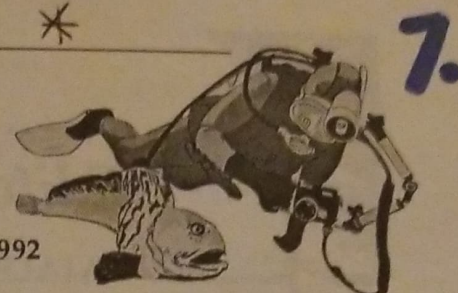


BOTTOMtime



The bi-monthly newsletter of the Nova Scotia Underwater Council - January, 1992

Diving Nova Scotia: new Halifax Harbour wrecks

All was quiet, except for the steady hum of the engines moving us slowly towards the Point Pleasant shoal buoy. Our eyes fixed to the needle scratching the harbour floor depth beneath the *Mako II* onto the paper screen, 90ft. ... 92ft. ... 94ft. Then, suddenly, the needle jumped 84ft. - 82ft. You could see it was not natural bottom topography: this was man-made.

We had finally found her. After two days of searching the area, the dive team was gearing up to videotape and explore the second of two shipwrecks recently discovered in Halifax Harbour.

The search for the vessels started on June 15, 1991 at Divers World in Halifax. By the end of the month, we had located and videotaped the remains of the first shipwreck, a 35 foot schooner. She is badly broken up, lying almost flat on the bottom, the sides have fallen away and the decks have collapsed. Large winching equipment could be seen amidship with ropes and cables lying all over; dishes, cups, and empty kegs lay scattered among the debris. A

broken, open box of munition sits on the bow of the ship with the markings "57 Snider" stamped on the shell.

Nothing we uncovered could positively identify the wreck, so we turned our attention to finding the other vessel which had eluded us to this point. That day had finally arrived. I held my mask, regulator and gauges in place and plunged backwards into the deep, green harbour water.

We followed the anchor line down through the murky harbour water. As we neared the 80 ft. mark, the vessel emerged from the dark: the starboard side looks relatively intact.

continues on page six

Looking ahead: President's report

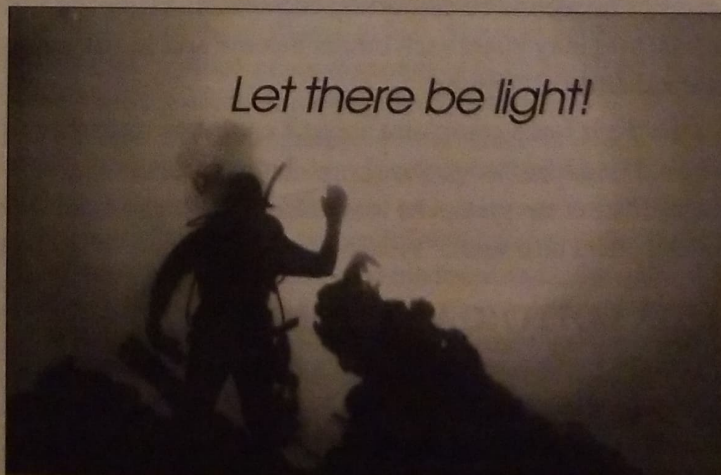
The new year is upon us - and on behalf of the Council I extend best wishes for a successful 1992. Most of us set aside diving activities during the long winter months in pursuit of skiing, reading, or gaining weight — unless of course you are an ice diver like Lorne Piercey.

However, the Board and other volunteers continue to surge ahead with NSUC and your business. I am happy to say that our numbers have increased to 290 — which is the highest since 1988. This is partly due to a commitment by some Metro dive shops (notably Divers World) to subsidize new NSUC

memberships as part of the basic training course. New divers are reminded that if you have qualified within the past 12 months, you are eligible for the student rate of only \$10.00 per year. While on memberships, a notice appeared in the last issue requesting

feedback on how you would prefer

continues on page four



Interesting light effect captured by Michael Covert. See also page six



Editorial

FATALITIES AND AGENCIES

I have been in Canada just over seven years now, and there have been, to my knowledge, just four amateur diving fatalities. This on the whole is not a bad record. Nevertheless, it is four too many.

Of the fatalities, two were persons that had never taken a course — one a student diver and one a person who had not dived for five years since taking a basic course. None were NSUC members. However the statistics do say something for the basic training a diver receives from the shops and independent instructors around the Province. The training of instructors by ACUC, NAUI, NSDS and PADI must also be of a more than an adequate standard. To rate one system over another and to rate one shop over another would be wrong. But I was asked to do this recently over the telephone. I declined on both counts. Having been involved with training in the PADI, ACUC and NAUI system, I can say that their training standards are safe with some offering a little more than others in various areas, but above all they are safe — providing a diver sticks to the rules that are taught. This is not to say there will not be the odd incident: regardless, the same applies to any other sport. I myself was trained on the British system BSAC and have since gained qualifications with PADI, NAUI and ACUC. I am not an instructor, but have been involved enough on the instruction side to know that all the systems teach you to dive safely. To say that a particular system does not would be totally wrong. Your course is also only as good as the instructor and there is going to be the odd bad instructor — like it or not.

All instructors should have a respect for the counterparts and not be seen to be degrading each other: it is not professional and may affect each others income and so has a detrimental affect all around.

If a diver has a complaint about a course or instructor, it should be addressed to the shops chief instructor or to the head office of the system he was trained in. We also hold letters of complaint on a similar system to the Better Business Bureau.

OUR EDITORIAL COUNCIL

We have made major progress over the past 16 months, developing an entirely new look for our newsletter. We have also improved the content. After three editors, we have also

BOTTOMTIME

Bottomtime is published six times annually by the Nova Scotia Underwater Council. It is distributed free of charge to members. Non-members may purchase an annual subscription for \$17.50. Whenever possible, subscriptions will commence with the current issue.

Bottomtime is published as a forum with the aim to generate opinions, communication with and feedback from our members. Submissions to *Bottomtime* are published at the discretion of the editor. Articles are the opinion of the contributory authors and do not necessarily represent the views of the NSUC. Articles may be reproduced with the written permission of the NSUC. We encourage response to any of the articles.

Advertising rates are available upon request. If advertisers require design services to prepare camera-ready copy, this must be arranged prior to the deadline.

The next edition will be published on March 18, 1992 with the deadline for submissions to the editor being Feb. 14.

Send all submissions to:

The Editor, Nova Scotia Underwater Council
26 Sapphire Crescent, Lower Sackville, N.S. B4C 2T9
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Bottomtime

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The Nova Scotia Underwater Council

President	Roland G. Lewis
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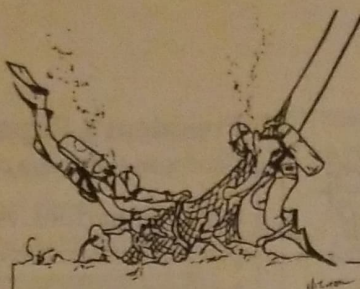
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stabilized the editorial side and now have more material than space for each edition. *Bottomtime* is a service to the divers of Nova Scotia. We hope our readers and advertisers will appreciate what we have done to improve the entire newsletter.

Our newsletter is a collective work. Now we are beginning an informal advisory group to increase participation, and enhance and expand its role. Anyone interested in the underwater world is welcome to participate. We aim to get together once every two months following publication of each edition. All we ask of you is to contribute your opinion and ideas! If you are interested, please call myself at 864-1157.

Colin Frazee-Whitlock

News in Brief & Comment



Ice tragedy

One of the great, unsung services performed by divers is rescue work. Such dedicated diving, however, oftentimes cannot avert tragedy.

Such was the case last Dec. 16 when a nine-year-old boy was pulled from the frigid waters of a Timberlea lake only to die in hospital hours later.

The boy was pulled alive out of the lake after spending more than an hour and a half under the ice.

"The water was about six feet deep but it was pitch black and visibility was zero," said diver Terry Dwyer, who found the boy after a search of about 45 minutes underwater. The shallow water was murky, with a soft, silty bottom. With no visibility, he had to feel around underwater for the boy. "I found him, but I only wish it could have been sooner."

The Grade 4 student was

walking on inch-thick ice of Half-Mile Lake with four friends at 3:30 pm after school when he plunged into the water about 50 feet from shore. No thin-ice signs are posted at the lake.

Mr. Dwyer was called to the scene from nearby Connors Diving Service/Divers World after firefighters were contacted by the school. Neil Connors said that children have survived after spending up to three hours in cold water. "The younger the child, the (better their) chances of him being revived," Mr. Connors explained. "The brain shuts the system down and stops the lungs from filling up with water."

We send our condolences to the boy's family and express our appreciation for the unselfish work of Terry Dwyer, Neil Connors and Jeff Thompson and, indeed, of all those involved in rescue work.

Editor's Comment

The *Canadian Diver* in its January, 1992 issue carries a headline, stating "new name for east coast u/w council", with a press release from a local committee.

The NSUC is the voluntary association of the divers of the province of Nova Scotia. It has not, nor does not plan to, change its name, aims or geographical area.

Halifax Port Corporation permission notice for members of the NSUC to dive in the waters of the Halifax Harbour will be published in our next issue.

Letters to the editor

Dear Dive Club Members,

We at *Diver Magazine* are pleased to offer you one-year subscriptions at the special low price of \$12 plus G.S.T. (\$12.80 each) when subscribing through your Provincial Council.

Please take advantage of this unique opportunity to keep up to date with the Canadian diving scene through our special offer.

Also, we appreciate receiving any newsletters or news releases on upcoming Club events. News items are used regularly in both *Canadian Diver Express* and *Diver Magazine*.

If you would like to encourage visitors to join in club activities you may wish to be included in our Scuba Directory. For \$22 plus G.S.T. your Club can obtain publicity in both *Canadian Diver Express* and *Diver Magazine* for a twelve month period.

Please feel free to call me for more information.

Sheila Dumont, *Seagraphic Publications Ltd.*

295-10991 Shellbridge Way, Richmond, B.C. V6X 3C6

Roland Lewis, President

Dear Mr. Lewis:

Is the bimonthly newsletter open to articles? What is your circulation?

I am interested in putting forward a prediction as to where one will find "The Great Dyke of Nova Scotia" quite close to, and just off of, your annual Crystal Crescent dive area. Having put forward the prediction, I would then like to throw out the challenge to N.S. divers to verify this by collecting a proof- positive sample of black basalt from an insitu ledge of outcrop along the dike's axis.

Is your newsletter an appropriate vehicle in which to try this on N.S. divers? Do you think they will respond? I gave a talk to Jane Biggs et al about two years ago but nothing came of it. The dyke is known from Pubnico to Lunenburg as a 2-600 ft wide black diabase intrusion and is last seen on West Ironbound Island in Mahone Bay — nailing it down off Sambro would be quite a nice feat and those involved would rate co-authorship on a scientific note.

Alan Ruffman

President, *Geomarine Associates Ltd.*, Halifax

THE NOVA SCOTIA UNDERWATER COUNCIL

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Ted Iannuzzi • 461-0049

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NSUC Member Clubs

Aqualantic Scuba Club

P.O. Box 2944, Dartmouth E.

Dartmouth, N.S. B2W 4Y2

Tel.: 434-2768

Membership is open to individuals, families, clubs or commercial enterprises. Dues are set annually - usually at the AGM. Members' fees for 1991-92 are \$20 for individuals, \$30 for families, \$10.00 for students and \$50.00 for commercial enterprises. Membership is also open to clubs at \$25. Individuals may join by sending an application or letter with the fee to the Membership Secretary.

NOVA SCOTIA

UNDERWATER COUNCIL

P.O. Box 3010 South, Halifax

Nova Scotia B3J 3G6



President's Report

Continues from page one

to pay your dues. A suggestion was put forward to have dues run for twelve months from the date of payment. We are still waiting for some direction, folks.

In response to a member's curiosity, it has been decided that minutes of meetings should be more available to all members. Therefore, upon request to your Area Director, any member may receive: an unabridged copy of the AGM minutes (a summary of these will appear asap in the *Bottomtime* following the AGM); Board minutes; the Constitution or By-laws. In addition, if a member wishes to attend a Board meeting to present business, this may be arranged through the Area Director. All members are encouraged to become more involved with the Council. To that end: the Valley Director position is still vacant. I must apologize to Gary Mattinson who was inadvertently left out of my last report: he still presides as Fundy Director.

Representatives of the Subsea Horizons committee attended a Board of Directors meeting on November 9, 1991 during which an agreement was signed whereby that committee relinquished all rights to the name Subsea Horizons. The need to continue with an event such as Subsea was recognized. The Board agreed to cooperate with the Subsea volunteers and to host a similar event this year.

A plan is underway to lobby government regarding divers' access to shore sites. If you are being told there is 'no diving' where you consider it to be public access - write to me with the par-

ticulars. Until we see the sun again, enjoy your travel books on warm water diving - or perhaps call Lorne or Trevor Kenchington. Safe diving.

Roland G. Lewis

From the Boardroom

As promised, here are the highlights of recent meetings:

AGM, October 5, 1991

- (1) *Bottomtime*, dues, elections, and the drawing were all reported in the last issue;
- (2) reports read at the June, 1991 non-meeting were accepted;
- (3) the treasurer reviewed the financial position; the budget has been approved by government and a cheque received;
- (4) Marcel Maessen, NSUC Administrator for the Center for Outdoor Recreational Services (CORS), explained the background of the organization and the services it provides to the Council; as the contract between CORS and NSUC is ambiguous, the Board will endeavour to rectify this;
- (5) the Board was directed to clarify the relationship between the Subsea Horizons committee and the NSUC;
- (6) the next AGM will be held in May; time and place to be decided; and
- (7) projects for this year were suggested: promotion of underwater parks, safety programs.

A Board of Directors meeting was held on November 9, 1991. The minutes are not at hand and therefore will be highlighted in the next issue. Stay tuned.

Underwater Christmas tree trimming

On the night of December 16, 1991, Santa Claus came to Sandy Cove to help the Nova Scotia Underwater Council decorate its Christmas tree.

It was quite cold, but our spirits were high and with Santa's help it came together with seasonal charm.

Next year the Council is planning a tree trimming contest, whereas each dive shop or club will be invited to donate a tree and assist in the trimming. We will be inviting public school children to make environmentally friendly decorations; one school for each dive shop.

The event will be a fun way to promote diving to both young and old. Special thanks is given by the NSUC to Santa and all the dive shops that took

part this year. The event was seen that night on ATV/ASN and we hope it will become an annual event.

Ted Iannuzzi, Publicity Director

DIVERS BOUTIQUE

NSUC Clothing

White golf shirt medium	
Gold lettering	\$10.00
White medium golf shirt	
Navy blue lettering	\$10.00
Blue small sweatshirt	\$10.00
Navy blue large V-Neck sweater	
Gold lettering	\$15.00
NSUC tacky t-shirts	\$5.00
(Various colours)	
NSUC decals	.75
NSUC Hyperbalic	.50

Notices to members

CRITERIA FOR THE ROGER AGGETT AWARD

"An active volunteer Council member who has made a significant contribution to the safety, enjoyment, image or growth of sport diving in Nova Scotia."

Election

To be elected by mail ballot by the Board of Directors. Ballots to be returned no later than two weeks prior to the AGM.

Nominations

Can be nominated only by members of the NSUC. Nomination call to be submitted to *Bottomtime* by the Secretary 90 days prior to the AGM. Nominations to be in 45 days prior to the AGM (to be held May 8-9, 1992).

§ Copies of the NSUC Constitution are available on request from the Secretary, Rob Snelling.

§ A subscription to *Divers Free Press* will be paid for by the NSUC as part of your annual membership.

§ Help! We have conflicting dates as to the founding of the NSUC. If anyone has any information, would they please contact the editor ASAP.

NSUC Member Instructors

Austin Baird

Home 492-2653

Noel Battcock

Home 422-5274

Michael Bayer

Home 464-1139

Wayne Bell

Home 465-3880

Michael Chambers

Home 454-4296

Ches Chaulk

Home 765-8527

Darin Connors

Home 443-1150

Carol Anne Draper

Home 757-2149

Gary Edwards

Home 883-9392

Tim Gay

Home 864-0558

R.R. Girourd

Home 434-3651

David Gough

Home 864-3046

Ted Iannuzzi

Home 461-0049

Ken Jardine

T. J. Kenchington

Home 889-3555

Roland Lewis

Home 562-2457

Gordon McVicar

Home 539-8340

Brian J. Macdonald

Home 564-1823

Rob Mack

453-0762

Lorne Piercey

Home 865-7680

Don Rodgeron

Home 835-8833

James Semple

Home 443-1150

Bob Smith

Home 462-0738

Dale K. Smith

Home 275-4471

Michael Turney

Home 506-382-9776

Let there be light!

Ninth in a series on u/w photography by Bob Semple

Colour is quickly filtered out underwater with the red part of the spectrum disappearing first. Photographs taken even as shallow as 10 feet will have a bluish tinge to them. At depths over 60', photos taken in natural light will be monochrome (one colour) — blue and white. The only solution to this problem is to **add artificial light** by the use of electronic flashes or strobes.

There is a great variety of underwater strobe equipment on the market. What would be the best one for your camera system?

To simplify the question, strobes can be considered as **small strobes** and **big strobes**. Let us look at the properties of each and see which type would best meet our needs.

Small strobes

These are small, less expensive than the larger strobes, not as powerful and have a narrow beam angle of 65° or less. This is enough beam angle to cover the field of view for the 35 mm lens and barely enough for the 28 mm. **They are superior to the large strobes when used for close-up or macro photography** — being smaller, lighter and easy to position and carry around. They must be held a little closer to the subject to get the same f-stop (for exposure) but the narrow beam angle will not produce as much light scatter as a larger strobe. The small strobe can be used in tight quarters where a large strobe wouldn't fit. Because of their lightness, two small strobes can be used together without much difficulty. One can be a slave (a sensor recognizes a sudden change in ambient light and flashes the strobe) unit and the other can be the sync (the regular strobe which triggers the slave when it flashes). This kind of photography can help reduce harsh shadows and be used in special lighting effects.

Big strobes

These are much more expensive, produce quite a powerful flash and have a much wider beam of light. The beam angle can vary from 85° to 120°. They are superior to the small strobes when used for wide angle photography. The Nikonos 15 mm lens has a beam angle of 94° and needs the wider beam angle to get adequate coverage of the subject. A small strobe would highlight only a portion of the photo and the rest of the area would be in

darkness. Another feature which a big strobe should have is variable power.

This enables the user to change the amount of light output to help balance the strobe light with an amount of ambient or natural light.

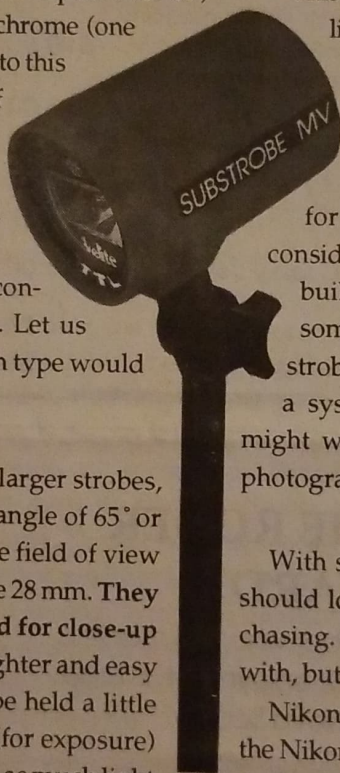
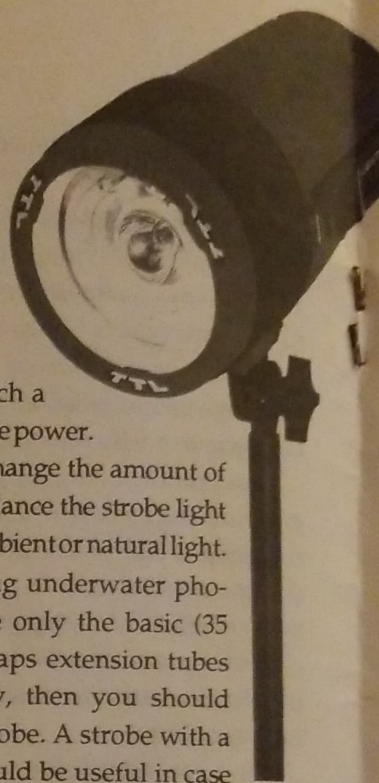
If you are beginning underwater photography and have only the basic (35 mm) lens and perhaps extension tubes for macro photography, then you should consider buying a small strobe. A strobe with a built-in slave sensor would be useful in case sometime in the future you might like to add a second strobe (small or big) to your system. If you already have a system with wide angle capabilities, then you just might want to purchase one big strobe to cover all your photographic needs.

Some excellent underwater strobes

With so many kinds of strobes of the market today, one should look them over and do a little research before purchasing. I will mention a couple of strobes which I am familiar with, but don't let that hinder you from considering others.

Nikonos sells an underwater strobe which is compatible to the Nikonos V and its TTL (Automatic through-the-lens flash control) system. The **Nikonos Speedlight SB-102** has a beam angle coverage of 79° and with the use of a diffuser 94°. Note: the diffuser will also lower the amount of light output (approximately one f-stop). The number of flashes is approximately 70 with NiCd batteries (rechargeable) and 120 with Alkaline batteries. It has 3 power settings (Full, 1/4, 1/16). This strobe can be used for both wide angle and macro photography.

Ikelite specializes in underwater housings, divelights and strobes. The **Substrobe 150D** is an excellent strobe for wide angle photography as it has a beam angle of 110° without the need of a diffuser. It can be used with all of the Nikonos models I-V in manual, automatic and TTL (with the Nikonos V). It has 3 power settings (Full, 1/2, 1/4). The number of flashes is approximately 150 with NiCd batteries. It also has a slave mode. It has an aiming light which enables the photographer to see the subject is within the frame before the photo is taken. This strobe can also be used in macro photography



Exploring Halifax harbour

"Diving Nova Scotia" — a regular feature in *Bottomtime*

continues from page one

on her hull are weathered but remain in place. What appears to be white paint is still stuck to several sections of this side of the ship.

The wreck is laying on her port side, where the evidence of a severe collision can be seen. The remains of several busted and split timbers litter the port side. The mast also lies perpendicular with the port side. Some pieces of wood which could be part of the ship's pinnacle are still nailed to the mast. At the tip, the shackle for the main sail is also in place, the rope still fed through.

Penetrating the wreck

At the bow of the ship, diver Darin Connors is frantically signaling for me to come with the video camera. As I make my way to the bow, I can see through the viewfinder what all the excitement is about: he has found the ship's anchor lying over several broken deck

Strobes and light

continues from page six

but is better suited for wide angle.

Ikelite also makes a variety of small strobes. The best buy would be the **Substrobe MS** which has both manual and slave option. It has no power settings and gets approximately 250 flashes per set of batteries. Great little strobe for macro photography.

Ikelite strobes have interchangeable cord connectors which can be adapted to the various Nikonos models. That is a handy feature when you own a couple of different models.

There are other factors to be considered in using a strobe; Rechargeable vs Alkaline batteries, TTL vs automatic, Syncords vs E-O (electro-oceanic) connectors. These factors will be looked at in a future issue.

planks. It is badly corroded, but the chain is still attached and runs into a collapsed section of the fore deck. Sticking out of the silt covering the harbour bottom is a large, well-preserved snatch block. Just inches away, the gunwell of the port bow can be seen and, on it, a brass cleat sits as it has since the day this vessel sank.

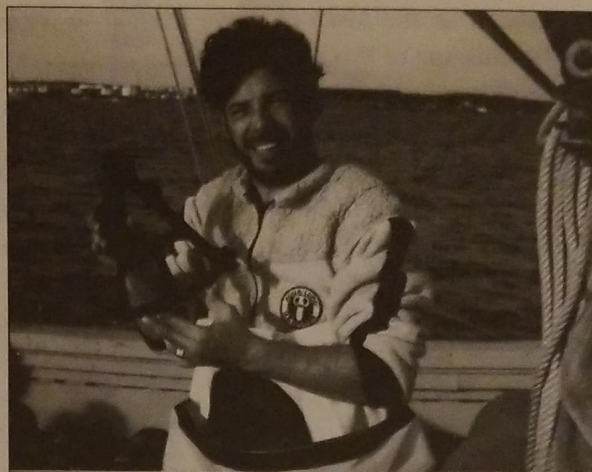
As safety diver Bob Smith and I travel amidships, we can see that the beams which once held the upper deck planks in place are still attached to the starboard side. With the lower deck collapsed, we can penetrate through to the stern. Inside, a pair of black shoes, several glass bottles, a large brass deck plate and two porcelain-covered metal cooking pots can be found.

Two other discoveries were made as we emerged from inside the wreck: a badly corroded fire extinguisher and a black electrical cable that led to an exterior light fixture made of metal and glass that still had a lightbulb intact inside.

Just then, diver Derek King made a wonderful find. On top of the stern — heavily covered with sea anemones — he followed two brass tubes that led him straight to the helm. It was completely covered with growth, but the ship's steel wheel was there, and its spokes and handles as well, although the wood that once adorned them is gone. It is truly a beautiful thing to see.

The diver in charge of dive time, James Semple, signalled to us that our bottom time was up, so we all took one last look at this spectacular site, located the anchor line, and headed up.

Once aboard the *Mako II*, we were



Ted Iannuzzi with sextant

met with anticipation by a CBC television crew who were following the expedition, and also by geologists Gordon Fader and his assistant Bob Miller from the Bedford Institute of Oceanography. They had discovered the wrecks in 1989 during a geological survey of the harbour bottom, using side scan sonar. The images that they had seen two years ago would now come to life on the video screen.

After careful analysis of the tapes and discussions with the dive team, it was agreed that further exploration would be required before positive identification of either wreck could be made.

A rare find

On August 30, 1991 we once again dove the site accompanied by Canadian navy diver Noel Battcock and a diving instructor from Ontario, Mike Ross. It was our plan to photograph and videotape the ship's wheel: after successfully completing the task, I scanned the area of the helm. My eyes fell upon an object there lying out in the open you only dream about finding — a sextant. Lightly covered with harbour silt, its brass and wood was badly corroded and decayed. The degree markings were gone as was the eye piece: however, the lenses and measuring arm were still attached. We noted the location and care-

continues on page eight
Bottomtime / 7

Exploring the harbour

continued from page seven

fully brought it to the surface, where we quickly placed it inside a container filled with salt water. You can't imagine the excitement on the *Mako II* as we headed to shore to inform the museum of this amazing discovery.

Research compiled by the Maritime Museum of the Atlantic uncovered something fantastic. According to the memoirs of Captain James A. Farquhar, a Nova Scotia Master Mariner, salvor, sealer and shipowner, a vessel he owned named *The Havana* was struck in the harbour by the *Strathcona*, a steel passenger ship, and sank on April 26, 1906. *The Havana* had just recently refloated the sunken schooner *Alexander R* and salvaged her cargo of coal. Captain Farquhar and a small crew were on board that fateful night but fortunately made it to the safety of the iron-hulled *Strathcona* before she slipped below the surface just off Point Pleasant Park. In his memoirs, the Captain relented that his only regret in the sinking of *The Havana* was the loss of his prized sextant that was proudly presented to him by the British Admiralty for salvaging the guns from the *H.M.S.*

Niobe in 1874. He faithfully relied on the sextant to navigate the globe for some 30 years of seafaring.

Is it just a bizarre coincidence or have we discovered the sunken *Havana* and Captain Farquhar's prized sextant? And what of the other shipwreck? Why are there no records indicating another sinking? As the museum delicately preserves the sextant, the research and exploration continues; so many questions, so little bottom time.

The videotape footage and the photographs shot on the expedition are available for viewing at the Maritime Museum of the Atlantic in Halifax, N.S. and will also appear in a tape being compiled by Unit Sea Productions, Dartmouth, that will feature several of the extraordinary dive sites in Atlantic Canada. The sextant is also at the Museum and is being preserved for potential exhibition and further study.

Special thanks must be given to Candace Stevenson, Director of the N.S. Museum Complex; Bob Ogilvey, Curator for Special Places, N.S., for granting the required permits for viewing these protected sites; to Connors Diving Services for the use of the *Mako II*; and, lastly, Divers World for equipment and technical support without which this expedition could not have been possible.

by Ted Iannuzzi

Aqualantic's Scuba Club: year-end report

Another dive year is just about over and again for a small club we have been quite busy. For the first time boat dives have out-numbered shore dives by 38 to 31. The higher number of boat dives is due to a boat being available in Ketch Harbour and the good weather throughout the spring and summer. This year we made 420 club member dives and 23 non-member dives — an average of 21 per club member — diving on 17 different wrecks.

Several different wrecks were visited this year for the first time by the club, mainly of Sambro Ledges, and we

The Aqualantics dived on 17 different shipwrecks in 1991, as shown in the following list (name of wreck and number of times dived):

Isleworth 7	Arrow 6
Sonja Maersk 4	Nueva Andalucia 1
Perry 1	City of Vienna 4
Humbolt Ribs 1	Deliverance 3
City of Brunswick 1	Martin Van Buren 5
Tribune 2	Bohemian 3
Daniel Stienman 3	Montera 1
Letitia 1	Premiere 2
Sheehand's Cove Wreck 1	

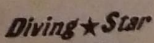
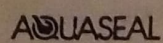
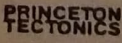
have several good leads on other wrecks in the area to visit next year. The mussel clean up dives in Dartmouth Yacht Club were not included in the total amount of dives accounted for above: another 41 dives between eight members were accumulated here. This will be my last year as Dive Officer as I have held this position now for seven years. I wish to thank all present and former members and look to forward to lots of great diving in the future. Thank you, all!

Bob Dorion, Dive Officer, Aqualantics Scuba Club



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Who are the Aqualantic's?

Are you new to this area? Or are you having trouble finding someone to dive with? How would like to become part of the most active group of scuba divers in the province! Let me tell you about the Aqualantic Dive Club and what we can offer you? You can depend on an Aqualantic club dive being held virtually any weekend during the year. The Aqualantics are based in the Metro Halifax area. Regular club dives are Sunday morning with frequent Saturday dives and occasional evening dives during the week. A major part of the membership continues diving actively all winter. We are a small club of around thirty members with a core group of about twelve members who dive together very frequently. For this group, 50-70 or more dives each per year is usual. Our club did almost 20 boat charters in 1991. During the summer of 1991 we dove extensively out of Ketch Harbour on the Sisters and Sambro Island shoals. We dove on many shipwrecks that have not been extensively explored recently - the *Daniel Steinman*, the *Bohemian*, the *City of*

Vienna, the *City of Brunswick* (or *Romsdalsfiord*), the *Premier*, the *Sonja Maersk*, the *Martin Van Buren*. We are waiting for some good weather to get out to the Russian but haven't made it yet. We learn of wreck locations from our contacts in the local diving community and from performing research and searches ourselves.

Getting the real diving experience

We encourage people of all experience levels to join our club. I joined the Aqualantics four years ago as an inexperienced beginner and now have over 200 dives under my belt. We conduct no particular training program, we just dive a lot. There is no better experience builder than diving with experi-



Members of Aqualantic Dive Club with sidescan sonar, recovered two miles off Martinique Beach, July 1, 1990. Pictured from right to left: Front Row: Peter Murray, Bob Doiron, Thierry Papion, John Hagell, Jane Biggs, Ken LeDez. Back Row: Greg Doughty, Nick van Stight, Roland Lewis, Brian Nadwidny, Lynn Gallant. Standing in rear: Barry Slaunwhite, boat skipper.

enced, adventurous, active divers. The Aqualantics will also take you out to the *AW Perry*, the *Deliverance*, the *Clare Lilly*, the *Bear Cove* ribs, the *Solerno*, the *SS Atlantic*, *HMS La Tribune*, the *Isleworth*, the *Letitia*, the *Governor of Cornwallis* and some other dive sites you probably haven't been to. Most club members have some advanced certification — advanced open water, rescue diver, divemaster, instructor — but what we have most of is real diving experience.

Diving with the Aqualantics is not for everyone. We are fairly adventurous: if you cannot see yourself diving below 60' then we are probably not the club for you! Our club leans heavily towards wreck diving and continues on page ten

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All about the Aqualantics...

some of our favourite wrecks are deep. When you start out diving with our club we don't bring you on deep or other advanced level dives until you are comfortable doing these. But we do expect that you will fairly rapidly progress in ability by diving regularly with the club.

You may find that our dives are conducted in a different manner than you are used to. No formal divemaster is assigned for each dive. Buddy teams are expected to keep track of their own bottom times, allowed no decompression limits and surface intervals. Each diver gets as much help as he or she wants getting ready and getting out of the water but each diver is ultimately responsible for the proper set-up and use of their gear and for diving within the limits of their ability. The Aqualantics probably demand more responsibility from each diver to look after him or herself (as much as possible) than some divers are used to. Don't misunderstand me. We won't leave you out in the middle of the ocean by yourself but, on the other hand, you won't have someone fussing over you checking your gear and closely monitoring your surface interval.

Other benefits and activities — an independent club

Our club also does occasional night dives, bottle dives, scallop dives, ice dives and search and recovery dives. We plan a major dive trip each year. Two years ago six members, including myself, had an extremely successful ten day dive trip to Newfoundland. A trip to the Florida Keys is now in the early planning stages for the fall of 1992. Join our club now and you will be more than welcome to join us on this trip. We also make at least one weekend trip to Arichat in Cape Breton each summer to dive the wreck of the oil tanker *Arrow*; arguably the most interesting dive site in Nova Scotia!

We are not affiliated with any commercial dive retailer. The club presently buys blocks of air fills at Northern Shore, Halifax and Aqua Dive, Dartmouth. Each member is entitled to two free air fills per week at either of these dive shops as long as our money holds out. We do a modest amount of fundraising during the year and that, plus dues collected, go mainly towards this buying of air. Using myself as an example, consider — I did around 65 dives in 1991 and paid \$60 club dues with its two free air fills per week. Club membership also includes membership in the Nova Scotia Underwater Council.

Sounds like a pretty good deal when you consider that an air fill goes for as much as \$5.00! And I've always got a dive buddy.

So, consider the Aqualantic Dive Club. We welcome any certified diver as a member. You are welcome to come out on a dive with us first or to come to a meeting. We meet normally twice a month, year round, on Wednesday evenings to plan dives and gather socially. Give us a call and come on and dive with us. Call John 455-2582, Therese 443-4283, Thierry (pronounced Terry) 465-3841 or Grant 860-3369 for more information.

By Grant MacLeod



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Coming Events

Coming events is a calendar of events of interest to divers in Nova Scotia and the region. To have your event included, please write to **Bottomtime**.

Scuba Diving: courses and events

Date	Agency	Course	Dive Shop
JAN 3,4,5	PADI	Basic Open Water	Aqua Dive
JAN 5	Call	New Years Dive	Divers World
JAN 6	NAUI	Basic Open Water	Divers World
Dalhousie			
Jan 11	PADI	PADI Wheel	Nautilus
JAN 12-29	PADI	Sun, Wed Basic Open Water	Aquadive
Dalhousie			
JAN 14	NSDS	Basic Open Water	Nautilus
Jan 26	NSDS	Basic Open Water	Nautilus
JAN	PADI	Call Basic Opn Water	Northern Shore
Sackville			
JAN	PADI	Call Equipment Specialty	Dive Masters
FEB 11	PADI	Basic Open Water	Northern Shore
FEB 25	NSDS	Basic Open Water	Nautilus
FEB 27	NSDS	Rescue Diver	Nautilus
FEB	NAUI	Call Ice Diving	Divers World
FEB	PADI	Call Basic Open Water	DiveMasters
FEB	PADI	Call Ice Diving	Dive Masters
MAR 11	PADI	Basic Open Water	Northern Shore
MAR	NAUI	Call Equipment Specialty	Divers World
MAR	PADI	Call Advanced	Northern Shore
MAR	NSDS	Call Basic Open Water	Nautilus
MAR	NSDS	Call Advanced	Nautilus
APR 7	PADI	Basic Open Water	Northern Shore
APR 20	PADI	Basic Open Water	Northern Shore

Aqua Dive 469-6948 Dive Masters 465-2526
 Divers World 876-0555 Nautilus School Of Diving 454-4296
 Northern Shore Diving Centre 429-8265

§ ACQUALANTIC DIVE CLUB

The club sponsors a full program, including regular meetings on the second and fourth Wednesday of every month. For information, call 434-2768.

§ THEY CAME BY SEA

Explorers, adventurers, early settlers, and thousands of immigrants came to Canada by sea. Many touched the shores of Nova Scotia or passed through Halifax. A series of events will be held centred around this theme, to mark the 500th year since the voyage of Columbus, Maritime Museum of the Atlantic. For information, call 424-7490, 1675 Lower Water.

§ UNDERWATER CANADA

The 20th anniversary of Underwater Canada, Canada's national dive show. A week-end of fun, films, information and exhibits, April 3-5. For information, call (416) 495-4245 or Fax (416) 495-4310.

§ ROPEWORK EVENINGS

Are you seriously interested in learning fancy ropework and knot tying? Ropework evenings, for individual projects, will be held the third Tuesday of each month, beginning Jan. 21, Maritime Museum of the Atlantic. Call 424-8793. Rope Splicing Workshops, March 14, 9:30 and 10:30 am.



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Using Scuba Diving Equipment	(video)
Sports Diver Open Water Vol. 1, 2, Pts. 1 & 2 (video)	
Bouyancy/Out Of Air Pt. 1	(slides)
Rescue/Accident Management Pt. 1	(slides)
Rescue/Accident Management Pt. 2	(slides)
Dive Promotional Programme	(slides)
Tapes for the above.	
Underwater Louisburg	(video)
Underwater Hockey	(video)
Hyperbaric Video	(video)
Hyperbaric Video (beta)	(video)

Drysuit Instruction	(video)
Drysuit Instruction	(slides)
Sport Diver Advanced Vol. 1, Pts. 1-3.	(video)
Contains: Diving Equipment • Boat Diving	
Underwater Navigation	
Sport Diving Advanced Vol. 2, Pts. 1-3	(video)
Contains:	
Limited Visibility Diving • Diver Stress & Rescue	
Deep Diving	
Neal Watson's Undersea Adventures	(video)
Louisburg Marine Heritage Pts. 1 & 2	(video)
Contains: Part 1 in English • Part 2 in French	
Australia Discover It	(video)
Dive Nova Scotia Pts. 1-3	(video)
Contains:	
Part 1 Dive Nova Scotia • Part 2 Dive Nova Scotia	
Part 3 Wreck Diving	

All videos are VHS unless otherwise stated

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Contact Rob Snelling, Secretary, at 429-6067

It all started June 11, 1910 with the birth of Jacques Yves Cousteau

A history of U.S. Divers

tacular new products and vast improvements on older ones.

at St. Andre-de-Cubzac (25 miles from Bordeaux, France). Twenty years later, in 1930, he entered the Brest Naval Academy. After seven years of travel around the world, he met and married Simone Melchoir in 1937. Simone's father was an executive of L'Air Liquide, France's principal producers of industrial gases. This was to prove very beneficial to the young Cousteau in the near future.

In 1943, through Simone's father, Cousteau was introduced to Emile Gagnan, an engineer at L'Air Liquide. Using the basics of his car gas valve, the

"Aqualung" demand valve was born. That June, Cousteau made the first real dives with the Aqualung. After the war ended, Cousteau recognized the need for help to manufacture and

U.S. Divers, and appointed Cousteau Chairman of the Board, a position he still holds today. La Spirotechnique owned 95% of U.S. Divers and Cousteau owned 5%. The parent company L'Air Liquide now owned five companies: La Spirotechnique of France; U.S. Divers Company; Techna Sub, Italy; Nihon Aqualung, Japan; and Canada Liquid Air, Canada.

A major breakthrough came in the late 1950's when

the company developed and introduced nylon-backed Neoprene to the dive market. Rapid growth required larger facilities so in 1960 the company moved to a 94,000 sq. ft. facility in Santa Anna, about 30 miles south of Los Angeles.

In 1969, U.S. Divers formed a Commercial Diving Division to provide even more support for this expanding aspect of diving. That year the company purchased the Kirby-Morgan Corporation, Santa Barbara. This increased the commercial line to include the KMB-8 Bandmask, the Kirby Morgan Air and Gas diving helmet, a diver communication system, and a host of other commercial diving equipment.

Throughout the '70's, U.S. Divers made breakthrough after breakthrough. When it came to research and development of diving equipment, U.S. Divers headed the pack. They were, as the expression goes, "ahead of their time".

In 1978, U.S. Divers had grown into a \$35-million-a-year company. In 1979, it was listed in the Fortune 500. Later that year the company expanded its size to 190,000 sq. ft. During a typical week, some 1,500 wetsuits, 2,500 tanks, 3,000 Regulators, 6,000 fins, 12,000 masks, 17,000 snorkles, 1,500 gauges, and 1,500 B.C.'s would be manufactured.

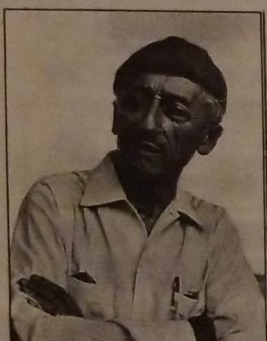
As U.S. Divers entered the '80's, it concentrated its R & D on military and scientific diving. The results were spec-

In 1987, rigorous tests were conducted by the U.S. Navy Experimental Diving Unit (NEDU), and U.S. Divers Regulators were rated among the elite of the world. NEDU subjected 51 Regulators submitted by every major manufacturer in the world to one of the most comprehensive examinations ever. When it was all over, only eight met or exceeded the NEDU standards for Class "A" Regulators. The result: U.S. Divers Conshelf SE2 and ProDiver Regulators won coveted Class "A" ratings for performance, and finished one-two in the critical area of comfort. Two other Regulators made by U.S. Divers rounded out the top four in all categories. U.S. Divers Regulators are now widely used throughout navies.

Today, the U.S. Divers is part of a worldwide group of diving manufacturing companies known as Aqualung International. It has affiliate organizations located in France, Japan, England, Italy, Belgium, Australia, New Zealand, Singapore, and Canada. A global firm, they draw on the experience of divers from around the world to produce a wide selection of the innovative diving equipment available today.

Their commitment to quality and high standards have made them the oldest and largest manufacturer of sport, commercial, and military diving equipment in the world.

by Terry Dwyer, November 1991



sell the Aqualung dive system. The patent rights for the Regulator were sold to L'Air Liquide of France. It became the nucleus of a new division of the company La Spirotechnique in Paris. Production and distribution was begun in Europe and in 1948 a license agreement was made with Canadian Liquid Air, near Montreal, to manufacture the Aqualung Regulator in North America.

In 1949 a Mr. Rene Bussoz, owner of Rene's Sporting Goods in Los Angeles, began importing the Aqualung into the United States for sale. He sold only 12 units that year. In 1953 Cousteau published a bestseller, *The Silent World*, and interest in diving exploded. That year Bussoz reorganized his sporting goods company around scuba equipment and renamed it U.S. Divers Company. The same year, he sold over 1000 Aqua-lungs, and the U.S. Navy officially sanctioned the Aqualung as standard dive equipment.

In 1957, La Spirotechnique purchased



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