



A Career as a Non-Commissioned Member Sonar Operator

STRONG-PROUD
TODAY'S Canadian Forces

WHAT THEY DO

The Sonar Operator (SON OP) can be employed in three distinct areas of Anti-Submarine Warfare (ASW) operations: surface ships, submarines, or Integrated Undersea Surveillance (IUSS). The SON OP is responsible for the operation of active and passive acoustic equipment, communication equipment, noise monitoring, recording and bathythermograph equipment, and acoustic range prediction systems. As an integral member of the Operations Team, the SON OP searches, detects, tracks, localizes, classifies, correlates and disseminates acoustic information. One of the SON OP's key duties is to gather, evaluate and present oceanographic data to the Command Team. As part of the ship's intelligence gathering team, the SON OP also compiles and analyzes acoustic intelligence information. Specific duties of the SON OP include:

- Operate all active and passive sonars, sonar simulators, communication equipment, bathythermograph equipment and sonobuoys
- * Perform operator function checks on equipment by using Built-in Test Equipment, Integrated Test Equipment, and basic on-line fault diagnostic procedures
- * Assist in the development of command decisions by compiling and analyzing sonar and intelligence data
- * Gather, evaluate and present oceanographic data
- * Identify the significant features of displayed oceanographic data
- * Convert analyzed oceanographic and acoustic data into comprehensive reports
- * Maintain status boards, charts and watchkeeping records
- * Maintain geographical, operational and tactical plots
- * Operate data transmission systems
- * Draft operational and administrative message traffic
- * Perform seamanship duties such as helmsman, bridge lookout, boatswain's mate and life buoy sentry
- * Perform administrative functions, as necessary

Surveillance System (IUSS) where he would be responsible for the tactical employment of Acoustic Surveillance Towed Array Sensor Ships and Fixed Arrays Sensors, in direct support of forces at sea and intelligence commands.

Qualification Requirements

Sonar Operators must have the ability to concentrate under trying conditions, as well as a memory for detail, sound reasoning ability, good visual and aural acuity and good hand-eye coordination. They must also be thorough and able to function as a leader/member of a team, understand directions quickly and improvise where necessary to achieve objectives. Given their exposure to classified service matters, personnel must be dependable and discreet.

Training

Basic Military Qualification

The first stage of training for everyone is the 10-week Basic Military Qualification (BMQ) course at the Canadian Forces Leadership and Recruit School in Saint-Jean-sur-Richelieu, Quebec. This training provides the basic core skills and knowledge common to all trades. A goal of this course is to ensure that all recruits maintain the CF physical fitness standard; as a result, the training is physically demanding. BMQ covers the following topics:

- * Policies and regulations of the Canadian Forces;
- * CF drill, dress and deportment
- * Basic safety;
- * First aid;

At sea, the Senior Sonar Operator (Petty Officer 1st Class) is responsible to Command for the coordination of all Anti-Submarine Warfare (ASW) sensors and weapons. He/She is responsible for training, coordinating and managing the ASW Team. Ashore, the he/she could be employed in an Integrated Undersea



- Personal survival in nuclear, biological and chemical conditions;
- * Handling and firing personal weapons;
- * Cross-country navigation; and
- * Personal survival in field conditions.

Basic Military Occupational Training

On completion of the BMQ, Sonar Operators attend Naval Environmental Training (NETP) at the Canadian Forces Fleet School (CFFS) in Esquimalt, B.C. or Halifax, N.S. Training takes approximately 5 weeks and includes:

- * Naval history and organization
- * Shipboard firefighting and damage control
- * Watchkeeping duties
- * Seamanship

The second portion is the Sonar Operator course held at the Canadian Forces Fleet School (CFFSE) in Esquimalt, B.C. Training takes approximately 25 weeks and includes the following:

- * Operation of active and passive acoustic sonars
- * Analysis of passive acoustic sound sources
- * Operation of auxiliary acoustic equipment
- * Physics of sound as applied to military oceanography

Career Development

Opportunities for career progression, promotion and advanced training are good for personnel who demonstrate ability and potential. Advanced training in tactical procedures, sensor and intelligence information correlation as well as personnel management and leadership are available. Service onboard ship also provides worldwide travel opportunities.

Advanced Occupation Training and Specialty Training

Personnel who demonstrate the required ability and potential can undertake advanced Military Occupation (MOC) training through formal courses and on-the-job training as they progress in their careers. Specialty training may also be available. Below are examples of training related to this military occupation.

Advanced Occupation Training Courses

- * Advanced Acoustic Analyst
- * Sonar Control Supervisor
- * Under Water Warfare Director
- * Submarine Sonar Operator
- * SURTASS Target Processor
- * Target Data Analyzer (TDA)
- * Operations Watch Officer (OWO)

Specialty Training Courses

- * Submariner
- * Ship's Team Diver
- * Ship's Team Diving Supervisor

- * Naval Boarding Party
- * Leadership and management courses
- * Instructional Techniques
- * Instructor Supervisor
- * Training Manager

Working Environment

Upon completion of the Basic Military Occupational (MOC) training and Sea/Surface Specialty Qualification training, Sonar Operators are posted to their first ship. SON OPs spend approximately 60% of their career assigned to ships or submarines based in Halifax, N.S. or Esquimalt, B.C. They perform their duties mainly indoors but are required to work on the upper deck, under all climatic and sea conditions. When on duty, SON OPs wear headphones and must maintain intense aural and visual concentration for long periods. They must also perform watchkeeping routines, which result in irregular meal hours and rest periods. SON OPs are subject to the stress associated with living on board ship, such as limited working and living space, lack of privacy, and discomfort caused by the ship's motion. The mental stress in this military occupation may be severe when identifying and classifying contacts, or attempting to solve problems under adverse conditions in a minimum amount of time.

As with all Naval personnel, SON OPs are sailors first and operators second. In addition to their occupational duties, junior operators in particular perform other duties related to seamanship. They occasionally work on the upper deck of their ship as sentries or lookouts, act as an internal communications person and handle ropes for replenishment at sea (RAS) and as a ship-hand for entering and leaving harbour. They participate in Search and Rescue events and man-overboard emergencies, act as a member of the ship's emergency response team for both Home and Foreign Port security watches, and routinely perform ship's husbandry.

Sonar Operators also fight fires acting as members of a Fire Attack Team, and provide damage control should the ship encounter a breach to the hull. During Maritime Interdiction Operations (MIO), a SON OP may serve as a member of the Naval Boarding Party (NBP) in order to inspect the cargo of suspect vessels and detain the vessel's crew during inspections, if necessary.

Appropriate training, environmental clothing and equipment are provided, and Tactical Acoustic Sensor Operators' health, safety and morale are closely monitored.

Related Civilian Occupations

Although this occupation has no direct corresponding civilian job, the experience, management, leadership and instructing skills acquired through normal occupational progression are applicable to a variety of fields, and are highly regarded by civilian employers.

For more information, please call the Canadian Forces Recruiting
at 1-800-856-8488,
or visit our Web site: www.forces.gc.ca

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