

Members of the Royal Canadian Navy wishing to become Naval Divers in the 1920's, were sent over to Whale Island, England for their training by the Royal Navy. It was at the Whale Island Training Unit that our first Canadian Divers were introduced to the diving world. The Officer's and Men were trained using both British and American Standard Diving Dress, however the predominant dress was British. At this time, there was no specifically recognized Service Dress, or recognized Self-contained or Re-breather diving equipment as is the case in our modern day.

The Qualified Navy Diver's(DV's) of this period were required to have been qualified in another Trade first, and worked at their diving tasks in a secondary skill or Trade capability. To indicate they had become Navy Divers, they wore a small hardhat badge on their right sleeve, 6 inches up from the cuff. The Service Diver of that era was limited in the depth he could dive, therefore was utilized mainly in harbour and ship repairs. The more competent Divers were retained for work at HMC DOCKYARDS, in Halifax NS and Esquimalt BC.

When World War Two commenced in 1939, the requirement for Diver services became readily apparent, due to the development of new methods of underwater warfare. Numerous Diving courses to meet this demand started up, with training of new Divers being conducted at both Halifax and Esquimalt. Personnel from the Navy, Army and Air Force all trained together and, upon successful completion, the members of the various Canadian Services would return to their original units to work with Army Engineer, Air Force Crash & Rescue Boat and the Navy to various HMC DOCKYARDS and Ships of the Fleet for salvage and ship repair operations.

The diving equipment primarily used during the early commencement of the WW II era was the United States Mk V Standard Diving Dress(which allowed dives to depths of 250 ft.)and British manufactured Salvus apparatus. However, the new methods of underwater warfare necessitated a requirement for Self-contained equipment that would permit diving to deeper depths, and allow for a wider free-swimmer range of operations. Extensive research and experimentation soon provided Naval Divers with Self-contained diving equipment which would enable them to accomplish many before-impossible feats. The versatility of the Self-contained equipment made it ideal for many underwater operations.

In March 1945, an immediate need for a Mine Disposal organization was recognized. It was felt that a few Officers trained in Self-contained diving and Mine render-safe techniques used in WW II, would be sufficient for this task. Two Officers volunteered, and were sent to England to train with the Royal Navy as Instructors. Upon their return to Canada, they established an Underwater Diving Training Unit at HMCS STADACONA(now CFB HALIFAX), and the first members of this group accepted for training were RCN(R) Officers and University Naval Training Division(UNTD, or sometimes called "untidy")Cadets. What then became apparent after the clear definition of Naval Responsibilities for bomb and mine Disposal, combined with the concept of the organization to also use mine searching techniques, is that this training should also be opened up to include Men of the Diving Units. Because the Ordnance Branch had accepted the responsibility for sponsoring and co-ordinating this organization, this special requirement was originally met by the Armourers Trade.

The formation of the Clearance Diver Branch took over more than five years of planning, growth, pruning, grafting and, in some cases, cross-pollination. It is a wonder that the Diving Branch actually got underway, what with the discouragements, delays & frustrations that were encountered, which threatened to destroy the Branch entirely. It was the bringing together of all the diving groups, ie: the

Mk 5 Standard Dress Divers(who were used in ship repairs & salvage), the “P” Party(used for Port Clearance during WW II to clear unsweepable mines and sabotage devices from harbours vacated by enemy forces)divers, and the Bomb and Mine Disposal squads(who dealt with unexploded bombs, projectiles, parachute mines and other dangerous ordnance encountered) which was required to make a cohesive Branch. Naval Reserve Officers with wartime experiences in Diving, Bomb and Mine Disposal, DEMS, Combined Operations, and even X-Craft were attracted into the organization on Short Service Commissions and, of these Officers, a number were transferred to the RCN Regular Forces.

The Canadian Navy Diver still remained at this time a secondary Trade(DV), and upon completion of his diving course, would be away aboard ship to sea for two or three years, before returning to the Fleet Diving Unit, or to one of the locations of the Unit at that time. With the combining of the various types of Divers into one cohesive Unit, there was a requirement for new instruction and Instructors. Officers and Men were now sent again to train for these positions, both to the United States and England. All manner of Instructional Aids, in the form of publications, Mines, Bombs, Rockets, projectiles and torpedoes were ordered, as well as the most advanced types of Self-contained diving equipment. The Dominion Rubber Company commenced development of a Canadian prototype underwater swim suit that utilized the best features of the British, American and French dry suits in use at that time. Approval was given to build suitable vessels for Clearance Diver training and Operations.

A second Diving Unit, on the West Coast, was established at HMCS NADEN(now CFB ESQUIMALT). This West Coast Unit matured rapidly under the guidance of LCdr E.L. Borradaile, who was later killed when an old Japanese floating mine washed ashore on the West Coast. He had been tasked to make safe this mine, when something went wrong and explode, killing him.

Advancement of the Branch seemed to be slowing due to numerous delays, strikes, manufacturing difficulties and red tape, all of which seemed to be endless. Duplicity was obviously evident by 1952 between the Underwater Self-contained Training Units and the Standard Dress diving schools and, as the result of another survey covering all the requirements of the Canadian Naval Diving establishment, it was decided in 1952 to establish a Diving and Explosive Disposal School and Training Center, which would be responsible for all training and a single career path. What was apparent was the inability to offer a firm foundation of a Rank structure with career prospects comparable to other Trades in the Navy. It also became apparent that it was quite difficult to reconcile the Technical with the operational aspects of a Clearance Diver Trade. It was approximately two years of countless proposals and counter-proposals being investigated and considered, with the best solution being a further joining of the two functions of Standard Diving and Explosives into one Branch for Men, and with the desirability to integrate with other aspects of Mine Counter-Measures, the Diving Unit was transferred to the Executive Branch.

It was in February 1954 that the Clearance Diver Trade and Branch was born – there has been much debate of the exact date of formation, however the research conducted for this Thesis, seemed to point to this date. Growing pains and many adolescent problems leading to maturity were encountered, but the foundation was now in place to become a workable organization, and the status of being a Diver had now been raised from a secondary to a new primary Trade. The Standard Dress Divers who elected to change over to become a Clearance Diver, were now only required to undergo conversion courses in Explosive Disposal techniques to fully qualify. It was because of these Men and their abilities that had already been proven in their aptitude and physical fitness for diving, and their psychological fitness to deal with explosives, that this shift to the new Trade was allowed. However, new candidates arriving from HMCS CORNWALLIS in the early build-up phase had to be thoroughly screened for acceptance.

## RESULTS OF THE AMALGAMATION

Since the formation of the Clearance Diving Branch, the Fleet Diving Unit(Atlantic) has had many homes, the first of which was in HMCS STADACONA and, with the combining of other groups into the Branch, further movements were undertaken. The Operational Unit was located in the South end of HMC DOCKYARD, while the Training Section was in the North end in the Boatshed. When the Operational Diving Unit was relocated from HMC DOCKYARD in Halifax to the Naval Armament Depot(NAD) on the Dartmouth side of the harbour, it consisted of two Barges, with YMT 5 and YMT 7 Boats. The Bangor Class Minesweeper, HMCS GRANBY at that time was already berthed there for quite some time. The Operational Diving Unit and the Training Section, on paper, were two separate entities, with the Training Section located on the Barges. It was in 1956 that the Diving Unit and HMCS GRANBY were amalgamated into one single Unit, and commenced to function under one unified Command. That same year, the Diving Unit as a whole, relocated from NAD to French Cable Wharf(FCW), some 400 Yards North of NAD, at which time the Unit obtained a two compartment Recompression Chamber and installed it in the nearby building. All diving training and operations were now conducted from the FCW site.

In 1966 the original HMCS GRANBY was decommissioned, being replaced by the reactivated HMCS VICTORIAVILLE at FCW – it was also renamed HMCS GRANBY at the time. The new GRANBY offered a more stable area to operate from, with larger accommodations, and room for expansion in the training of both Clearance Divers and Ships Divers. Subsequently, in 1974, this GRANBY was decommissioned also, with the FDU(A) moving to become a Lodger Unit on CFB SHEARWATER, where it now operates from..

After the formation of the Diving Unit in the mid 1950's, Diving Teams from the Unit have travelled to the Arctic in support of Diving Operations for the construction of the Distant Early Warning sites(DEW Line Radar Bases), as well as serving aboard the Icebreaker HMCS LABRADOR to assist it's Arctic support of these DEW Line Bases. In 1959 a Diving Team, designated as Underwater Demolition Team(UDT) Bravo, comprising of an Officer and 8 enlisted Men, of whom 4 were Ships Divers(a first time event), travelled from Halifax aboard the USN ship USS EDISTO to conduct Operations with their American Diver counterparts in the Arctic. The Divers travelled to; Goose Bay, Labrador; Thule, Greenland; back to Goose Bay, on to Robinson Creek, Newfoundland and then back to FDU(A), with all objectives fully met.

Many other Operational commitments were conducted from the 1950's through to the 1970's, i.e. Helicopter recoveries at SHEARWATER, Shock Trials in the Gulf of Mexico, off Key West Florida, ship repairs, Arctic Teams once again utilized by Department of Transport Sea-Lifts to re-supply the DEW Line sites, Combined Operations with other Military Units such as Operation Boatclock in 1962 and security for the Royal Yacht in 1964.

Diving Tenders that were utilized to add support for the FDU(A) operations during this period were YMT 7(for Standard Dress diving), YMT 5 & YMT 8(for Mine Search & Recovery), and then we had the additions of YMT's 11 & 12, to replace YMT 7.

There now began a time of technology expansion during the period from 1965 to 1974, with Divers required for multi-tasking on experimental events. The opening of the experimental Recompression complex in Toronto ON at the DCIEM(Defence and Civil Institute of Environmental Medicine) proved to be a real asset for us, since it solved many of the questions that arose from diving problems encountered by Divers in field work under pressure. Saturation diving trials were conducted, together

with the Canadian Pneumatic Analogical Computer tests, and with DCIEM teams travelling to CFS ALERT in the high, high Arctic to assist in the task of repairing and installing water intake pipes. 1974 saw the first operation of COLD WATER DIVER, next came COLD WATER DIVER 1975 then the 3<sup>rd</sup> COLD WATER DIVER Experiment in 1977.

Various other underwater tasks and operations have advanced the skills and experiences of our Divers:-

- Emergency Teams transported to Egypt for the six day War
- To the Bahama's for ship propeller changes, and assist with Fleet repairs
- Two Divers assigned to participate with the American SEALAB III project
- Mobile Teams assist Provinces in search and rescue situations
- Assisting in locating and render safe Explosive Ordnance operations
- Conducting tasks involved with SOSUS – Sound **S**urveillance **S**ystem
- In 1970, acceptance tests of the SDL-1(Submersible Diver Lockout – 1)
- Recovery of oil from the Supertanker "ARROW" sunk in Chedabucto Bay near Canso NS
- In 1972/73 the recovery of the crew of a Tracker aircraft off Sheet Harbour NS in 250 ft water
- Continuous recovery & disposal of ordnance from WW II wreck CLAIR LILLY off Chebucto Head NS
- Salvage Operation of a Sea King helicopter from 525 ft off Chebucto Head NS
- Search & Recovery of data from the fishing trawler LADY LYDIA off the Magdalen Islands
- Search & Recovery of Swiss Air flight from crash site in St. Margaret's Bay NS

Over the many years up to the present day, there have been a multitude of operational taskings and assignments required of the Fleet Diving Units, and through all these operation, the Officers and Men of the Royal Canadian Navy's Diving Branch have received messages and letters of commendation. Some have come from the Chief of Defence Staff, the United States Navy, the Maritime Commander, Provincial Officials, Military Base Commanders, Law Agencies and citizens at large.

Canadian Naval Divers have acquitted themselves very well as they are now experts in their fields of endeavour. With these types of Officers and Men, we can rest assured that all three Units: FDU(A), FDU(P) and the Experimental Diving Unit at the Defence and Civil Institute of Environmental Medicine live up to their motto: **STRENGTH IN DEPTH!**