

Prior to the early 1950's, all diving in the Royal Canadian Navy(RCN) was conducted using Standard Dress(Hardhat/Mk 5 helmet)equipment, with Navy Divers(DV) being trained by the Royal Navy(RN) at Whale Island in Portsmouth Harbour, England. Volunteers of Men from the RCN came from various Trades within the Navy and, when trained as DV's, wore a small hardhat badge on their right sleeve, six inches up from the cuff. He would then be employed as a Diver or, returned to be employed in his primary Trade, with the proviso that he may be called upon to complete any diving tasks required. The earliest date I could locate for Divers being employed in Canada, was from an article from the 1992 Old Farmer's Almanac "The Morning That Halifax Was Blown to Smithereens" and in a book "A Thousand Brave Canadians", which stated there were two Divers in the water, an RCN Chief Master-at-Arms(MAA) supervising and six men manning the handpumps. After the explosion, the MAA, both Divers and one RN(R) AB Newfoundlander on the handpump were living, while five handpumpers had expired. The Chief MAA was awarded the MBE, while the AB Newfoundlander was awarded the Meritorious Service Medal(Naval). This largest man-made explosion(prior to the Atom Bomb)was caused by the Norwegian steamer IMO crashing into the French munitions ship MONT BLANC in the Halifax Harbour narrows on 6 December 1917.

During World War Two(WW II), from 1939 to 1945, most of the training of RCN Divers was conducted on both the East and West Coasts of Canada, although some Officers continued training in Portsmouth, England. There were some Canadian Divers operating with the RN's Port(or "P")Party groups, who were utilized to clear unsweepable mines and sabotage devices from Harbours vacated by the enemy, together with the bomb and mine disposal squads, who dealt with unexploded bombs, projectiles, parachute mines, etc. on land. As well, the Royal Canadian Air Force(RCAF) from RCAF STATION DARTMOUTH in Eastern Passage, Nova Scotia seconded a group of Airmen to the Diving and Explosive Disposal Unit in HMC DOCKYARD for training as DV's. In Halifax, the Diving Tender HC 41 "The Edith" was skippered by LCdr Arthur H. "Archie" Baker, AKA LCdr Baker and his Forty Thieves, and his crew consisted of:
PO Scoville, Hyde, Eddie, Watts, Cleland, Poole, Hardy, McDowel, Brown, Renuik, Richardson, Lynott, Edgar, Collins, Steeves, Wigmore and Pollack.

As forwarded to us by LCdr George W. Cook, beginning in March 1949 the RCN recognized there was a need for a Mine Disposal Organization. At first it was considered that this requirement could be met by a few Officers trained in self-contained diving gear, and the mine render safe techniques used in WW II. LCdr(P) Harry J.G. Bird and Warrant Officer(at that time) E.D. "Tomy" Thompson were the first to volunteer, and were sent to qualify as Instructors with the RN. On their return, an Underwater Training Unit was established in HMCS STADACONA, and the first RCN(R) Officers and University Naval Training Division(UNTD, sometimes called "Untidys")Cadets were accepted for training. With no clear definition of Naval responsibilities for bomb and mine disposal however, the concept of the organization broadened to embrace mine searching and surface weapon disposal techniques, and it became abundantly clear that training should be extended to include Men. This equirment was met first by the Armourers, as the Ordnance Branch had accepted the responsibility for sponsoring and Co-ordinating the organization. Several Reserve Officers with wartime experience in diving, bomb and mine disposal, Defensive Equipped Merchant Ships(DEMS), Combined Ops, and even X-Craft were attracted to this organization on Short Term Service appointments. Until more comprehensive training could be undertaken in the RCN. Officer and Men were trained as Instructors in the United States Navy(however, some were still trained by the RN in England). Meanwhile, all manner of instructional aids in the forms of mines, bombs, rockets, projectiles and torpedoes were

ordered, as well as the most advanced types of self-contained diving equipment. The Dominion Rubber Company started development of a Canadian prototype underwater swim suit embodying the best features of the British, French and American suits which had been in use to date. Approval was granted to build suitable vessels for Clearance Diver training and operations. With a second underwater training Unit being established in HMCS NADEN on the West Coast. This Unit matured rapidly under the leadership of LCdr Edward Litchfield Borradaile, who was killed on 11 June 1952 while de-arming a WW II Japanese mine which washed ashore on the West Coast.

From this time on, delays and disappointments became numerous, with strikes, manufacturing difficulties and procurement red tape seemingly endless. During this difficult period when stocks of diving equipment were rapidly becoming unserviceable, a “dry” diver became the exception to the rule, and it soon reached the point where a dry Diver was openly suspected of “nursing” his dive, and was generally regarded as being soft – though secretly envied by some. In spite of quite a few shortcomings of the equipment, many highly successful operations were carried out, including the salvage of several crashed aircraft. Both Officers and Men were keen and were learning quickly, although the physical conditioning required for underwater swimming was not easily achieved. Diving trainees must consider, am I prepared to enter and master an entirely new world, where new dangers lurk which, in most cases, must be faced alone and often in murky blackness? Having faced and learned to avoid the dangers of “bends”, oxygen and nitrogen narcosis, air-embolism, asphyxiation, “squeeze”, and a dozen others, am I capable of mastering all the many skills of a Clearance Diver? Am I prepared to apply these newly acquired skills in the performance of Clearance Diving activities, whether in connection with underwater inspections, maintenance, repairs and salvage, or demolitions, countermining, render-safe and disposal of explosive devices of either “friendly” or enemy origin? All of the above, plus physical conditioning are the aspects required of a Clearance Diver. There was a case on record of a swimmer Diver who, after a half hours strenuous work on the bottom surfaced, commenced to climb the ladder, but with much water inside the suit had to stop to “rest” half way up. His “diving tender”, being particularly conscientious and sensing his distress, unsheathed his sharp knife, slashed at the harness of the breathing set and then at the “frogman” suit, in his efforts to free the Diver. Unfortunatley, while slashing at the rear part of the suit, it also contacted some “cheeky” parts of the rear area, causing much consternation on the Divers part! This required some stitching in his back as a result of the “Tenders” zealous attention.

By 1952 it became obvious that duplication existed between the underwater training Units and the Standard Diving Schools and, as a result of a survey of all diving requirements in the Navy, it was decided in August of the year to establish a Diving and Explosive Disposal School and Training Centre, which would be responsible for all training and peacetime operations in these field. Bringing the two organizations together would provide better economics in equipment, facilities, time and instructional personnel. It also emphasized the similarity and weaknesses of both. Chief among these weaknesses was the inability of either to offer its Men the firm foundation of a Rank structure, with career prospects comparable to other Trades in the Navy. At this point moreover, it became difficult to reconcile the Technical with the Operational aspects.

Finally, after two years in which countless proposals and counter-proposals were sifted and considered, the best solution appeared to be further amalgamation of the two functions of Standard Diving and Explosive Disposal into one Branch for Men and, because it seemed desirable to integrate this with other aspects of mine countermeasures, the organization was transferred to the Executive Branch. And so, in February 1954 the Clearance Diving Branch was born! Following this new birth, will surely come the usual teething troubles, the childhood and adolescent growing pains leading to

maturity. However, the foundation has been laid for a workable organization, and the status of the Diver has been raised from a secondary to a primary qualification. Standard Dress Divers who elect to transfer to this new Branch will only be required to undergo conversion courses in Explosive Disposal techniques to fully qualify. These men have already proven their aptitude and physical fitness for diving, and their psychological fitness to deal with explosives. However, the new candidates, who will come largely from the New Entry Training Base, HMCS CORNWALLIS must undergo a thorough screening. First must come a recommendation from their Commanding Officer(CO), vouching for their reliability, intelligence and common sense. Then a special medical examination, followed by a “dry dive” in the recompression chamber to a simulated depth of 100 feet of sea water. In the chamber the candidate is taught to equalize pressure on the eardrums by clearing the Eustachian tubes, to relax and breathe deeply – so necessary in diving. They are carefully watched for symptoms of nervousness, excitability or claustrophobia. The greater number of failures show up during this test – most through inability to “clear” their ears, some through claustrophobia, while with some it is simply fear of the unknown. Not all who pass this “pressure test” will become Clearance Divers, however next comes screening to determine a candidate’s psychological suitability to meet exacting and hazardous tasks that lie ahead. In this, the candidate is subjected to a series of questions to obtain his reactions to certain conditions, and his ability to think his way out of difficult situations. Most of the questions asked are of a serious nature. Occasionally however, LCdr John C. Ruse, Officer in Charge(OIC) of the Diving and Explosive Disposal School, may strike a lighter vein by telling the time honoured procedure for Divers to adopt when confronted by an octopus! It goes something like this: *“When a Diver is interfered with by an octopus in the course of his diving duties, he shall immediately tuck his bare hands under his armpits to prevent the octopus from seeing or feeling bare flesh. If it attacks, the Diver shall remain motionless until completely embraced by the tentacles. He shall then endeavour to free one hand sufficiently to tickle the octopus under its armpit, which has the desired effect of throwing it into convulsions, thus allowing the Diver to escape”*. Any candidate who can take a detached and coldly realistic view of this, and asks *“Sir, how can you be sure it is an armpit, and not a legpit”* is assured of a passing mark!

After passing all the above tests, the candidate becomes a trainee, and proceeds to actual diving activities. Failures may occur at this stage too, for initial training in the water is a reality for further screening. Men who show no signs of claustrophobia in the chamber, occasionally revolt at being sealed into a diving suit. While others cannot stand the feeling of being on the end of a rope lifeline underwater so far from relative safety, completely dependent on the Diver’s Tender on the surface(as is the case of the fully –weighted Diver). Still others may not possess the mechanical aptitude necessary to work with Diver’s tools, while some may show nervousness in dealing with explosives. Occasionally a man may show the symptoms of Oxygen tolerance, which means it is unsafe for him to use Oxygen in a breathing apparatus, or during compression in a deep-sea suit. The method employed to determine a Diver’s tolerance to Oxygen in the days of WW II, as little was known of the subject, was to lower him on a lifeline while breathing Oxygen from a self-contained breathing set, and increase the depth until pulling on the line indicated the Diver has gone into Oxygen convulsions! This method gave the desired information, with no ill effects to the Diver, other than the loss of dignity. However, it was never looked forward to as an exhilarating experience, and was to be superseded by other more secure methods. Today an encephalograph tells the story with no loss of dignity. Little by little, confidence will improve, as ability increases. The ever-present risks and responsibilities are shared equally by the Diver and his Tender, for as carelessness on the part of a Tender can endanger the life of the Diver, so can the Diver endanger those about him by an incautious move when handling explosives. For this, the Diver’s Tenders are always qualified Divers themselves.

Soon, the Clearance Diver will know that he is a member of a highly trained team, each dependent on the efficiency and co-operation of the other men for their lives. From this sense of responsibility and Inter-dependence, and knowledge that one is of those who made the grade, comes that precious asset in any good team – esprit de corps!!

The Clearance Diving Branch is to be established as a small peacetime nucleus, geared to expand efficiently in times of emergency. Its versatility and mobility will permit employment with minimum delay in any or all other fields for which it is responsible. Should war never come, the Clearance Diver will be fully employed in carrying out the diving duties relative to safety, inspection, maintenance and repairs of ships' hulls, jetties and sea walls, and the laying of moorings, etc. He will also deal with mines or other offensive weapons which are washed ashore. He will undertake the necessary underwater demolition tasks, and may occasionally be called on to recover a practice mine, or a depth charge. Surely such an organization can be likened to an Insurance Policy which, throughout its life, pays out premiums!

EDITORS NOTE: RCN(ret)LCdr George D. Cook(Ordnance Branch) served 5 years with the RN Bomb & Mine Disposal Teams overseas from 1940-1945 and demobilized in 1946. Signed on again in 1951(Ordnance Branch), then reverted to Executive Branch to have all Clearance Divers.