



National Search and
Rescue Secretariat

Secrétariat national
Recherche et sauvetage



INTERNATIONAL SEARCH AND RESCUE TRAINING GUIDE



FOREWORD

This booklet is made available by the Canadian National Search and Rescue Secretariat and contains descriptions of aeronautical and maritime Search and Rescue training courses that are now being offered to international students. Each course is described under the following headings:

- **the title of the course;**
- **the aims and objectives of the course;**
- **a brief description of prerequisite training, experience and/or language requirements that must be met for students to qualify for the course;**
- **the duration and frequency of the course;**
- **the capacity and applicability of the course (the rank or experience level of student the course is intended for);**
- **the location of the course (including accommodation and meal information);**
- **a synopsis of the course syllabus; and**
- **a contact point for further information and for registration.**

The courses noted in this booklet are designed to meet Canadian requirements and students will normally share all aspects of their training with Canadian students. Most courses are available in either of the two official languages of Canada, French and English. Generally, courses are divided into serials to accommodate the linguistic requirements of the student.

The majority of courses are taught at the Canadian Coast Guard College located on the nation's East Coast at Sydney, Nova Scotia. The college is a fully modern training facility that features live-in accommodation, a full-service cafeteria, a wide range of athletic and sports facilities and a large technical library. Professional instructors from the Canadian Coast Guard and from the Canadian Air Force combine their talents to provide the student with current information and the latest in innovative search and rescue thinking. Classes consist of a combination of theory and practical work. Many courses are taught in very modern ADP-equipped classrooms that are able to closely simulate the conditions that would be found in an operational environment.

If you are interested in applying for any of the courses outlined in this booklet, contact the individual or office that is noted in the course description material. Courses are normally run intermittently throughout the year with the heaviest number of serials taking place in the September to November and January to April periods.

If you are interested in learning more about Canadian Search and Rescue, write to:

National Search and Rescue Secretariat
4th Floor, Standard Life Building
275 Slater Street
Ottawa, Ontario, Canada K1A 0K2



Or visit one of the following websites:

National Search and Rescue Secretariat www.nss.gc.ca
Canadian Air Force www.airforce.dnd.ca
Canadian Coast Guard www.ccg-ggc.gc.ca
Canadian Coast Guard College www.cgc.ns.ca

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CANADIAN FORCES

SEARCH AND RESCUE TRAINING

SEARCHMASTER COURSE

Aim/Objectives

The aim of the course is to train qualified and SAR-experienced aircrew officers to perform the duties of a SAR Mission Co-ordinator or Searchmaster for a specific air search operation.

Prerequisites

Candidates should have at least two to three years operational SAR experience on primary or secondary SAR aircraft. Candidates must be able to communicate and take instruction in English.

Course Duration and Frequency

The course consists of six (6) training days. Courses start on a Monday and end on a Saturday. The course is offered twice a year; once in the Fall and once in the Spring.

Course Applicability and Capacity

The applicable ranks are Captain or Major. Non-commissioned members serving in SAR-related positions, such as SAR Technicians or RCC Assistant-Controllers may also be course-loaded, if space allows. There is room for 12-24 candidates.

Course Facilities

The Searchmaster Course is conducted at the NavCan Training Institute (NCTI) in Cornwall, Ontario, approximately 70 miles west of Montreal. NCTI is a live-in facility with accommodation and meals provided for a single daily rate.

Course Syllabus

- **Canadian National Search and Rescue.** The lecture is an overview of the various governmental relationships involved in the operation of the SAR system. A review of various national and international conventions and agreements pertaining to the provision of SAR services is also undertaken.
- **RCC Organization and Responsibilities.** This presentation provides a brief description of the organization of an RCC and initial actions undertaken in SAR incident resolution.
- **Search and Rescue Satellite (SARSAT).** This lecture outlines the capabilities and limitations of the SARSAT system and describes the interpretation of SARSAT data.
- **Dealing With Next-Of-Kin.** A guest lecturer covers the development of an understanding of the emotional state in which next-of-kin find themselves during a SAR incident, particularly during a protracted search operation, and provides some insight as to what to expect, and how best to deal with persons in this situation.
- **Legal Aspects of SAR.** Given by a representative of the Assistant Judge Advocate General's Office, this lecture discusses the legal responsibilities of a Searchmaster and DND policies with respect to legal representation and litigation.
- **Search Planning.** This presentation covers Search Area Definition in accordance with the National SAR Manual, and modifications required for special cases. A short syndicate discussion follows the session, during which selection of actual air search missions are reviewed from the standpoint of Search Area Definition.
- **Briefings/Debriefing/Reports.** This lecture outlines the briefing and debriefing of search crews and the reports and returns required during a major search.
- **Search and Rescue Technicians/Ground Search.** A Search and Rescue Technician (SAR Tech) describes factors affecting the employment of SAR Techs on a major search and the use of ground search parties.
- **Civil Air Search and Rescue Association (CASARA).** This lecture briefly describes the capabilities, limitations and support requirements for the use of CASARA aircraft and volunteers.

SEARCHMASTER COURSE

- **Public Affairs/Media.** A team of Canadian Forces Public Affairs Officers outlines proper techniques for dealing effectively with the media, followed by simulated on-camera sessions with Course candidates. On some courses actual members of various media are involved in this facet of the training as well as during the simulation exercise.
- **Selection of Search Headquarters.** This lecture covers factors and considerations to be taken into account when deciding the location for a deployed search headquarters.
- **Conduct of an Actual Search/Searchmaster Duties.** This lecture is a step-by-step outline of the duties and responsibilities of a Searchmaster, given within the framework of a sequential description of the conduct of a search.

Simulation Exercise (SAR Sutherland).

Based loosely on an actual search incident in British Columbia, this is the pivotal portion of the Searchmaster Course. SAR Sutherland is a simulated five-day search exercise conducted over two and a half days of real time. The candidates are assigned to syndicates, each with 4-6 person-

nel and two Directing Staff, both of whom are experienced Searchmasters. Students are rotated through various Search HQ positions; Searchmaster, Assistant Searchmaster, Public Affairs Officer, Aircrew Detachment Commander and Administration Officer, holding each appointment for one exercise day (a half day of real time). Directing Staff make inputs by telephone, in-person, by "actors" role-playing or by Public Affairs personnel representing media for telephone or on-camera interviews. The exercise covers all facets of a major search, and includes search headquarters set-up, contact with next-of-kin, crew briefing and debriefing, search planning and tasking, information assessment and dealing with aircraft and personnel problems. The exercise culminates in a "find" requiring subsequent rescue and medical evacuation operations. Each half-day session is debriefed by Directing Staff with suggestions as to how things might have been done differently where applicable. This is not a "marked" exercise, as there are really no absolutes with respect to "right" or "wrong" solutions, merely different means of achieving successful results.

Departmental Contact

Mr. Blair Waddington
Canadian Aerospace Training Program
National Defense Headquarters
Ottawa, Canada
K1A 0K2

Tel. (613) 998-4320
E-Mail: blairwaddington@compuserve.com





CANADIAN FORCES

SEARCH AND RESCUE TRAINING

FRENCH LANGUAGE PROGRAM

Aims/Objectives

The SAR French language training program involves 600 contact hours, and uses French for Specific Purposes courseware which will enable SAR personnel to provide services in French to members of the public. The program was established to teach SAR personnel to communicate in both official languages.

The program will enable students to:

- understand and interact in various emergency situations;
- obtain the required factual information from diverse sources in order to carry out SAR duties;
- issue procedural directives to individuals involved in SAR incidents;
- describe the distress scene and physical condition of the victims;
- fill-in SAR forms and other related government documents.

Prerequisites

Please refer to departmental contact

Course Duration and Frequency

The SAR French language training course is conducted in twenty-one (21) weeks.

Course Applicability and Capacity

The courses are open to Search and Rescue personnel and other government employees who interact with the public in marine emergency situations. Class size will be limited to ensure that each student receives the highest quality training.

Course Facilities

The Canadian Coast Guard College offers two types of accommodation at the College residence. Private hotel-style bedrooms are furnished with study desk, telephone, cable television and in-house data port; and there are also apartments of eight private bedrooms with shared bathroom, lounge and kitchenette facilities. The College dining room serves three complete meals a day as well as coffee breaks and late night snacks. The College has a 25-metre pool,

gymnasium, hydrofitness room, weight room, squash court, sports fields and a nature trail. After hours, students can relax in the fully licensed Lighthouse Lounge.

Course Syllabus

The program places a strong emphasis on oral interaction skills. It incorporates realistic SAR situations and SAR documentation as integral parts of the program, and encourages participants to bring their own SAR experiences to the language classroom. All course materials, the SAR lexicon and other texts will be supplied to participants upon arrival. Furthermore, upon successful completion students will receive a language maintenance package. Experienced and highly-skilled instructors deliver the training using up-to-date equipment.

Departmental Contact

For more information concerning tuition, registration and accommodation, contact:

Office of the Registrar
Canadian Coast Guard College
P.O. Box 4500
Sydney, N.S.
B1P 6L1

Tel.: 902-564-3660

Fax: 902-562-6113

E-Mail: business@cgc.ns.ca



CANADIAN SEARCH AND RESCUE PLANNING PROGRAM (CANSARP)



Aims/Objectives

The Canadian Search and Rescue Planning Program (CANSARP) course teaches students how to use the specialized CANSARP computer program that calculates many of the variables to be considered in determining the drift of a search object. It covers all the CANSARP outputs and provides instruction in how to use the software effectively as a search-planning tool during the prosecution of a SAR incident.

The course enables students to:

- become competent users of CANSARP;
- be familiar with the computer windowing environment;
- understand how to use CANSARP as an effective tool in defining the search area;
- determine optimal resource allocation.

Prerequisite

Please refer to departmental contact

Course Duration and Frequency

The course is comprised of four teaching days.

Course Applicability and Capacity

The course is primarily designed for personnel working in a Rescue Coordination Centre or Marine Rescue Sub-Centre, and can be offered at the College or at the client's remote location. The course is also of interest to individuals who work with this type of information. Class size will be limited to ensure that each student receives the highest quality training.

Course Facilities

The Canadian Coast Guard College offers two types of accommodation at the College residence. Private hotel-style bedrooms are furnished with study desk, telephone, cable television and in-house data port; and there are also apartments of eight private bedrooms with shared bathroom, lounge and kitchenette facilities. The College dining room serves three complete meals a day as well as coffee breaks and late night snacks. The College has a 25-metre pool, gymnasium, hydrofitness room, weight room, squash court, sports fields and a nature trail. After hours, students can relax in the fully licensed Lighthouse Lounge.

Course Syllabus

The course familiarizes participants with the computer windowing environment. Instructors teach students the operation of the CANSARP program using realistic SAR scenarios and data. Since CANSARP accepts more available incident data, as well as real time data than is possible to account for in a manual solution, the search planner can evaluate many more possible scenarios with a range of incidents times, positions, targets, situations, and environmental factors.

Intensive hands-on exercises using real SAR incidents will provide participants with practical experience. This approach makes the transition from a learning environment to a working environment an easier one.

Teaching methods include group discussions, individual coaching, individual and group assignments, hands-on training and lectures. Experienced and highly-skilled instructors deliver the training using state-of-the-art simulation.

The course can be adapted to the client's needs.

Departmental Contact

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Fax.: 902-562-6113

E-Mail: business@cgc.ns.ca



FUNDAMENTAL MARINE SEARCH AND RESCUE COURSE

Aims/Objectives

The Fundamental Marine Search and Rescue course is designed for those involved with the Search and Rescue community in a maritime environment. It provides practical knowledge of the Search and Rescue organization and operations in Canada, and teaches participants how to develop a search plan as well as how to coordinate Search and Rescue resources.

The course enables participants to:

- increase their knowledge of a SAR organization and its operating principles;
- develop and implement a competent search plan;
- understand the importance of effective communication and coordination to a search operation;
- develop the necessary skills to assume the responsibilities of On Scene Commander during a SAR case.

Prerequisites

Please refer to departmental contact

Course Duration and Frequency

The course is comprised of 15 teaching days, and is offered several times a year at the Canadian Coast Guard College.

Course Applicability and Capacity

The Fundamental Marine Search And Rescue course primarily targets ships officers and aircraft pilots involved in marine SAR. The course is, however, valuable for anybody participating in a search conducted over water. Class size will be limited to ensure that each student receives the highest quality training.

Course Facilities

The Canadian Coast Guard College offers two types of accommodation at the College residence. Private hotel-style bedrooms are furnished with study desk, telephone, cable

television and in-house data port; and there are also apartments of eight private bedrooms with shared bathroom, lounge and kitchenette facilities. The College dining room serves three complete meals a day as well as coffee breaks and late night snacks. The College has a 25-metre pool, gymnasium, hydrofitness room, weight room, squash court, sports fields and a nature trail. After hours, students can relax in the fully licensed Lighthouse Lounge.

Course Syllabus

Throughout the course, students participate in intensive hands-on exercises, which provide them with practical experience. This approach makes the transition from a learning environment to a working environment an easier one. Teaching methods include group discussions, individual coaching, individual and group assignments, lectures, role-playing, and simulation.

Course curriculum and presentation follows the guidelines set out in the International Maritime Organization Search and Rescue Manual. It is divided into eight sections and covers:

- SAR organizations;
- Facilities;
- Actions taken during the awareness stage;
- Initial actions of a SAR incident;
- Development of a search area and plan;
- Search operations;
- Rescue operations;
- Conclusion of a mission.

Departmental Contact

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THE RESCUE COORDINATION CENTRE/MARINE RESCUE SUB-CENTRE CONTROLLERS COURSE



Aim/Objective

The Rescue Coordination Centre/Marine Rescue Sub-Centre (RCC/MRSC) Controllers Course is designed to provide the skills needed to perform the duties of a marine or air controller employed at a Rescue Coordination Centre or a Marine Rescue Sub-Centre.

The course enables students to:

- gather the necessary information needed to coordinate a response to a SAR incident;
- make skilled judgments and decisions on the planning, monitoring, and conducting of a SAR incident;
- coordinate all available resources effectively and efficiently;
- respond appropriately to requests for information from various sources;
- assist non-SAR organizations with SAR activities.

Prerequisites

Students should have completed the Fundamental Marine Search and Rescue Course or the Air Search Master course.

Course Duration and Frequency

The course is comprised of 13 teaching days.

Course Applicability and Capacity

The course is primarily designed for personnel working in a Rescue Coordination Centre or a Marine Rescue Sub-Centre who are involved in the planning, coordinating, controlling and directing of the response to marine and air search and rescue incidents. Class size is limited so that each student receives the highest quality teaching.

Course Facilities

The Canadian Coast Guard College offers two types of accommodation at the College residence. Private hotel-style bedrooms are furnished with study desk, telephone, cable television and in-house data port; and there are also apartments of eight private bedrooms with shared bathroom, lounge and kitchenette facilities. The College dining room serves three complete meals a day as well as coffee breaks and late night snacks. The College has a 25-metre pool,

gymnasium, hydrafitness room, weight room, squash court, sports fields and a nature trail. After hours, students can relax in the fully licensed Lighthouse Lounge.

Course Syllabus

The course is divided into three parts: students are exposed to the use of computer-based search planning tools; they attend lectures and discussions on national policies and procedures, and they participate in simulation applications and role playing.

Throughout the course, students engage in intensive hands-on exercises, which provide them with practical experience. This approach makes the transition from a learning environment to a working environment an easier one. Teaching methods include group discussions, individual coaching, individual and group assignments, lectures, role playing, and simulation.

The course will focus on correct procedures to follow in information gathering, search, rescue, public relations, training, administrative responsibilities, non-SAR services, legal responsibilities, and documentation.

All materials needed by the students will be supplied when they arrive at the College.

Departmental Contact

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GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM COURSE GENERAL OPERATOR CERTIFICATE

Aim/Objective

The Global Maritime Distress and Safety System Course - General Operator Certificate (GMDSS-GOC) Training was designed by the Canadian Coast Guard College, Marine Communications and Traffic Services (MCTS) Department in accordance with the International Maritime Organization recommendations for GMDSS-GOC training. It addresses the complexities of issues and problems that can and will develop in carrying out communications responsibilities with a distressed vessel.

The course enables students to:

- fulfill the requirements of the GOC curriculum for GMDSS training;
- increase the knowledge and abilities of the Ship's Officer in charge of communications to alert Coast authorities or other vessels of a distress situation;
- increase the knowledge and abilities of the Ship's Officer in charge of communications to better assist a vessel in distress;
- become comfortable with the environment in the simulator and then progress to situations of higher intensity and complexity as the course progresses;
- become more knowledgeable in the areas of Search and Rescue Marine Emergency Equipment to a degree that will increase effectiveness in a distress situation.

Prerequisites

Students should have a valid Maritime Radiotelephone Restricted Operator's Certificate or equivalent.

Course Duration and Frequency

The course is comprised of 10 teaching days and is offered once a month.

Course Applicability and Capacity

The GMDSS-GOC Training course was developed for any Coast or Ship Officer, regardless of nationality. Class size will be limited to eight (8) students to ensure that each student receives the highest quality training.

Course Facilities

The Canadian Coast Guard College offers two types of accommodation at the College residence. Private hotel-style bedrooms are furnished with study desk, telephone, cable television and in-house data port; and there are also apartments of eight private bedrooms with shared bathroom, lounge and kitchenette facilities. The College dining room serves three complete meals a day as well as coffee breaks and late night snacks. The College has a 25-metre pool, gymnasium, hydrofitness room, weight room, squash court, sports fields and a nature trail. After hours, students can relax in the fully licensed Lighthouse Lounge.

Course Syllabus

The program consists of three major components: Theoretical Support, Application and Practical Operations. The practical portion of this program is conducted on a fully-integrated GMDSS simulator built according to Canadian Coast Guard College specifications.

The course will focus on principles of Maritime Mobile Service, Maritime Mobile Satellite Service, Systems Overview, Digital Selective Calling (DSC), INMARSAT, Enhanced Group Calling (EGC), Narrow Band Direct Printing (NAVTEX and TOR), Distress Procedures for Radiotelephone, DSC and INMARSAT, EPIRBS (COSPAS-SARSAT and L-band), Search and Rescue Transponders, Search and Rescue Overview, Marine Emergency Management and Practical Operations (simulation).

All materials needed by the students will be supplied to them when they arrive at the College. This includes course notes and textbooks, which can be retained upon completion of the course.

Departmental Contact

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Telephone: 1-902-564-3660
Facsimile: 1-902-562-6113
E-mail: business@cgcc.ns.ca

COMMANDER OF SMALL VESSELS COURSE



Aim/Objective

The goal of the new Small Vessel Command course is to promote a change of attitude within the Coast Guard's small vessel crews. Philosophies fundamental to the operation of a small vessel and station are presented and practiced throughout the duration of the course.

Prerequisites

Participants should have the knowledge equivalent covered in the following Ship Safety examinations: 021 - Navigating Instruments; 041 - Chartwork and Pilotage; 061 - Navigation Safety. They should have a Marine Emergency Duties Certificate; Restricted Radio Operators Certificate; High School Leaving Certificate or equivalent; recommendation from their supervisor; and experience on board a type 100, 300, 300A, 300B or equivalent vessel type.

Course Duration and Frequency

The duration of the course is nine weeks.

Course Applicability and Capacity

This course is primarily designed for and is compulsory for personnel taking command of a Coast Guard type 100, 300, 300A or 300B vessel. The course is, however, valuable for anybody taking charge of a small vessel or station. Class size will be limited to ensure that each student receives the highest quality training.

Course Facilities

The Canadian Coast Guard College offers two types of accommodation at the College residence. Private hotel-style bedrooms are furnished with study desk, telephone, cable television and in-house data port; and there are also apartments of eight private bedrooms with shared bathroom, lounge and kitchenette facilities. The College dining room serves three complete meals a day as well as coffee breaks and late night snacks. The College has a 25-metre pool, gymnasium, hydrofitness room, weight room, squash court, sports fields and a nature trail. After hours, students can relax in the fully licensed Lighthouse Lounge.

Course Syllabus

A team of experienced Coxswains and educators has completely rewritten this course to address the Coxswain's changing role within the Coast Guard. This challenging course now serves as a model of operations for a typical Coast Guard lifeboat station or small vessel station.

Participants can expect to spend at least 70 per cent of their time in practical exercises or simulations both on board motor lifeboats and ashore. This approach makes the transition from a learning environment to a working environment an easier one.

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COMMANDER OF SMALL VESSELS COURSE

Teaching methods include group discussions, individual coaching, individual and group assignments, lectures, role playing, and simulation. Guest speakers will be invited to discuss topics outside of Coast Guard expertise. All facilities and the training vessels are available for student use outside of regular class hours.

The course is presented in modular format and covers the following topics:

- Command and Management;
- Safety Maintenance and Inspection;
- Vessel Operations;
- Other Operations;
- Search and Rescue;
- Public Relations;
- Human Resource Management;
- Financial Administration;
- General Administration;
- Navigation.

Departmental Contact

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