small groups to meet a specified goal. The instructor's questioning is flexible and minimal, and aims at encouraging cadets to explore their own experiences and opinions	1. To develop imaginative solutions to problems. 2. To stimulate thinking and interest and to secure cadet participation. 3. To emphasize main teaching points. 4. To supplement lectures and seminars.	1. Increases cadet interest. 2. Increases cadet acceptance and commitment. 3. Utilizes cadet knowledge and experience. 4. Results in more permanent learning because of the high degree of cadet participation / cognitive	1. Requires highly skilled instructors. 2. Time consuming. 3. Restricts size of group. 4. Requires selective group composition.

ANNEX A
INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

METHOD(S)	APPLICATIONS	ADVANTAGES	DISADVANTAGES
through peer interaction.	5. To determine how well cadets understand the concepts and principles. 6. To prepare cadets for application of theory or procedure. 7. To summarize, clarify points or review. 8. To prepare cadets for instruction that will follow. 9. To determine cadet progress and effectiveness of prior instruction.	involvement.	
IN-CLASS ACTIVITY In-class activities encompass a wide variety of activity-based learning opportunities that can be used to reinforce instructional topics or to introduce cadets to new experiences. In-class activities should provoke thought and stimulate interest among cadets, while maintaining relevance to the performance objectives.	1. To reinforce instructional topics. 2. To orient cadets to the subject. 3. To give direction on procedures. 4. To illustrate the application of rules, principles or concepts. 5. To review, clarify, and / or summarize.	Provokes thought and stimulates interest among cadets. Appeals to kinaesthetic learners.	1. Difficult to gauge cadet reaction. 2. Takes time to prepare.
INTERACTIVE LECTURE The instructor-driven methodology combines both lecture and interaction to meet lesson objectives. Lecture portions of the lesson are offset with relevant activities such as videos with discussion, games to confirm and completion of handouts.	1. To orient cadets to the subject. 2. To give instruction on procedures. 3. To illustrate the application of rules, principles or concepts. 4. To review, clarify, and / or summarize.	1. Saves time. 2. Permits flexibility of class size. 3. Requires less rigid space requirements. 4. Permits better control over content and sequence.	Difficult to gauge cadet reaction.
LECTURE This is a formal or semi-formal discourse in which the instructor presents a series of events, facts,	1. To orient cadets to the subject. 2. To give instruction on procedures. 3. To illustrate the	1. Proficient oral skills are required. 2. Useful for big groups. 3. Saves time because of fewer interruptions.	1. Requires preparation and a dynamic lecturer. 2. Cadets may be passive and uninvolved.

ANNEX A
INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

METHOD(S)	APPLICATIONS	ADVANTAGES	DISADVANTAGES
principles, explores a problem or explains relationships.	application of rules, principles or concepts. 4. To review, clarify, and / or summarize.		
PRACTICAL ACTIVITY Practical activities encompass a wide variety of activity-based learning opportunities that can be used to reinforce and practice instructional topics or to introduce cadets to new experiences. Practical activities should stimulate interest among cadets and encourage their participation, while maintaining relevance to the performance objectives.	1. To introduce a subject. 2. To practice skills. 3. To review and / or reinforce.	1. Encourages participation. 2. Stimulates an interest in the subject. 3. Fun and interesting. 4. Creates ownership.	1. Requires significant planning, preparation and organization. 2. May require additional staff to ensure adequate supervision.