

Chuck Rolfe, Editor
RR2
Kinburn, Ontario
Canada
KOA 2H0
Phone(613)832-1653



FOUNDED
HALIFAX, N.S.
1981

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Glenn Adams P. Eng
André Desrochers
Leo Goneau
Terry Havlik
Michael Walsh

First President
Stanley F. Watts

DIPPERS DIGEST #29

15 March 1997

DIVING TENDER #7 aka
YARD MAINTENANCE TENDER No. 7

The practice of sending Divers up in the Arctic to assist with their expertise in the construction of the radar DEW LINE was in its second year and two of my young lads were sent along with a diving team to do their thing. The pace of construction was very frenetic what with the Cold War thing looming over the horizon. Tasks allocated to them being diving, surveying, tide watching and being driven around the bend with boredom in between Sea Lifts, as routines weren't down pat yet - either there were too many landing craft with supplies waiting to be unloaded, or there were none simply because the weather was bad and it was too dangerous for the landing craft to come in, equipment failures, and the list goes on, at times a complete FUBAR (fouled up beyond repair, or you can choose your own words). Also, in between, there was the use of explosives to assist moving to new locations all the rocks and bergy bits that were deposited there. This caused SNAFU's (pick your own words) and the team became very proficient in their blasting operations as they could put a rock of any size to almost any distance they wished, with a cash side bet even! For some reason or other it seemed as though those Head Honcho's who roomed and boarded in that big five-sided building down below the 49th parallel had a practice of sending their troops who had lived all their lives in the 'tropics' up to the Arctic to act as stevedores for the Sea Lifts. Of course the scenery and weather were totally opposite to what their bodies were used to and could handle, whereas those lads of ours would be walking around with the bare minimum of clothing. The 'southern' fellows were bundled up to their ears with double sets of survival clothing and shivering, which was strange too, because no matter where on these bleak patches of god forsaken islands, one of our lads always managed to locate the proper "anti-freeze", and shared it with them. The usual method of operating the LCM's (landing craft men) was to load it to the hilt and drive it full bore to the beach and keep the screw clutched in until it stopped, then slow down the revs while the unloading was taking place. This constant blade turning eventually scoured the bottom of sand and small rock until a ridge was formed behind it. After a few such landings the ridge was high enough that a loaded craft was stranded about thirty feet from the true beach, and the trough caused by this became too deep for the fork lifts to handle. Naturally, of course, this was right up the Sirs alley, and in due course a string of explosives was laid to remove the ridge and blow the sucker into little bits of sand. Onlookers, or goofers as they came to be known, were the main hindrance to these operations, and no amount of urging (more often cursing and swearing) on our part would move these southern gents away from the area. Roping off the beach was out of the question as they just hopped over it, and you couldn't push them away since most of them seemed to be twice as big as our largest Diver. Eventually, with all the charges laid and after repeated warnings, the crowd of them reluctantly shuffled away to a somewhat safe area, all except this one fellow who refused to budge, *"The gummint sent me here and I'se stayin to watch"* says he. Well, the head Sir by this time was so frustrated that he gave the order to "Fire", and up it went!! Incidentally, he was behind a bulldozer while all the rest of the crew took shelter under a crane for protection. If it was anyone else that saw two hundred feet of beach launching itself at the sky with one helluva loud bang, I would have thought that the minute the waves started to erupt their feet would take immediate action and beat a hasty retreat, like a road runner. But not this gentle soul from the deep south. His eyeballs fixed upon a rising rock which was the size of his head, and stayed on it until it reached the zenith of its arc and started coming towards him - even then his size twelves didn't move. Oddly, that piece of stone must have bounced off another one, causing it to veer inland instead of heading out to sea. It was seeking dry land and aiming itself at the goofer, whose only moving part was his head, which was leaning so far back that he fell over with his arms spread out, while all

around him came the pitter patter of falling debris. Wonder of wonders, not one single grain of sand or piece of rock touched that body, while some tents had small holes in them and much of the machinery sitting around had pits and dents in the paint. It goes without saying that there weren't too many goofers come around after that blast, and all future beach clearing operations then went smoothly. A decision to locate another suitable beach landing area came about due to one of those sudden Arctic storms creating chaos to our main beaching area, causing the LCM's to land sideways instead of head-on and much additional hardships for the stevedores. So three young chaps and the head Sir set out to find another landing spot. One would think that some suitable transportation would be appropriated for this task, like a truck or even a boat, but no sir, shanks mare was the order of the day. I guess that the boss thought that the exercise would do them all some good after doing nothing but eat and sleep those last couple of days, and besides he wanted to get back for the prank the lads pulled on him when they brought him some duff (a dish of strawberries with a topping of shaving cream) from the galley. So off the team marched along the shore line in their dry suits (the old thin rubber type with entry through the neck). The first issue given to the lads of these rubber neck-entry suits were cast-offs from the Royal Navy, and they looked and felt like it! First of all the legs were usually far too short, the torso part too long, the seat area was triple ply & stiff as a board with the arms almost always mismatched. It didn't matter what angle you looked at it, you immediately thought of "Ace the Orang-outang" wearing a dirty diaper, what with a normal stride effect making the rear end move sideways to and fro, like a damsel of the night. After a few miles of stumbling along in the shale and sand, the lads were getting fairly pooped and sore to say the least, what with the suit chaffing their tender bodies, when the leader considered the area they had arrived at was the most suitable site, so they would do a water survey to see if there were any obstructions to relocate. One must keep in mind that in this region of Baffin Bay there were only sandy dunes and shale with no trees, grass, neon lights - no nothing, which meant on excursions you trundled along with your head down to see where you are stepping, and in the water one saw only the bottom. So when one young lad finally looked up to check where they might be, lo and behold, no less than a mile away was the main base they had departed from! That far north in the summer the only time piece was usually the stomach, and when it started to grumble it was an indication of meal time, and if you were tired it must be night time. The big difference was that the sun stayed out practically all day, with just a short period of twilight or dusk. Now these lads didn't relish the thought of the long plod home in those suits, so instead of walking all along the shore, around this bay, they opted for the short-cut swim across the bay, while the bossman (suitable attired in proper Arctic apparel) was forced to hoof it the long way home. By this time the weather had moderated somewhat which made the going pretty easy for the swimmers, and the three of them in a cluster were making good time, when one of the lads looked around to get his bearings and let out a tremendous yell. Standing with one foot on the gunnel of this wooden craft with a sail up was an Eskimo (now called an Inuit), arm raised with a harpoon, preparing to heave it at what he must have thought were some seals, one of which would become his next meal!! Well, with one lad screaming his head off, it didn't take long for the other two to join in, complete with a few choice words of profanity and a bunch of arms waving. Now that 'skimo had never heard such a ruckus in a long time, not since that Missionary cut off his thumb while building an igloo two summers ago and got such a fright that he dropped his harpoon back in the boat and took an oath never to sample the good Padre's Mass wine again. Thereafter, it must be admitted, there was absolutely no dawdling by the swimmers in getting back to the main base, even if the chafing was rubbing the tender spots raw. To be continued.



BREAKDOWN !

While in transit to the Magdalen Islands in 1971 to search for and locate the sunken fishing vessel LADY LYDIA, YMT-11 lost its engine when proceeding up the Northeast coast of Nova Scotia. No big deal you would think, as they came through the ordeal without a problem. It all happened as follows. The seas were very calm that day and they were about 12 miles off the coast, about to enter a very dense fogbank that was rapidly approaching. As they entered the fogbank they slowed and commenced sounding the fog horn - the visibility was only about 100 ft and 100 yards with no contacts showing on the Radar for 10 miles. The Bridge team were Joe Paquin, Leo Goneau, Ivan Cripps and Lt. Bud Nuquist. Just as YMT-11 was slowing to enter the fog, the main engine seized and stopped, the alarms went off, and 11 Boat slowed to a stop in a matter of moments. Bud hollered to the Engineer but he was busy checking out the engine and shaft bearing to see why the shaft was not turning. Aside from not being underway, the electrical power, generators, radio and Radar were still operational, and they had a good position report as they had taken it just prior to entering the fog. They immediately got out a good position and status report to CANMARCOM and to HMCS GRANBY. The forward anchor was manned, a continuous watch kept on the Radar, the foghorn and radio looked after, and everything seemed to be well in hand on a tranquil sea. The big concern obviously was what had gone wrong with the engine or shaft. The engine was way too hot to determine what its status was, and the shaft bearing was much hotter than it should have been, so there was not a lot they could do right at the moment. CANMARCOM had despatched a Fleet Tug to stand by 11 Boat, which was estimated to arrive in 6 to 7 hours, and HMCS GRANBY was going to send YMT-12 with a minimum crew. If need be, 11 Boat was to transfer her crew and all diving equipment to 12 Boat in order to continue her original task on the LADY LYDIA.

Upon reviewing their situation, and after closely consulting the Charts, it was noted that they were about 12 miles out from a very nicely sheltered cove with a depth of 20 ft. A discussion followed as to whether it was feasible to be towed into this cove utilizing the three Zodiacs with their 25 HP outboards that were onboard, and the consensus was this was the way to go. Consideration was given to tying the Zodes alongside for the tow in, however this was not the best situation as they could not be kept in view due to 11 Boat's hull masking them from the Bridge. So the Zodes were tied into a cluster on the end of a towline, with Leo Goneau and three Seamen manning them, with set signals for directions to pull. Messages were sent to CANMARCOM and HMCS GRANBY informing them of 11 Boat's status and intentions, and with Ivan Cripps on the Depth Finder, Joe Paquin on the helm, and the ol' Yank on Radar, they headed for shelter. Within 15 to 20 minutes they were making way at about 4 knots - which wasn't too bad at all! In less than three hours they proceeded totally blind into a cove that appeared to be protected all around at least 300⁰, with ample depth to anchor. During the entire evolution the visibility never lifted one iota, and the Zodes, with 11 Boat in tow, proceeded through the entrance to the cove without ever seeing it, and into what they figured was the centre of the cove, where the anchor was dropped. Radar indicated they were about 500 ft from any direction of land and they had 20 ft of water under them. They felt real good to be there

Before reaching the anchorage, Lt. Nuquist was informed the engine and shaft bearing had been checked, the crankcase had been replenished with good oil, and everything appeared to be OK, but would require further testing to ensure it was 100%, and that the shaft was turning with water passing over the screw. The Engineer figured that if it was necessary they could replace or repair the shaft bearing from spares held aboard. Messages were sent telling the world where they were, advising everyone that repairs were being effected, and that they just might be ready to proceed on task before any support arrived in the form of YMT-12. The message was

TO: CANMARCOM
HMCS GRANBY
FLT DIV UNIT ATLANTIC

FM: OIC YMT-11

SUBJECT: SIT REP

YMT-11 IS AT POSIT AS LAST REPORTED AND NOT IN ANY DANGER. ALL SYSTEMS IN WORKING ORDER EXCEPT MAIN ENGINE AND SHAFT BEARING. AM CONDUCTING OWN INVESTIGATION OF DAMAGE AND POSSIBLE REPAIRS. HAVE NEEDED OR PUT 16 QTS OF OIL INTO ENGINE CRANKCASE AND HAVE PARTS TO REPAIR SHAFT BEARING IF NEEDED.

AM PRESENTLY UNDER TOW WITH OWN SMALL BOYS AT FOUR KTS AND UNLESS OT DIR AM PROCEEDING TO PROTECTION OF HARBOUR LOCATED AT LAT--- LONG--- WITH ETA OF TWO HOURS PLUS TIME GROUP (2-3 hours).

VISIBILITY STILL LESS THAN 100 YDS, BUT ALL GEAR WORKING AS DESIGNED AND FEEL CONFIDENT OF YMT-11 AND CREW TO PUT SELF IN SAFE ANCHORAGE.

BT.....

Now, realizing that none other than Sam Semple was at the Sparkers desk at GRANBY, it was visualized that in Sam's mind there would be pictured a cartoon drawn up by him and posted on the bulkhead of FDU(A), of a drawn 11 Boat with it's crew manning the oars (galley slaves!) and rowing the craft into port under the whip being cracked over their heads. Interpretation of certain selected words oft times can run amok, and Sam had the incredible capability of serving his humour to it's fullest, thereby allowing the "CREDIT" for it being passed on to some other poor deserving unsuspecting soul!! Sweet solace came eventually by ensuring Sam's promotion to P2CD regardless of his protestations that he did not want to be a Petty Officer!

During the next 5-6 hours, the fog lifted to the extent of revealing that indeed 11 Boat was anchored exactly where they figured to be and, upon review of the overall situation, the following was found to be the status:

1. YMT-11 was safe and had made all repairs as required.
2. YMT-12 was close at hand and awaiting transfer of crew and gear if needed.
3. A Fleet Tug was close by and awaiting further orders.
4. Extra spare parts were on their way by truck to a selected port.
5. The situation was fully under control and safe at this time.
6. A land-line report was to be made prior to darkness with 11 Boats recommendations.

The land-line conversation was completed in which it was agreed that 11 Boat would conduct tests on the engine and shaft bearing repairs whilst enroute to the operational area. Should any problems develop, they would be investigated further, and a decision would be made as to whether to continue on or to shift to YMT-12. YMT-11 encountered no further difficulties and proceeded to the Magdalen Islands to conduct it's task of searching for the LADY LYDIA.

Events such as these never appear to be a big deal, but in retrospect when reviewing such a situation in which everyone makes it look so easy, it usually means that good men were doing a completely satisfactory job - something they are very adept at! A key decision was made by Bud Nuquist in that he really wished to show his faith in the crew and their repairs, as he wanted to complete the original task using 11 Boat and her crew. All common sense indicated to him that 11 Boat crew and gear should be shifted to 12 Boat, but when everyone does such a fine professional piece of work - and it works - why change!! Al Booth made the decision, "*Bud, if you are truly comfortable with your crew and 11 Boat, then by God take anything you may require from YMT-12 and proceed*". Al requested Bud to stop at the Canso Straits area to call him by land-line for a status report and, if there were ANY problems, 12 Boat would be sent there to shift the gear and proceed. Everything on 11 Boat operated perfectly so that when this report was received by Al, he sent them on their way with a "*Smooth sailing and good luck*" rejoinder - which 11 Boat's crew felt very good about!

They never did find the reason why the shaft bearing went out. However, whenever a ship sends out a report of being dead in the water off the coast of Nova Scotia, in a blind fogbank, it would be cause for concern. Bud personally felt that the crew addressed each option they had, and fully overcame or resolved each one better and faster than expected. Upon anchoring and after the fog lifted somewhat, they all fully realized what a superb combined effort had been made by everyone, acting as a team to arrive at this position. All hands were alert throughout the long haul, the necessary repairs were completed and they then proceeded on to fulfil their original task. This story then continues to the report of transitting to the Gulf of St. Lawrence, when about 30 miles Northwest of Cape North they were astounded to see the three lights of Cape St. Lawrence, Cape North and St. Paul's Island - see follow on story about the "Search for Lady Lydia" in a future issue of the DIPPERS DIGEST.

1997 CNDA REUNION

We are pleased to say the 97 Reunion in Ottawa, Ontario is proceeding very well and that the Registrations and Ottawa Citadel Hotel reservations are arriving at a steady pace since the information was published in the last DIPPERS DIGEST. For those wishing to visit the many Museums in the Capital City, please be advised they are open from Tuesdays through to Sundays inclusive - BUT ARE NOT OPEN ON MONDAYS! The politicians usually are not in session then, however there are tours of the Parliament Buildings you may go on, and the "CHANGING OF THE GUARD" ceremony on the lawn in front of Parliament every morning.

Your Editor is now off to the Hospital in order to have his other hip joint replaced.

SOLVING A DIVING PROBLEM

Jun 57

TWO SEPARATE solutions to a serious problem of self-contained diving have been offered by members of the Clearance Diving Branch. The problem was injury to or actual rupturing of eardrums in cases where divers made descents below the limits prescribed for "frogman" diving.

The present design of the "C" type hood, used in the RCN and other navies, has resulted in severe ear pressure being suffered by divers owing to the internal pressure on the eardrums being greater than the external. Thirty-three feet is considered to be the safe limit of diving with the current "C"-type hood, used with self-contained diving gear.

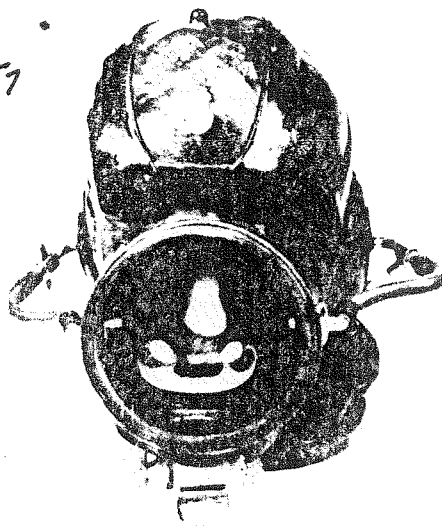
The difficulty arises from the fact that no reserve of air is maintained on the outer ears to balance the pressure reaching the inner side of the ear drums via the Eustachian tubes from the nose and mouth.

The discomfort caused by inadequate external air pressure on the ear drums is known by the divers as "reverse ears". For every 33 feet of depth, sea water exerts an additional pressure of one atmosphere on the diver. Clearance divers have frequently gone beyond the 33-foot mark without experiencing "reverse ears", but when the condition does occur it may require a lay-off from diving for periods of from two to six weeks. Sometimes the ears are affected by dives of even less than 33 feet.

Effective means have been devised by both PO Yvon Gingras (P2CD3, ON 8606-H) and CPO P. J. Nicholson (C2C14, ON 6094-H) serving in the Clearance Diving Trials and Development Unit on board HMCS *Granby*, based at Halifax.

CPO Nicholson's invention was the simpler of the two devices and, presumably, modifications to the diving suits would be relatively inexpensive. However, it was not as effective as that designed by PO Gingras in that air leakage into the suit would affect its operation and it is Gingras' invention which is undergoing further development.

The essentials of the Gingras device are two tubes leading from the face-piece to doughnut-shaped soft rubber rings, built into the hood around the



Separate answers to a problem of "frogmen"—discomfort and possible damage resulting from the internal air pressure on the ear drum exceeding the external—have been provided by PO Yvon Gingras and CPO P. J. Nicholson, both of the Clearance Diving Unit in HMCS *Granby*. The accompanying text explains how the Gingras device (left) and the Nicholson (right) work. (HS-44536A)

ears. The pressure of the air breathed by the diver and that pressing externally on the ear drums is thus equalized.

The Gingras invention does not require a high degree of technical skill to fit to present diving garments and devices already fitted have for the most part been made of parts salvaged from unserviceable sets.

In its original form PO Gingras' invention had a handicap in that it interfered with the "ditching" of breathing apparatus during an emergency. Quick-release couplings are being developed.

This difficulty of disengaging breathing gear is not present in CPO Nicholson's invention, which has by no means been abandoned, although current development is concentrated on the other. It has been suggested, in the course of study, that features of both devices might well be embodied in the equipment in its final form.

The Nicholson modification consists of strong rubber cups, cemented over the ear pieces on each side of the "C"-type helmet. Small perforations allow air to seep back and forth between the cup and ear piece as water pressure increases or diminishes. The device has worked successfully in several experimental dives to a depth of 100 feet, where the diver is under a pressure of four atmospheres or approximately 45 pounds per square inch above normal.

The possibility has been foreseen that an imperfect seal around the ear

pieces might result in the escape of air into the hood. When the diver rose towards the surface, reduced pressure in the cups would, in such case, result in a partial vacuum and produced the "reverse ears" effect which the helmet modification sought to avoid. Alternatively, if the diver returned to depth, there would be no reserve of air to counteract the internal pressure.

The successful introduction of a means of preventing "reverse ears" will mean that the expression "shallow-water diving" will lose its significance in the Clearance Diving Branch and the use of some such expression as "self-contained diving" or "free diving" will more accurately describe the type of work which is being done.

Born at Honey Harbour, Ont., 32 years ago, CPO Nicholson has been in the Navy, except for a few months following the Second World War, since May 1943. He began his diving career ten years ago and was promoted to his present rank last year.

PO Gingras, a native of Montreal, joined the RCN as a steward in 1948 shortly before his 20th birthday. He transferred to the seaman branch in 1950 and took up diving two years later. In 1953, at the end of his first five years, he left for "civvy street" but was back in the diving business again with the RCN before the snow flew that fall. He transferred to the Clearance Diving Branch in 1955, the year he was promoted to petty officer second class.



Rear-Admiral Walter Hose, RCN (Ret), 88, of Windsor, first Chief of the Naval Staff of the RCN, (centre) chats with Rear-Admiral J. B. Caldwell, Chief of Naval Technical Services, and Liston B. McIlhagga, of Winnipeg, president of the Naval Officers Associations of Canada, at HMCS Carleton, the Ottawa naval division, at the associations' 19th annual meeting in June. Admiral Hose is honorary president of the NOAC. (O-15637) **AUG 64**

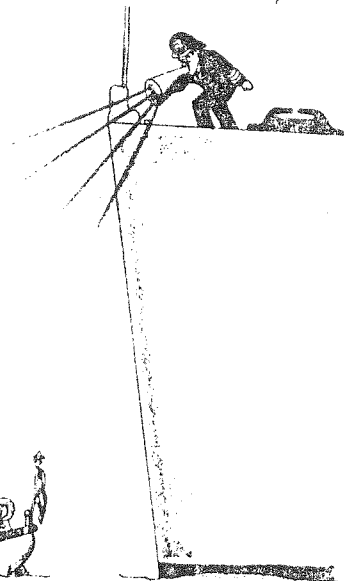
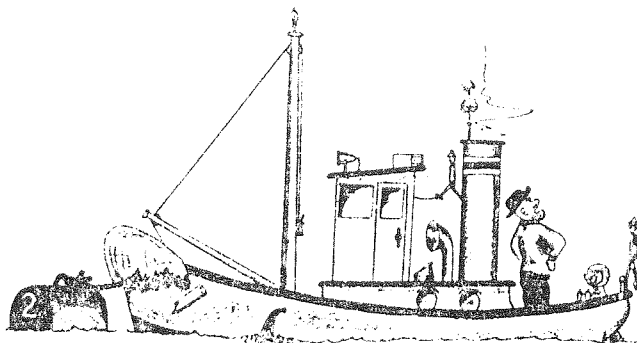
Diving Display at Marine Museum **JUN 65**

An underwater exploration room was recently opened at the Marine Museum of Upper Canada, Toronto.

Situated in Stanley Barracks, Exhibition Park, the display features equipment used in diving, both Scuba and skin-diving, and the old "hard hat" or helmeted diving. The latter display is complete with its manually operated air pump.

Many historic items raised from ships lost on the Great Lakes are to be seen in the exhibit. Their recovery has been made possible through the development of Scuba diving, which permits underwater exploration in shallower waters.

Since 1960, many skin-divers of the Underwater Club of Canada have collaborated with the Marine Museum in gathering this collection.



Bomb Found Under Bridge at Victoria **64**

Possible tragedy was averted in late June when naval divers and demolition experts recovered a fully charged mortar bomb from a bank beneath the Gorge Bridge at Victoria.

The army-type projectile, three inches in diameter and about a foot and a half long, was first reported to Esquimalt police authorities, who in turn notified the Navy.

Lt.-Cdr. Earl Thompson and Lt. John Roland, both members of the Pacific Command's Diving Establishment at Colwood, hurried to the scene and recovered the dangerous explosive. The bomb was taken to Colwood for disposal.

It is believed the mortar bomb was discarded by some resident of the area who realized its potential danger.

Lt.-Cdr. Ward Palmer, officer in charge of the naval diving establishment, said the mortar was powerful enough to demolish an average house.

This explosive, he continued, might well have been found by some youngsters and not realizing the hazard, might have struck it with rocks, or thrown it about. It could have resulted in a grim tragedy. He said all suspected bombs or shells should be reported to police.

Fully qualified experts in the demolition field would then attend to the matter and dispose of the object safely and properly.

MAY 64

LDG. SEA. DAVID LAFAYETTE McALISTER BENTLEY; LSBN 2; joined RCNVR March 29, 1944, transferred RCN Aug. 7, 1945; served in York, Protector, Cornwallis, Puncher, Niobe, Warrior, Stadacona, Nootka, Iroquois, Div. Tender #3, La Hulloise, Haida, Huron, Porte St. Louis, Quebec, Magnificent, Shearwater, Cape Scott, Lanark, Cayuga, Porte St. Jean, Crescent; retired April 4, 1964.

The underwater work of Fleet Diving Units and CORMORANT

The boys from down under

1997
Wings Magazine

Forming part of Maritime Command and situated in both major naval ports (Halifax and Esquimalt), these two organizations are responsible for all underwater activities within the Navy. Fleet Diving Unit (Atlantic) is representative and will serve as a model for description.

Situated on the shores of Halifax Harbor, just up from Eastern Passage on the Dartmouth side, FDU(A) lies within the confines of the lower half of CFB Shearwater. It has a list of roles to fulfill that clearly covers all underwater work contemplated by the Commander, Maritime Command. These are:

Search and Salvage - FDUs are tasked with the search and salvage of all DND property lost through accident or act of human nature anywhere within the tidal borders of Canada. This includes downed aircraft, helicopters, ships, boats or smaller equipment of high value to DND.

Practice - All aspects of diving have to be regularly practised and this is the task of the FDUs on both coasts. To this end, they certify/recertify ships divers as required, undertake training schemes for all divers and certify safe practises within the

MARCOM diving community.

Underwater Ship Repair - To do this, they must be well versed in damage control practises, both shipboard and in below-the-waterline repairs to ships' hulls, clearing fouled propellers, rudders and shafts, and such routine practises as clearing vitally needed water inlets that have become blocked with debris.

Husbandry - The general maintenance and cleaning of ships' fittings, hull, and areas below the waterline in between refit times.

Underwater Construction - Fitting of, welding and construction of specified structures of all sorts.



Under-ice diving training at MacDonald Lake, CFB Shearwater. Novice divers wear uni-suits and SCUBA gear.

HMCS CORMORANT launching the SDL - during CARIBOPS '85 in Sir Francis Drake Channel, British Virgin Islands. (C2 Catchpaugh, Chief Diver - HMCS CORMORANT)

(Left) - An Explosive Ordnance Disposal Technician (E.O.D.) wearing a bomb disposal Suit examines an inert mortar round. Suits such as this, with Kelvar armor, help the disposal expert survive a nearby explosion. (Canadian Forces Photo)



Training FDUs are responsible for the basic training and, later, advanced training of divers, both within the FDU unit and aboard the various ships of the fleet. General safe practises must also be instilled. All classes of diving, from basic SCUBA to deep submergence saturation diving with the Canadian Armed Forces, are taught.

Fleet Diving Unit(A) began with the clearance divers of World War Two. Most were civilian-trained before the war, with further training via the Royal Naval courses in the U.K. They were also extensively trained in bomb disposal. However, it wasn't until 1953 that they were organized under an Ordnance Lieutenant-Commander, who, accompanied by a Warrant Officer, went over to the U.K. for extensive coursing, came back here and started training Canadians for diving purposes. They put together the basic structure that exists today within the FDUs. They were bounced from pillar to post as far as accommodation was concerned, starting at the Naval Armament Depot, then up to Stadacona after the war, and from there to the old French Cable Wharf and the old diving tender, GRANBY.

In the early 1970s they were re-organized into

the Fleet Diving Units and moved to Shearwater. GRANBY disappeared during the changeover and the organization has continued to expand from Y hangar ever since.

Today, Fleet Diving Unit Atlantic has extensive facilities at Shearwater. All command, administration and training are situated within Building E. Down closer to the shore is the SDL-1 Building, built less than three years ago. It is dual-purpose, with the SDL sharing the facility, when requiring repairs or maintenance, with the engineering, hull, electrical, and electronic shops. Y Hangar has two large recompression chambers, one of which is mobile, and two smaller, two-man, air-transportable recompression chambers. It will be divested of the training facilities that remain by the end of the summer of 1985. There are also extensive stores and a modern sick bay in the hangar.

To service the fleet of barges, training barges and fleet diving tenders, there is A Jetty down on the Shearwater waterfront. This has been recently renovated, through a mutual aid agreement with the U.S., who occasionally use a portion for berthing nuclear SSNs and SSNs.

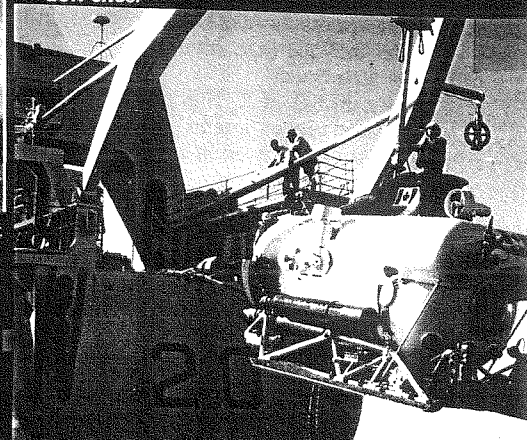
Explosive Ordnance Disposal has its building

Survey - The survey of the underwater condition of ships' hulls, permanent structures such as wharves and retaining walls, and temporary items such as trot buoy soundness.

Location of Objects on the Sea Bed - With the planning of a mine-hunting capability within the Navy, it is necessary to know just what is legitimate on the bottom of a particular area of the sea bed. This makes mine-hunting infinitely easier.

Mine Countermeasures - Since Canada has been without a specialized MCM force from the mid-1960s, the role has been shifted squarely onto the shoulders of the divers of the Fleet Diving Units. With the aid of hand-held sonar and magnetometers, these divers can detect, dive on, classify and then plan the disposal of confirmed mines.

Explosive Ordnance Disposal - FDUs are responsible for recovery and disposal of stray, misplaced or washed-ashore underwater ordnance to the high-tide mark on both of Canada's coasts. In this role, they must not only deal with the normally expected derelict mines, shells and loose cordite, but also stray explosives from construction sites.



adjacent to the jetty, too. There are three diving tenders of about 90 feet each to serve the need of the FDU(A). Two of them are older, made of wood, and are used for mine countermeasures. The other is steel-hulled and is used for salvage and deep diving, having space for the mobile recompression chamber while deployed. There is also a variety of smaller craft such as landing craft and the utility inboard/outboard "duck boats," plus Gemini rubber boats, and Boston-whaler type craft. Additionally, FDU(A) has three large training barges, acquired less than two years ago for diving training and to be used within the confines of the harbor.

To fulfill the roles of FDU(A), approximately 80 people, 53 of whom are divers, are on staff, the rest being engineers, administration clerks, medics, and radio technicians.

Activities of FDU require all types of diving apparatus, ranging from a simple SCUBA aqualung system with a wet rubber suit, flippers and mask to the plastic/fiberglass helmet, surface supplied with air, and with a circulated hot water suit for the deep submergence diver. The days of the copper-helmeted, canvas-suited deep sea

diver of the movies are gone, although the equipment is kept in reserve.

However, the clearance diver rebreather apparatus remains in service for clearance diving. Instead of the expelled breath being vented into the water and forming tell-tale bubbles, it is circulated through a canister filled with a carbon-dioxide absorbant, oxygen added, and the breath recirculated. This means greater endurance under water than SCUBA, especially useful in clandestine operations such as limpet-mining a ship, where tell-tale bubbles are undesirable.

As well as the roles of detection and disposal ordnance, the FDUs participate in public awareness courses on how to identify misplaced or stolen explosives and primer caps. These public courses have resulted in the saving of countless lives and the prevention of mutilation caused by uninformed handling of these substances.

The future

The present trend in underwater activities carried out by Fleet Diving Units is to remove the diver from mundane and sometimes risky manual labor. The use of remote-controlled vehicles to locate and/or dispose of underwater mines, for survey work at the bottom, will become increasingly sophisticated in the near future. Already, free-swimming and bottom-crawling remote vehicles are in service, and future trends will see the diver used only where on-the-spot human judgement is necessary. A requirement for mine detection and countermeasures without a proper mine countermeasures ship with side-scan and minesweeping capabilities will mean these measures will be the only avenue of recourse open to the Canadian Navy in the foreseeable future.

Coming under a joint command with Maritime Command, the diving support ship CORMORANT and its unique Submarine Diver Lockout or SDL-1 are a deep-water extension of Fleet Diving Unit (Atlantic). CORMORANT is a fully independent facility that offers full diver support and a recompression chamber. It can be transported anywhere, world-wide. The unique qualities of SDL-1, especially after her extensive refit, make her equally at home in 200 feet of water in the Halifax approaches or 2,000 feet of water in the West Indies. Capabilities stemming from this refit now see SDK-1 capable of "hands-off" hovering against underwater currents at any desired depth with much greater visibility and manipulators remotely controlled within the cabin.

Roles for SDL-1 include underwater survey of the deeper portions of the Atlantic ports, starting with Halifax. This will allow for the accurate and immediate identification of all submerged objects, making it hard to place undetected mines in time of war.

The need for a second craft of this nature is readily apparent, especially considering the age of the SDL-1, and the fact that no similar craft or tender exists on the west coast. Additionally, when routine overhauls are being conducted, there is no craft to temporarily replace SDL-1.

As Canada enters a new age of underwater exploration and exploitation, knowledge that will protect these investments will be necessary. Military protection can only be afforded if this knowledge is obtained, updated, modified, and analyzed in a useful manner. FDU, CORMORANT, and SDL-1 are providing the foot in the door for Canada's Navy.



JAN 66
Little Harry Wilkinson saw through the disguise when a monster rose from the deep during Navy Day celebrations in Halifax last spring. It was just AB Paul Passero, a friend of Harry's dad, Ldg. Sea. Harry Wilkinson, of MCS Granby, diving depot ship. (HS-75626)

ROYAL VERSION NOV OF WAKEY, WAKEY '64

A new version of "Wakey, wakey" for use on a special occasion was reported in the Oct. 10 Montreal Star as follows:

Hands on board the destroyer Nipigon, one of the sleek Canadian destroyers in the Royal escort, hit the deck yesterday with a substitute for the traditional "Wakey, wakey, rise and shine" pipe of the bos'n's call.

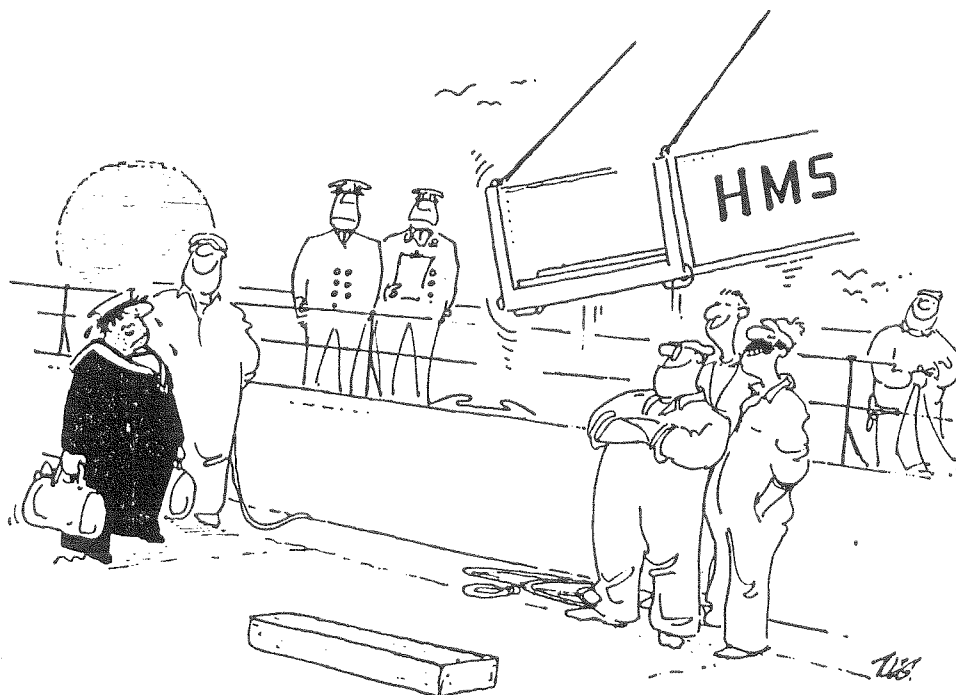
After the shrilling squeal of the pipe through the ship the bos'n's mate recited:

Wakey, wakey, up and at,
We're following the Royal yacht
Down St. Lawrence mighty fine,
Five good ships all in a line.
The day is clear, the water calm,
So stir yourselves without a qualm.
The dress for all is number threes,
So rise and cover up your knees.
A really great and Royal scene—
We'll man the ship and cheer the Queen.

And that's exactly what each ship's company was to do later in the day as the destroyers passed in review.

The crews, lining the decks, gave three cheers for the sovereign.

The wakey-wakey jingle was written by young Sub-Lt. Peter King, of Montreal.



Adrift

HMCS CORMORANT Commemorative Paying-Off Book

As part of the celebration of the formidable work completed by HMCS Cormorant during its tenure in Her Majesty's Service, it is intended to gather together a collection of photos, short narratives/stories and news clippings electronic media which highlight the significant achievements of the ship and her crew from Commissioning to Paying-Off.

The assistance of all former ships crew, naval divers, scientific/technical staff, and every interested party will be greatly appreciated. Any items which you may wish to consider for inclusion should be submitted to the following address;

Lt(N) R. Dreimanis
Diving Officer
HMCS CORMORANT
PO Box 99000 Stn Forces
Halifax NS B3K 5X5

Items should be submitted by 20 Jan 97 and must be sent with a stamped self-addressed return envelope, permission to reproduce and a contact phone number. It is intended that hard copy material will be scanned onto computer disc and immediately returned. A copy of all items duplicated will be submitted to the Maritime Command Museum to form an integral part of the ship's historical record.

In conjunction with this project it is intended to use the submitted material to produce a commemorative book summarizing Cormorant's life. All personnel wishing a copy of the final publication (which is expected to be ready for Paying-Off on 2 July 97) are to indicate the number of copies required. Payment will be requested prior to going to final printing (31 Mar 97). With a printing run of 300, the estimated cost will be \$30.

Electronic media items such as video or audio tapes (or their transcripts) would also be appreciated and useful in preparing the history.

For further information please contact Lt(N) Dreimanis at (902) 427-0550 ex 2862/2860 or Fax 427-2801 (at sea 902 427-2950) or LCDR Gwalchmai at (902) 427-0550 ex 2122 or fax 427-3320.

EDITOR'S NOTE:

This request arrived too late (Feb 97) to meet the 20 Jan 97 date, however any member wishing to contribute material can still do so by contacting LT. Dreimanis or LCDR Gwalchmai to make arrangements. We urge all to purchase a copy of this book as it will refresh your memory in future years.

It's Reunion Time Again!

1997 REUNION INFORMATION

ACCOMMODATIONS: All Reunion events will be held in the Ottawa Citadel Inn Hotel, 101 Lyon Street, Ottawa, Ontario, Canada K1R 5T9. Those attending should book their own accommodations by telephoning 1-800-567-3600 or (613)237-3600 also by Faxing 613-237-9114. Room rates are \$79.00 CDN plus taxes with 35 rooms being held for our people until 1 July 1977 only, after which they will not be held for us only. Please make sure you reserve before this date and state that you will be with the Canadian Naval Divers Assn Reunion. This hotel is within a short walk from Parliament Hill.

REUNION REGISTRATION: All inclusive registration for the Reunion is \$50.00 and please forward it payable to CNDA REUNION, Charles Rolfe, RR2, Kinburn, Ontario, Canada KOA 1H0 Phone(613)832-1653. For those wishing to attend only the Friday Meet & Greet but not the Saturday Dinner/Dance, a partial registration fee of \$15.00 will be charged. We urge you to forward your registration fees at an early date in order for us to arrange for the required meals and seating space. Registration packages will be available for pickup in the Hotel when you arrive. Any questions? contact Chuck Rolfe, RR2, Kinburn, Ontario, Canada KOA 1H0 Phone(613)832-1653

DIRECTORS MEETING: The National Directors Meeting will be held in the hotel as advised by phone call. Election of the National Directors for the next three years will occur at this meeting.

SCHEDULE OF EVENTS

Friday, August 1, 1997

1200 - 1800 Registration Confirmation and Meet & Greet(in Hotel)

Saturday, August 2, 1997

0800 - 1400 Registration Confirmation in Hotel

0800 - 1800 Sightseeing on your own

1900 - 2000 Cocktails in Hotel

2000 - 0100 Dinner/Dance in Hotel

Sunday 0800 - Brunch in Hotel - Self paying

1997 CNDA REUNION APPLICATION

Please Print

Name _____ Spouse/Friend 1st Name _____ Phone #(Home) _____

Address _____ Phone #(Work) _____

Number of persons attending _____ Total registration fees enclosed \$ _____

Number for Beef Dinner _____ Number for Chicken Dinner _____

Make all cheques payable & forward to: 1997 CNDA REUNION Registration fees are \$50.00(a person)
Charles Rolfe, RR2, Kinburn, Ont. Part Registration \$15.00
Canada KOA 1H0