

BOTTOMTIME

The Newsletter of The Nova Scotia Underwater Council

ISBN 1100-2050

June 04, 1995

**FREE SCUBA REFRESHER COURSES
YES FREE !!! - SEE PAGE XX**

President's Report

The South Shore Marine Park Society is celebrating the anniversary of sinking HMCS Saguenay on the week-end of June 23-25. There will be guest speakers, events, dives and of course the Annual General Meeting of the NSUC. All members should try to attend as this most important meeting includes the election of officers. All members have a vote at the AGM.

Editor's Report

This summer promises to be a very busy one for Nova Scotia divers. There are numerous events planned, in Cape Breton, Halifax, Lunenburg and Yarmouth - some-

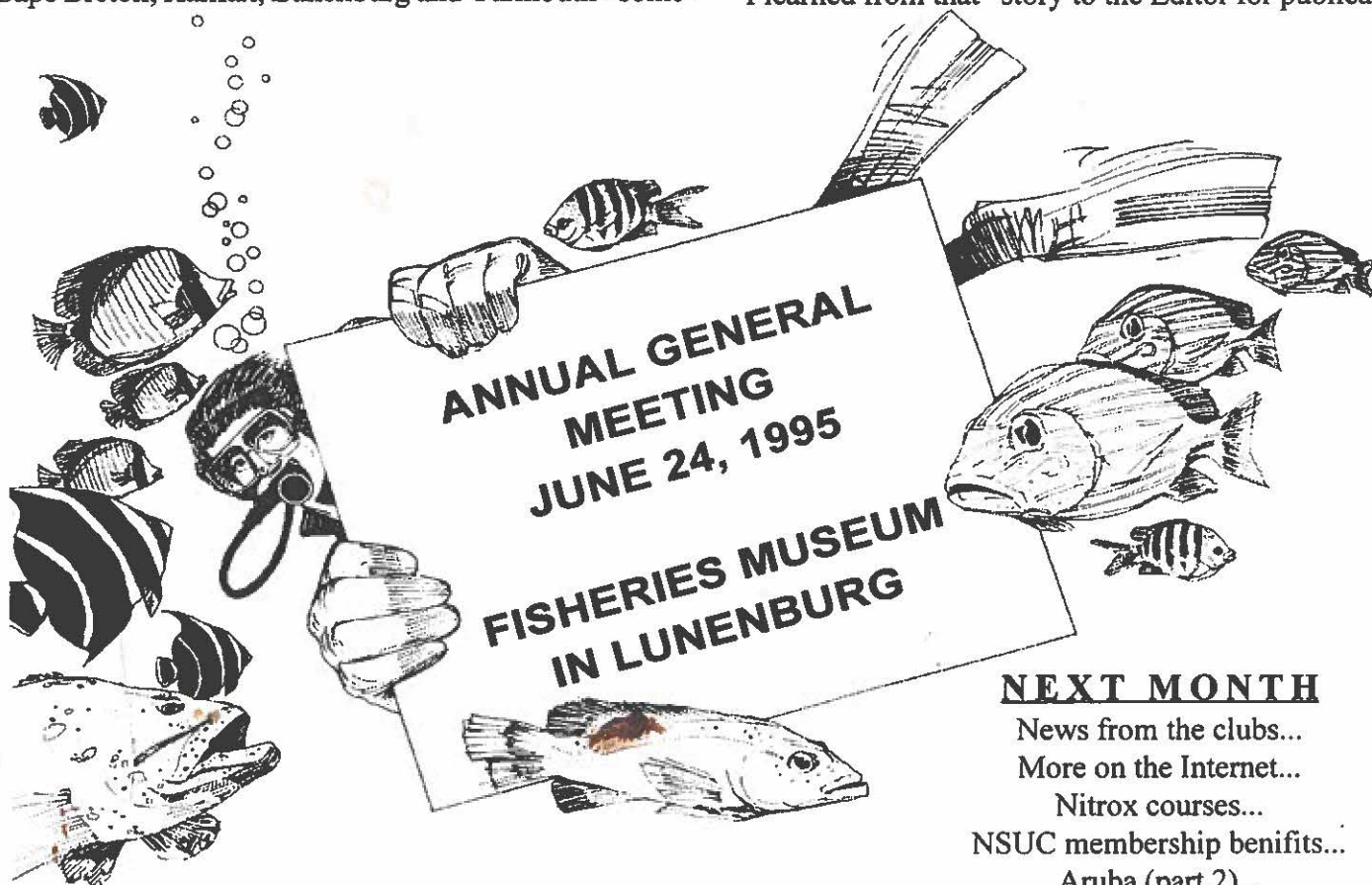
1995 MEMBERSHIPS ARE DUE

thing for everyone. Watch in this and upcoming issues for particulars of upcoming events.

The AGM is fast approaching and promises to be a very busy weekend. It is being held in Lunenburg in conjunction with the first anniversary of the sinking of Saguenay. There will be guest speakers, day and night dives on the Saguenay and many special events.

All NSUC members should try to attend. This is the most important meeting of the years with the election of officers and an open forum to voice opinions and have your ideas or concerns recognized.

Don't forget the contest that is now running for a free 1996 membership in the NSUC. Send your humorous or "I learned from that" story to the Editor for publication.



NEXT MONTH

News from the clubs...
More on the Internet...
Nitrox courses...
NSUC membership benefits...
Aruba (part 2)...
A.G.M. results...
AND MUCH MORE...

The Aims and Objectives of the Nova Scotia Underwater Council

1. To be a representative body for the scuba diving community so as to preserve, support and promote diving and diver safety in the province;
2. To ensure that training programs are given to a recognized level of quality, to foster and encourage the safe handling and usage of all approved types of equipment used in the sport of scuba diving;
3. To make available to all members information concerning safety, medical, technical and research data concerning the sport of scuba diving and scuba diving equipment;
4. To co-operate and participate with the provincial government on projects and policies that lead to the recognition of sport diving as a significant recreation activity.

UP-COMMING EVENTS

DIVERS WORLD - SPECIAL EVENTS

1-800-616-3483 or 876-0555

FREE SCUBA REFRESHER COURSES

June 14, June 21, June 28, July 12

Location: Dalplex Pool 7:00 pm - 10:00 pm

Course length: 1 evening

Pre-registration required

U.S. DIVERS & DIVERS WORLD

1995 Treasure Hunt Series - #1

June 18, 1995 - Hubbards Beach

All proceeds to the I.W.K. Hospital

ENRICHED AIR NITROX

Basic Course - I.A.N.T.D. or T.D.I. Certifications

course #2 - June 27 & 29 (2 evenings) **

course #3 - July 3 & 5 (2 evenings) **

course #4 - July 22 (1 full day) **

** 2 dives will be completed the following weekend

GET WET 1995

July 16th, 1995. The Oven's Natural Park, Bayport.

Fifth Annual Scuba and Snorkeling Festival.

THOUSANDS OF \$\$\$\$\$\$ IN PRIZES!

- Buoyancy and Navigation competitions -

- Treasure Hunt -

- Barbecue -

- Assisted Boat Diver -

- Dive Charters -

- Tent Sale -

- Equipment Trials -

- Snorkeling excursions -

- Air Fills -

- Charity Dunk Tank -

Diving is also available on July 15th. Prize draws

and competitions will be held on July 16th. Local

camping should be reserved well in advance.

1-800-JO-DIVE-1

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The N.S.U.C. Lending Library

1991 Sport Diver Open Water Vol. 1, Pts 1 & 2 Video
 Contains: Using Skin Diving Equipment
 Using Scuba Diving Equipment

Sport Diver Open Water Vol. 1 & 2, Pts 1 & 2 Video

Buoyancy / Out of Air, Pts 1 Slides

Rescue / Accident Management, Part 1 Slides

Rescue / Accident Management, Part 2 Slides

Dive Promotional Programs Slides
 Audio Tapes for Above

Underwater Louisbourg Video

Louisbourg's Marine Heritage Video
 Part 1 - English / Part 2 - French

Underwater Hockey Video

Hyperbaric Video, (VHS or BETA format) Video

Sport Diver Advanced Vol. 1, Pts 1 - 3 Video
 Contains equipment, boat diving, U/W navigation

Neal Watson's Undersea Adventures Video

Australia - Discover It Video

Dive Nova Scotia Series Video
 Part 1 - Dive Nova Scotia
 Part 2 - Dive Nova Scotia continued
 Part 3 - Wreck Diving

All videos are VHS unless otherwise stated. Lending Policy
- There is a \$10.00 deposit for each item borrowed (except
audio tapes needed for the slide presentations). The deposit
will be returned within 21 days of shipping from N.S.U.C..
All costs incurred in shipping payable by the borrower.

Contact: Mike Haynes at Sport Nova Scotia
 5516 Spring Garden Road.
 Halifax, NS (Or by calling 425-5450)

Instructor List

1. David Allen	Halifax	876-0555
2. Tony Beare	Yarmouth	742-2626
3. Brian Boye	Halifax	876-0555
4. Travis Carter	Bedford	835-6565
5. Mike Chambers	Halifax	454-4296
6. Darin Connors	Halifax	479-1631
7. Harry Dort	Bedford	835-6565
8. Gary Edwards	Halifax	876-0555
9. Gary Field	Halifax	479-2981
10. Tim Gay	Bedford	835-6565
11. Ken Jardine	Sydney	562-6061
12. Roland Lewis	Sydney	562-2457
13. Robert Mack	Fall River	860-0634
14. Dwayne McLaughlin	Windsor	798-8862
15. Gordan McVicar	Sydney	562-6975
16. Frank Meeks	Bedford	835-6565
17. Blaine Montroy	Bedford	835-6565
18. Roland Morrison	Dartmouth	463-3796
19. Tim Oickle	Lunenburg	634-3443
20. George O'Neil	Sydney	564-5671
21. Dennis Pitts	Bedford	835-6565
22. Jodie Pratt	Lunenburg	634-3443
23. Donnie Rodgeron	Bedford	876-0555
24. Joe Rossitter	Lunenburg	565-3373
25. Joanne Shadbolt	Lunenburg	634-4822
26. Dale Smith	Chester	275-4471
27. Stephen Tate	Bedford	835-6565
28. Ralph Tomlinson	Lunenburg	634-3443
29. Rick Welsford	Mahone Bay	624-8051
30. Sean Wilkie	Lunenburg	543-9317

N.S.U.C. Items for sale - Excellent Deals

Hyperbaric Video	\$20 + \$2 s&h
Cloth Crests	\$8 + \$1 s&h
Passport To Diving	\$3 + \$2 s&h
Emergency Card	\$1.50+ \$1 s&h
Hyperbaric Decal	\$0.75+ \$1 s&h
Dive Slate	\$2.50+ \$1 s&h

*Note - The shipping and handling barely covers
the postage*

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Admiral sets new record at Fleet Diving Unit Atlantic

Vice-Admiral Larry Murray has broken a record.

The commander of Maritime Command set a new depth record for VIPs during a recent visit to Fleet Diving Unit Atlantic (FDUA) where he dove to 37 feet in the Superlight 17B diving helmet. He surpassed the previous record of 16 feet set in August 1994 by Capt.(N) Ken McMillan.

According to the dive supervisor, Chief Petty Officer 2nd Class Nick Serbu, the only reason Murray stopped at 37 feet was because the bottom got in the way!

The admiral dove from YDT 12, FDUA's surface-supplied diving tender, in the Superlight helmet from which divers breathe various gas mixtures fed from the surface to a depth of 330 feet. His diving "buddy" was Leading Seaman Sean Barry.

During the same visit, Murray was also given a personal demonstration on how to react to an improvised explosive device (IED) by the explosive ordnance disposal department at FDUA. And personal it was. Leading



THE SHEARWATER SCUBA CLUB

The Shearwater Scuba Club is a community based organization open to both military and the public. The Club provides rental equipment to members at below market prices, two airfills per week at a nominal

cost, and organizes dives, dive trips, and other social activities.

Club membership costs \$20.00 per year for an individual member, or \$25.00 per year for a family. Club meetings are the first Tuesday of every month at 7 PM at the Shearwater Gym.

For further information, please contact Tom MacLaughlin, President, Shearwater Scuba Club, at 902-864-2134 Fax 463-8408, or write to:

Shearwater Scuba Club
P. O. Box 69
Shearwater, N. S.
B0J 3A0

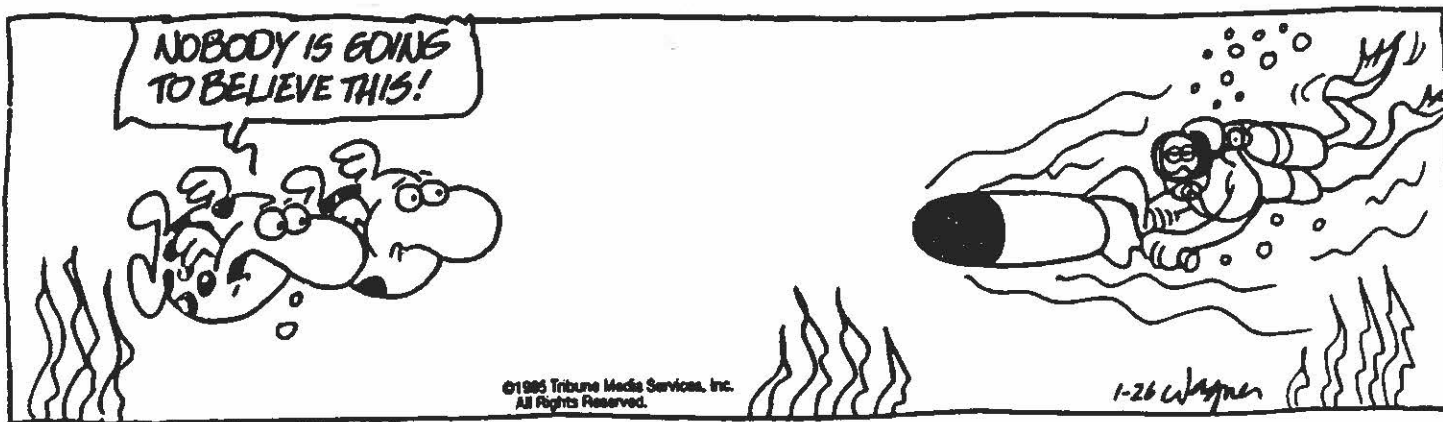
Seaman Keith Musselman created an IED that was a parcel bomb addressed to the admiral himself! After showing Murray the clues that would help identify the package as a bomb, it was neutralized using a Centaur water cannon. This technique disrupts the bomb before it has the chance to detonate.

Murray toured other areas of FDUA during the visit and was given a demonstration of DART, or deep access remote television, in the training tank. DART is a remote-operated vehicle

that has been used for many missions ranging from sampling protoplankton levels at significant depths to investigating hazardous sonar contacts off Baffin Island. It was also used to conduct initial searches for scuttled drugs recently recovered by HMCS Cormorant. Murray also took some time during his visit to speak to FDUA personnel on current naval and Canadian Forces topics and to answer questions.

Taken from the Thursday, Apr. 6, 1995 issue of the TRIDENT.

Animal Crackers



DEAR EDITOR

Having spend thirteen years diving and almost twelve involved with the council I feel that things haven't changed much in the Nova Scotia Diving Community.

My first NSUC meeting was one where the existing Directors were proposing that the Council fold due to the lack of new people interested in taking an active role in the running of the Council. Of course with this prospect some people came forward and the Council was saved once more. I became a director a few years later and have held one position or another for most of the time since then, with the odd hiatus now and then. My present stint as treasurer is being done as a personal favor for the president and come the Annual General Meeting in June I am through.

Almost every position in the Executive will be vacant this year. At the moment I don't see many people actively seeking these spots. Where do we go from here? The Council as it stands now is very stagnant and for the most part the present executive are housekeeping but there is little initiative or new ideas coming forth. This is not meant as a slur on the directors, just many of us have been there so long the urge to fight is long gone.

Perhaps most of you are aware that there is a new Council forming and you may not have realized that they have approached our government contacts looking for financial assistance. At the moment the government will only finance the existing Council. If this Council is to fold then financing could go to the new council.

Our President has approached the other council for meetings to see if we could find a common ground and work together but we were rebuffed. Surely, we all should be working for the common good of the sport diver.

The point of this letter is to shake up the divers of this province. If no one comes forward to do the work of this Council then you had better hope the alternate council has the good of the sport diver in mind and not just that of the commercial interests. Without new blood and energy the Council cannot grow and become strong. One has to question if a stagnant council is worth the effort of those involved?

Yours truly,
M. Lynn Gallant
Interim Treasurer NSUC

On May 24 and May 31, Divers World held 2 of a scheduled 4 free scuba tune-ups. A total of 14 participants registered and attended the 3 hour events. There were divers certified as far back as the 70's in attendance.

We have also received a large number of calls for the June 7th course. At present Divers World is planning to schedule 4 more tune-up session for the rest of June and into July.

Yours In Diving,
Divers World

RE: Spring Tune-Up, Sunday, April 23. 1995

On behalf of CFB Shearwater Scuba Club, I agreed to host and provide instruction for the captioned session, designed to refresh diving skills and knowledge for those divers who have been out of the water since last summer or fall. As agreed, the Council paid \$200.00 for this service so that the session would be free to Council members.

The session was advertised in The Trident, The Warrior, and the Eastern Passage Beacon. The date of April 23 was chosen so that the Council would have in excess of five weeks to publish the next issue of the Bottomtime so as to advertise the event to Council members. By Tuesday, April 18, it was apparent that the Bottomtime would not be published in time, so faxed notices were sent to Divers World, Nautilus School of Diving and Discover Diving. Dive Masters, which has no fax, had been verbally informed the previous week.

Nine divers attended the session on April 23, seven of whom were Shearwater members, and two of whom joined Shearwater that day (both had military status). Although two instructors were scheduled to give the course, only one (myself) was available. The session commenced at 0900 with a classroom session covering Dive Planning, Dive Hazards, Diver's First Aid, and Tables. At approximately 1030 hours, the group commenced the pool session, which included Gear Set-Up, Self-Checks and Buddy-Checks, Entries, Exits, Doff and Don Gear at Surface and at Depth, Buoyancy Control, Alternate Air Sharing, and Emergency Ascent while Alternate Air Sharing. The pool session ended at 1230 hours.

Although intended as a review, it was apparent from the questions and actions of the participants that some of the instruction was newly received. Unsolicited feedback was that the course was usefull, practical and enjoyable. The timing (April) was also good as people are just starting to get interested in getting back in the water. March is too early in the season. For the future, four hours would provide a more comprehensive session, and early advertising would ensure greater participation.

Respectfully submitted,
Roland Morrison
Instructor & Dive Supervisor, CFB Shearwater Scuba Club

FDUA DIVERS TO CLEAR MORE UNEXPLODED AMMUNITION FROM BEDFORD WHARF SITE

by Capt. Darlene Blakeley

Another attempt to clear unexploded ammunition from a temporary wharf site near the Canadian Forces Ammunition Depot (CFAD) Bedford is expected to take place this week.

A 10-man dive team from the Fleet Diving Unit Atlantic (FDUA), including four divers from the explosives ordnance disposal (EOD) section, will use 10 Mark 8 "hose charges" of 50 lb. each to clear any ammunition still hidden in the bottom silt at the site where the wharf's pilings will be driven. This temporary wharf will be used while the existing jetty at CFAD Bedford is being rebuilt.

In February, divers recovered 670 pieces of unexploded ordnance from the site at Rent Point, ranging from 20-mm and .50-calibre small arms ammunition to depth charges and four-inch British naval rounds. The ammunition had been there since July 18, 1945 when rounds piled up on the jetties at the Bedford magazine by ships returning from the Second World War caught fire and exploded.

Based on this initial sweep, the department of construction engineering requirements at National Defence Headquarters in Ottawa has decided a follow-on operation is necessary because "it is

reasonable to assume that some ordnance is still present hidden in the bottom silt and could pose a major risk to equipment and personnel during construction (of the temporary wharf)."

Petty Officer 2nd Class Jordan Walsh of the EOD section says the hose charges, about 25 feet long, will be placed on the ocean floor in the area where the pilings will be driven at depths which start at 20 feet and run to about 30 feet.

"When they go off, you'll see a plume of about 10-15 feet at the shallow end, and maybe nothing at the deeper end," he explains.

Walsh says it will take 10 dives to lay the charges, one at a time. They will be wired electrically to a command post behind some of the abandoned bunkers at the magazine and will be set off from that position.

Prior to detonation, FDUA will inform the Queen's Harbor Master, Halifax Traffic and local municipalities, and will also post a notice to mariners to ensure that no one is in the area at the time of the explosion.

"Just before the shots we will do an inspection of the area to ensure there's nobody there," Walsh plains. "There's no danger or explosion hazard to the general public at all."

For the EOD section of FDUA, this type of job is not out of the ordinary. "The application is a little different in this case,

but it's what we normally do," Walsh says.

It is hoped that following the dive operation, construction of the temporary wharf can go ahead with a minimum of risk.

NAVY DIVERS RECOVER 670 PIECES OF AMMO

by Capt. Darlene Blakeley

Fifty years ago it rained artillery shells over Bedford Basin. Today, those shells, some unspent, are still being picked up off the ocean floor.

In just six dives, navy divers from Fleet Diving Unit Atlantic (FDUA) recently recovered 670 pieces of ammunition from the area around Jetty NB, the southern-most of two jetties at the Canadian Forces Ammunition Depot (CFAD) Bedford.

The ammunition, including 20-mm and .50-calibre small arms ammunition, individual fuses, depth charges and four-inch British naval rounds, was scattered during an explosion which occurred the night of July 18, 1945 after a fire began at the Bedford magazine.

"No one knows how the fire started," says Lieut.(N) Brian Titus, officer in command of the current FDUA operation, "but the area was just a powder keg waiting to go off."

Ships returning from the Second World War with live ammunition "were doing

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whatever they could to get the stuff off the ship" according to Titus. This meant that boxes full of ammunition were overflowing the magazines and stacked up on the jetties. Although miraculously enough nobody was killed or injured during the explosion, land and naval rounds fired for a mile around the depot.

For six years after the explosion, shells were cleared annually from under the water, particularly around Jetty NB, but in a never-ending cycle, the tides either buried deeper or dredged up shells on a regular basis.

"You could clean up shells now and then come back next year and find more," says Titus.

"About 15 navy divers, some of them trained in explosive ordnance disposal (EOD) and others in mine countermeasures, went into the area at the bequest of the directorate of construction engineering requirements at National Defence Headquarters in Ottawa to once more clear the area around Jetty NB and prepare it for the construction of a temporary jetty. It will be used for loading and unloading ammunition while the magazine's main jetty, well over 50 years old, is torn down and then rebuilt.

For the divers, it was an excellent opportunity to practise their skills. And while Titus says they were nervous about finding some ammunition like the deadly "hedgehog" or depth charges which are designed to trigger underwater, the divers' training is such that a set routine

is established for safely removing any questionable material.

"The benefits (of the operation) far outweighed the risks," says Titus. "There is lots of vintage ammunition there and we had to go back to the books to see how it operated. It was a great exercise for us; we just had to handle things with care."

Most of the ammunition recently removed from average depths of 20-25 feet and in an area measuring 50 by 75 metres was passed by hand from trained mine countermeasure divers in the water to EOD specialists alongside in a small punt.

"It sometimes looked comical to see these shells going into that small punt," laughs Titus. "It got a bit tipsy!"

After carefully bringing up the ammunition it was logged and stored in one of the magazines.

And while Titus says the divers had fun bringing up the corroded shells like buried treasure, the operation was tempered with a lot of caution.

A similar clean-up operation occurred last year when the frigate HMCS Montreal hooked some ammunition while drawing-up her anchor between Georges Island and Woodside at the mouth of Halifax Harbour. Titus recalls an ammunition barge which had caught fire had been sunk there to prevent further damage.

"But this type of work is not done very

often," he explains. "When it happens though, it's great for the (divers) because they get exposure to everything from bottom surveys to video surveys to working with other government departments."

The FDU(A) divers wanted to clear, to the best of their ability, all visible ordnance from the area around Jetty NB so that construction on the temporary jetty could begin. However, that construction will have to begin since tides and the freeze/thaw cycle could mean the surfacing of more ammunition.

Titus hopes a decision on the timing of construction will be made by the end of this week so that divers can proceed with phase two of the operation. This will involve finding out exactly where any pilings will be driven or drilling take place so that divers can then go up to one metre below ground to clear out any other ordnance.

Taken from the Thursday, Jan 26, 1995 edition of the TRIDENT

Internet Information

For all those divers that have taken the plunge into the world of the internet, take a moment and check out the WWW site at:

[http://cfn.cs.dal.ca/Recreation/](http://cfn.cs.dal.ca/Recreation/(con't) EastCoastDive/Index.html)
(con't) EastCoastDive/Index.html

Grant MacLeod has done an excellent job with this site... Check it out! With a little luck you might see the Bottomtime there as well.

DIVERS WORLD

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SCUBA TANK QUIZ - ANSWERS

The **Compressed Gas Association (CGA)** in New York publishes standards governing the inspection and testing of compressed gas cylinders. The C.G.A. bases its standards on Federal regulations

Professional Scuba Inspectors (PSI) also publishes standards for cylinder inspection of Scuba cylinders. PSI bases its standards on C.G.A., various research facilities and cylinder manufacturers.

Here are the answers to the quiz which appeared in last month's issue.

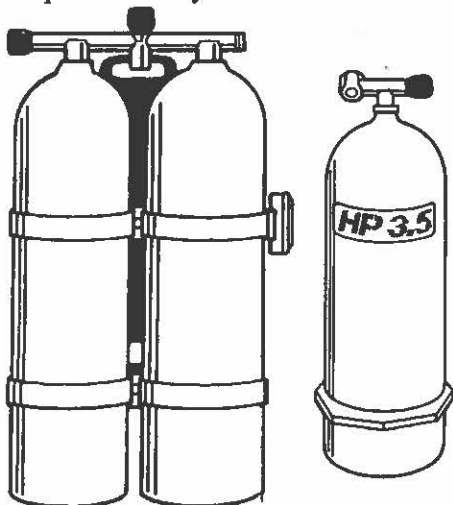
1. A. 900 psi (62 bar). According to the CGA Standards for visual Inspection of Compressed Gas Cylinders, high pressure cylinders are those with a marked service pressure of 900 psi or higher. Most are DOT 3A, 3AA or 3AL types.
2. For steel cylinders - True; For aluminum cylinders - False. The hammer test is only valid (and is recommended) on steel cylinders.
3. D. Either A or C. CCA Standards for visual Inspections of High Pressure Aluminum Compressed Gas Cylinders says that if the wall thickness is unknown, the allowable corrosion depth is .030" (~75 mm). If the wall thickness is known, the allowable depth is 15% of the minimum design wall thickness.
4. C. 15% of the internal or external surface. The same standards quoted in answer 3 say the area of corrosion must not extend over 15% of the external or internal surface, whichever is being examined.
5. D. Either B or C. The standards quoted in answer 3 say if the wall thickness is unknown, the allowable depth of pitting is .060" (1.5 mm). If the wall thickness is known, the allowable depth of pitting is 30% of the minimum design wall thickness (isolated pits only).
6. D. Either A or B. The standards quoted in answer 3 say if the wall thickness is unknown, the allowable cut is .030" (.75mm). If the wall thickness is known, the allowable cut is 15% of the minimum design wall thickness. The length of the cut must be less than 6" (152 mm).
7. A. .060" (1.5 mm) deep with a major diameter of 2" (50 mm). According to the standards quoted in answer 3, the current practice is to accept dents up to .060" (1.5mm) in depth when the major diameter of the dent is 2" (50 mm) or less. Dents should be avoided on your scuba cylinder to prevent it being condemned.
8. A. 350 F (176.7 C). According to the standards quoted in answer 3, aluminum cylinders can be permanently damaged by exposure to elevated temperatures. Cylinders exposed to temperatures in excess of 350 F must be condemned. Be safe - Do not heat any scuba tank!
9. A. 10% of its total expansion. The standards quoted in answer 3 say a high pressure aluminum cylinder shall be condemned if its permanent expansion exceeds 10% of its total expansion. Hydrostatic testing expands a cylinder for at least 30 seconds. The tank must return to within 10% of the volume it had before the test in order to pass.
10. D. A small fraction of 1%. The CGA Methods for Hydrostatic Testing of compressed Gas Cylinders standards say considerable experience with hydrostatic tests has shown the number of cylinders that fail will only be a small fraction of a percent of those tested.
11. A. True. The standards quoted in answer 10 say DOT regulations specify that a hydrostatic test must require external and internal visual examination of the cylinder. All cylinders rejected by the visual inspections shall be condemned immediately.
12. A. 70 F (21.1 C). According to the CGA Suggestions for the Care of High Pressure Air Cylinders for underwater Breathing, the last four digits of the DOT (or ICC) mark indicate the service pressure of the cylinder, which is the maximum pressure permitted at 70 F (21.1 C). Cylinders marked with a plus (+) following the test date (steel cylinders only) may be charged 10% in excess of the marked service pressure.
13. All statements are true. The answers are paraphrased from the CGA standards quoted in answer 12. All cylinder coatings and linings must be visually inspected every year. If a coating or lining is damaged, it must be removed to inspect for corrosion. Also, when transporting cylinders take great care to protect the valve. The rocketing effect resulting from a sheared off valve is potentially lethal.
14. A. True. The standards quoted in answer 3 say the plus (+) stamp is not allowed on aluminum cylinders. The plus sign signifies the qualification of a steel cylinder for filling to a settled pressure 10% in excess of the stamped service pressure. With aluminum cylinders, the full settled pressure may not exceed the service pressure limit stamped on the cylinder.
15. A. Transport Canada. Hydrostatic testing of compressed gas cylinders, as specified in DOT regulations and specifications, require testing by water jacket. The water jacket test apparatus shall be regularly inspected and approved by a Transport Canada

Scuba Tank Quiz - Answers con't:

Inspector.

16. D. Depends on Use. According to the standards quoted in answer 12, all compressed gas cylinders shall be visually inspected at least annually. Professional Scuba Inspectors (PSI), Cylinder manufacturers and other testing agencies recommend more frequent visual inspections of cylinders used for rental or other uses of a demanding nature.

17. D. Depends on Use. According to the standards quoted in answer 3, scuba cylinders must be hydrostatically tested every five years (some other cylinders, such as those used in fire departments, must be tested every three years). If a cylinder shows signs of misuse, it should be retested to ensure it is not damaged and structurally weakened. Think about getting your tank(s) inspected today.



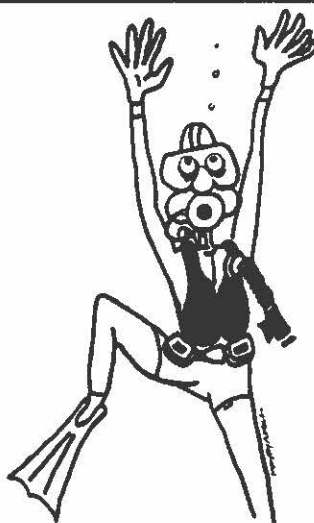
Seascope Atlantic Society

Seascope Atlantic Society is a non-profit organization dedicated to the sport of scuba diving. We offer project management services for dive contests and events, as well as providing diving opportunities for Nova Scotia divers and tourists. We have qualified instructors and dive masters on staff and can arrange charter boats, accommodations and equipment rentals.

Our charter season runs from June 1 to September 30, although special arrangements can be made at other times of the year. A typical 2-tank boat charter with lunch costs \$40.00 CAN., not including equipment rental. For further information, please contact Roland Morrison, Seascope Atlantic Society, at 463-3796, Fax 463-8408,

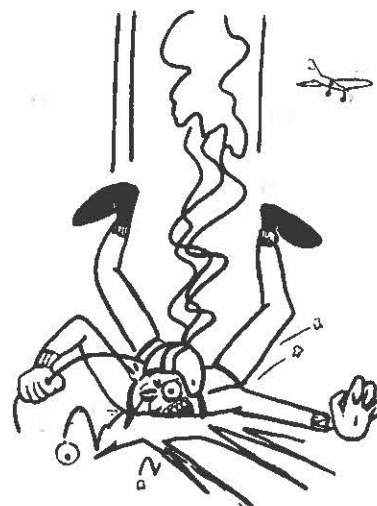


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DESERTS IN THE CARIBBEAN? YOU BET

ARUBA AND BONAIRE (Part 1)

Several of my diving friends had been to Bonaire and had highly recommended it as a diving destination. From the literature available, Bonaire also appeared to have excellent snorkelling, which would appeal to my non-diving wife, Charlotte. Accordingly, we selected Bonaire for this year's trip south, adding on a week in Aruba so as to sample a second Caribbean island.

Aruba, Bonaire and Curacao, usually referred to as the "ABC Islands", are Dutch possessions located between 24 and 80 kilometres (15 - 48 miles) off the coast of Venezuela. Aruba is the westernmost, and measures 20 miles (northwest to southeast) by 6 miles wide. Aruba's population of 76,000 is comprised of a mixture of Indians (descendants of the Arawaks), Dutch, Spanish, South Americans, Blacks, Filipinos and expatriate Americans. Although Dutch is the official language, the residents speak their own Papiamentu, a melange of Dutch, Indian, Spanish, Portuguese, French and English. English is taught in school, and is widely spoken, even between natives. Although the local currency is the Aruban florin (Afl.), the American dollar (and U. S. coins of a nickel or larger) prevails.

In spite of being in the Caribbean, Aruba and its sister islands are outside the hurricane belt and receive slightly in excess of 500 mm. of rain per year, or 20 - 30 inches. Consequently, the climate is arid and the terrain desert-like. The main vegetation is cacti, with some hardy low-lying bushes and the famous divi divi tree. Air temperature is consistently between 23 and 27 C in February, or about 80 F. Most days are sunny, and overcast periods are brief. As noted above, the land is dry and the humidity is low by Caribbean standards. Fresh water does not exist on the islands, so consequently each island has a large desalination plant. The lack of runoff no doubt contributes to the high visibility in the surrounding waters.

As usual, there was no direct flight to Aruba from Halifax, so we had to fly through Toronto. Before leaving Toronto, the Air Canada rep informed us that our hotel, the Amsterdam Manor, was overbooked, and we had been upgraded to the five-star La Cabana All Suite Beach Resort and Casino. This hotel is right beside the Amsterdam, and would give us a "superior" studio. I was somewhat dubious about the bed which was called a "Murphy" bed and which pulled down from the wall. Anyway, we were still on our way to Aruba.

The flight left shortly after 8 PM, and arrived a bit early in Aruba at 0235 on Sunday, February 12. The baggage must have travelled separately, because it showed up considerably later. After passing through Immigration and Customs, and starting to soak in our own sweat, we met our Air Canada agent and were directed to our bus. The luggage again seemed to separate from us as it disappeared into a white truck. However, we all did meet up at the hotel.

It took about an hour for the two desk clerks to process a bus load of tourists, so it was after 4 AM when we collapsed in our room. Sure enough, the bed did pull down from the wall, but it was queen size and very comfortable. The room itself exceeded expectations. It was about 12" x 36" with a Jacuzzi tub, in-wall hair dryer, counter top stove, garborator, microwave, full fridge, sofa bed and sitting area, kitchen nook, remote control TV with satellite reception, walk-in closet and in-room safe. Although it was dark, we could see that our patio opened onto a large pool area. Needless to say, we were more than pleased with the last-minute substitution of hotels.

Most of Sunday was spent recovering from our overnight flight, but we did finally stir and explore our hotel and Eagle Beach, just across the road from the hotel. Aruba's beaches are amongst the

finest in the world, and Eagle Beach seemed to be the best in Aruba. Lucked in again! As well, La Cabana seemed to have every convenience, whether the need be groceries, beauty salon, fitness centre, gambling, dining, or shopping. A very good public transportation system existed, so we used the bus to head into Oranjestad for dinner (\$US3.50 for two return tickets).

From our literature we learned that Aruba has a reputation for world-class dining, ranging from gourmet French cuisine to local curried goat dishes, so we put it to the test. We were not disappointed! We would recommend Boonoonoonoos for Caribbean food (try the Jamaican jerk ribs if you dare!), Mama & Papa's for great local dishes and down home atmosphere, the El Gaucho for well-prepared (and lots of it!) meat dishes, and the Paddock for simple, inexpensive fare with a great view of the Harbour. We wish we could have sampled more restaurants. Although meals are of a high quality, they are expensive. Dinner for two with one drink each and no appetizer nor dessert cost an average of \$60.00 US, including service charge. Drive-through McDonald's and Wendy's are available for the more frugal.

The next day, we arranged for a dive on the Atlantis submarine. The British Columbia-built sub can take about 40 passengers in air-conditioned comfort to depths of 150 feet. With three tranquilizers, Charlotte, normally claustrophobic, prepared to take the plunge. The sub loaded from both the bow and the conning tower, and we trooped in, single file, until we each had a seat facing an oversize porthole. Except for a burst of bubbles, the dive was almost imperceptible. The pilot took us along a gorgeous coral-encrusted wall with brilliantly-coloured marine life everywhere we looked.

Look for part 2 in the next issue of the BOTTOMTIME

Implant Explodes (British Diver Magazine April 1994)

An American woman suffered horrific injuries when a silicone implant in one of her breast exploded as she ascended from a 90ft dive. The 37 year old Bostonian was left with extensive damage to her chest wall muscle, two broken ribs and a bad infection. Her right breast was completely decimated. Doctors hope to conduct plastic surgery once her wounds have healed completely, but they warn that a totally normal appearance may never be possible due to extensive damage done. An implant in the women's other breast was unaffected during the diving ascent.

Sequel British Dive Magazine (Diving Doc) (October 1994)

Diver recently carried a news article (above) which described a women diver whose breast implant is said to have exploded during an ascent, causing fractured ribs and disfiguring injuries. The story reached (Diver) by a circuitous route. it seems to have originated in an American newspaper, the National Enquirer which is renowned for its sensa-

tional stories but not its accuracy. The incident occurred in Mexico but attempts to verify it have failed. Could such a thing happen? In the past there have been apocryphal tales that breast implants expand and cause injury during relatively minor decompressions which occur during commercial flights. However, careful checks have failed to confirm these events.

Breast implants consist of a bag filled with silicone gel, saline or a combination of both gel and saline. The implants are gas permeable. During compression gas will diffuse into the implant and can be liberated in the form bubbles during decompression.

In a saline filled implant liberated gas may be enough result in the fluid level which can result in a swishing noise during movement, persisting until the small amount of gas is re absorbed. However, formal experiments in hyperbaric chambers have shown that even when implants are exposed to rates of pressure change considerably greater than experienced

during diving, gas liberated is very slight and at most causes a volume change in the prosthesis of only a few percent. The skin and subcutaneous tissue overlying the breasts is very flexible. Indeed the volume of the female breast changes much more during stages of the menstrual cycle, pregnancy and breast feeding than occurs during decompression. It therefore difficult to imagine how a very small volume change in the breast implant could result in trauma.

The National Enquirer's story does not ring true for another reason. Explosive force travels along line of least resistance. If a breast exploded, forces would travel outwards through fat and not inward through bone.

Women divers with breast implants can be reassured that the events described did not and cannot occur.

Published by kind permission of British Diver Magazine. Diving Doc Written by Peter Wilmhurst

AND EVEN MORE INTERNET...

You can now contact 2 of the local dive shops via the internet:

Divers World at 'divrwrld@fox.nstn.ca', and Discover Diving at 'ddive@fox.nstn.ca'

A recent posting on the internet newsgroup rec.scuba listed a large number of W.W.W. sites. Try out a couple and see what you think?

<http://www.scuba.net> - Underwater photo & much more

<http://diver.ocean.washington.edu> - Scuba Site

<http://www.noaa.gov> - Government regulations

<http://www.pht.com/uw-photo> - Underwater photography

(card not available at time of print)

SCUBA TECH **SALES * SERVICE * RENTALS**

15 Wentworth Street
Sydney, Nova Scotia
B1P 5H8
Tel: (902) 562-6061

SUZANNE, KEN, RUSSEL

(card not available at time of print)

Roland Morrison **NAUI Instructor**

30 Leaman Drive
Dartmouth, Nova Scotia
B3A 2K9
Tel: (902) 463-3796





O.U.C. BULLETIN

NOVEMBER 1994

ACCIDENT REPORT

Unfortunately, it is our sad duty to inform you of a diving fatality. We had hopes that this would be a year without an accident, sadly this was not to be. We publish these reports in the hope that it will be a reminder that safety is not to be taken lightly.

Please note that these details are of a preliminary nature. Any further details relating to this incident will be published in the yearly summary of accidents.

CASE: 94-01

DATE: Oct. 29, 1994

SITE: WRECK OF THE
DARYAW

FATALITY

VICTIM: 52 year old male - good health. Certified, open water in June 1994. Had also taken several specialty and advanced courses.

THE DIVE SITE: This wreck is near Long Beach in Elizabeth twp., west of Brockville. Wreck lies at 50 ft. On this day, weather was windy with approx. 3 ft. waves. Moderate current at the site.

DIVE PLAN: Victim and his buddy were participating in a wreck diving specialty course. There were to dive on the wreck with their instructor.

THE INCIDENT: Victim & buddy entered water from their boat. Descended down the line to depth of approx. 20 ft. The instructor stopped and check the divers. Both signalled OK. Instructor continued down the line for a few feet. As he turned to check on the progress of the students, he saw victim ascending the line hand over hand. Instructor saw victim climb unto the boat.

On the boat, the victim told the boat attendant that there was something wrong with his regulator. Attendant check the reg. which appeared to be functioning fine. The victim then fell, or dove, back into the water, appearing to be in difficulty. Attendant shouted instructions, but the victim was unresponsive. Attendant jumped in the water to assist, but had stability problems (he was wearing a dry suit with no weights). Attendant lost contact with the victim and returned to the boat.

Victim was recovered approx. one hour later. Coast Guard was present and CPR and O2 were administered but the victim was pronounced dead at hospital in Brockville.

COMMENTS: At this time, investigators are unsure about what went wrong. There seem to be no gross violations of safety rules with the planning or execution of this dive. This was a situation where divers were in an odd buddy pair, but this system is common in training situations and the instructor is

trained to deal with this. It could be that the victim simply had some problems, or perceived some problems, with his equipment and headed for the surface to solve them.

The victim, however, violated the most basic rule of SCUBA diving, he held his breath and paid for it with his life. We may never know why he did it. The victim may simply have panicked, held his breath and ascended. Stress can be a very insidious thing. Perhaps the main lesson to learn is not to be afraid to cancel a dive if you have any doubts about the dive or your ability to handle it. This goes double for training situations.

Should you have any questions about this incident, please feel free to contact:

Tim Philp
Director of Sport Safety
Ontario Underwater Council
1185 Eglinton Ave. E.
Suite 307
North York, Ontario
M3C-3C6

PLEASE REMEMBER TO DIVE
SAFELY! HAVE A GREAT
HOLIDAY SEASON!

SHATTERING THE MYTH OF ASPIRIN AND DIVING

Take two aspirin and call me in the morning ...”

This well known and overused maxim has led many individuals to perceive that aspirin is good medicine and is great for treating just about anything that ails people.

Some divers have extended this common but erroneous belief into the realm of diving — that aspirin should be good for preventing decompression sickness (DCS) and for improving the eventual outcome of a diving accident.

However, clinical evidence does not support this leap of faith.

Aspirin, as a salicylate compound, has been shown to be effective in diminishing mild to moderate pain, reducing fevers and decreasing inflammation at the site of tissue injury. In fact, many over-the-counter preparations contain salicylates.

However, for the past 20 years the medical community has been evaluating another effect of aspirin therapy. Aspirin has a direct effect on the function of platelets (small circulating blood cells). This is an important observation since platelets are often responsible for plugging blood vessels and causing a thrombosis (blood clot) which can lead to a stroke or heart attack.

Aspirin seems to Prevent the platelets’ ability to “stick together” to form

the clot within the blood vessel. This observation has led to the use of aspirin in patients who may be at risk for the development of thrombosis. Unfortunately, much controversy still exists regarding this therapy.

Routine use of aspirin has therefore been limited to physician discretion, and based on the risks and benefits of each particular patient.

However, just as the routine use of aspirin for individuals with documented clotting risk has not been adequately established, there is no clinical proof that aspirin can prevent decompression sickness and is therefore not recommended for routine use.

Anecdotal reports exist of individuals ingesting multiple aspirin tablets (six to ten tablets) in an attempt to reduce their chance of acquiring DCS.

Despite the lack of clinical evidence in favor of aspirin, some divers have noted this “anti-platelet” effect of aspirin, and are using it as part of their routine dive plan.

Additionally, excessive use of aspirin by the diver may, in fact, pose other serious dangers. Aspirin, even, within normal dosage ranges, can prolong bleeding in most individuals.

The diver who is also taking other medications may enhance the effects of aspirin and be at increased risk if they are bleeding from a laceration. Bruising may also be more extensive

and more frequent.

Individuals who have a history of peptic or duodenal ulcers, or have had a recent traumatic injury, are at an increased risk of bleeding again at that site.

It is fairly well known that the likelihood of bubble-related problems worsening, and hyperbaric treatment becoming more difficult, increases with delayed recognition and treatment of a problem.

Because of the pain relieving effect of preventative aspirin therapy, common early signs of DCS, such as joint and muscle pain, may not be immediately recognized. Thus hyperbaric treatment may be delayed.

Finally, some individuals cannot tolerate compounds containing the active ingredient in aspirin, salicylate. These individuals have allergic-like reactions, such as asthma or hives, and must use extra caution when taking medications.

Indiscriminate use of aspirin before diving to avoid DCS should therefore be discouraged and avoided for all of the above reasons.

If you are unsure if a preparation you are planning to use contains aspirin, read the label first or consult with your physician or pharmacist.

Taken from D.A.N. Alert Diver May/June 1991 issue.

**REMEMBER GET THOSE ARTICLES, STORIES, TALL TALL TAILS, AND THINGS I LEARNED
TO THE EDITOR OR E-MAIL THEM TO DIVRWRLD@FOX.NSTN.CA
YOU COULD WIN A FREE YEARS MEMBERSHIP TO THE N.S.U.C.**

The Nova Scotia Underwater Council's 23rd Annual General Meeting

Come and enjoy a fun filled weekend

Hosted by:

The Lunenburg Marine Park Society

1330 hrs, 24th of June 1995

The Fisheries Museum, Lunenburg

Guest Speakers:

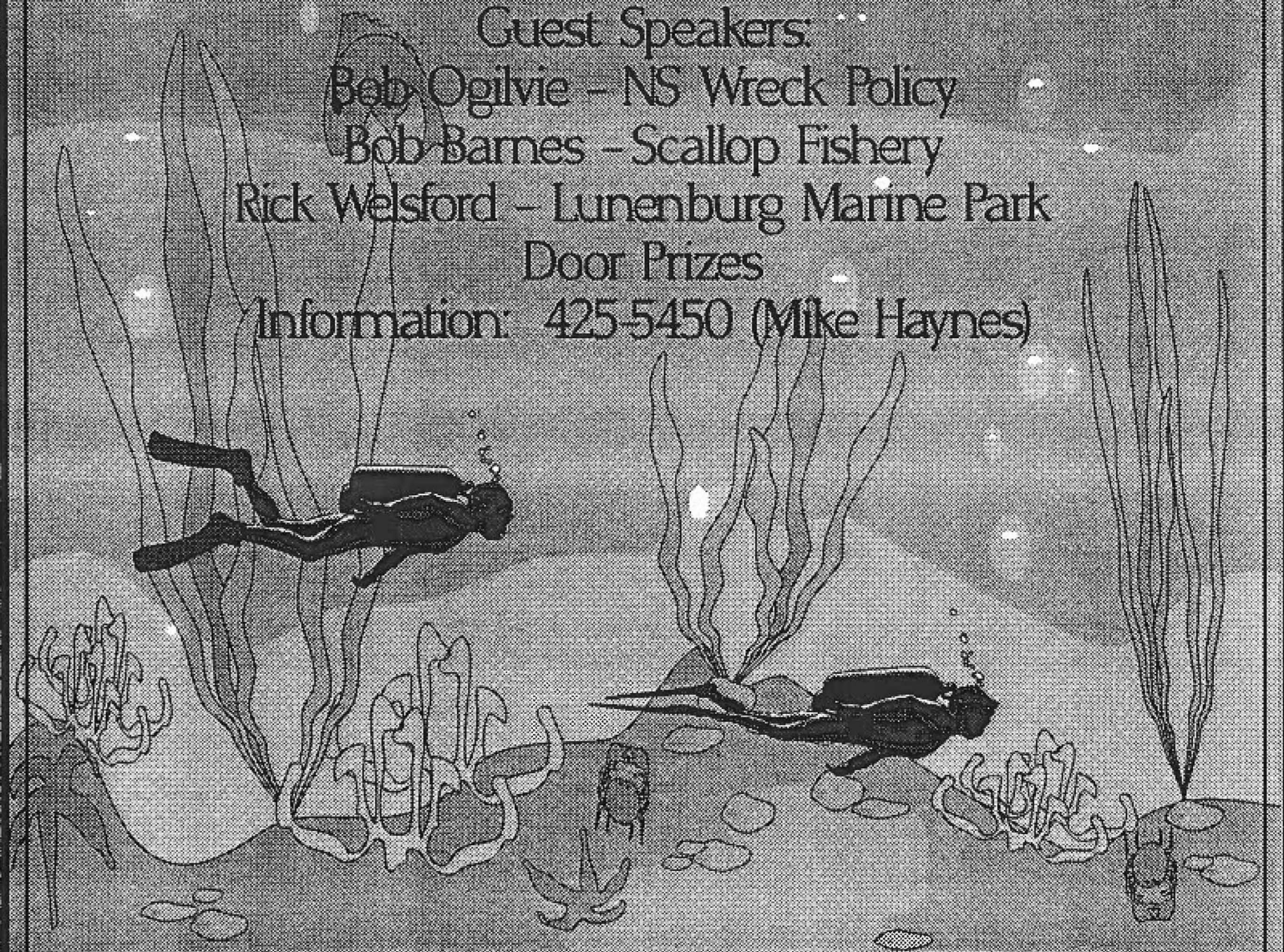
Bob Ogilvie - NS Wreck Policy

Bob Barnes - Scallop Fishery

Rick Welsford - Lunenburg Marine Park

Door Prizes

Information: 425-5450 (Mike Haynes)



Saturday Continued...

***18:00 Reception, Seafood BBQ, Awards Ceremony and Silent Auction,
in the Fisheries Museum of the North Atlantic Aquarium;**

and

**Presentation on Artificial Reef Developments in British Columbia,
in the Fisheries Museum of North Atlantic Theatre**
presented by Mr. Gene Hemsworth, a Director of the Artificial Reef Society of
British Columbia and National Director, PADI Canada.

AWARE

Sponsored by the South Shore Tourism Association. Limited seating. Advance ticket packages available from Nova Scotia dive shops beginning June 1 (\$25.00 per adult or teen, for all evening events, includes one Park day pass and one Museum day pass). Dress casually and warmly; Children welcome (gourmet BBQ sausage on bun)

Sunday, June 25

***8:30 Guiding in Marine Parks Workshop** in Fisheries Museum Boardroom (Ralph Tomilson coordinating 634 3443) Fee: donation at door:

*Introduction by Mr. Rick Welsford, Lunenburg Marine Park;

*9:00 Presentation on SAGUENAY by Capt. Hugh Plant, former captain of ship;

*9:30 Guiding, Tourism and Diving Promotion in Marine Parks by Mr. Ralph Tomilson, Jo's Dive Shop;

*10:00 Artificial Reef Biology by Dr. David Scarratt, former DFO research laboratory director;

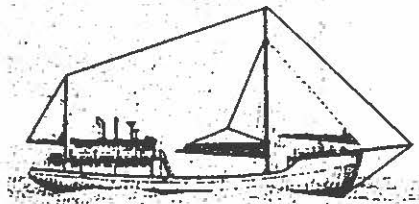
*11:00 Wrap-up and prepare for afternoon guiding evaluation.

*9:00 Nova Scotia SCUBA Association Meeting.

*Diving in the Park.

*Fisheries Museum Open 9:30-17:30.

***13:00 Official Dedication of the Lunenburg Marine
Park on the ship Selchie No. 1 by
Lt. Gov. and Mrs. James Kinley, Lunenburg Bay.**



***13:15 Guiding in Marine Parks Workshop continued.** Course participants to be evaluated by divers on charter boats in Park;

* 17:30 Course Debriefing location at Knot Pub.

*20:00 Night Diving in the Park

Principal Host: Lunenburg Marine Park.

Contacts: Lynn Perry, Accommodation (South Shore Tourism Association 624 6466, 624 9734 fx), David Williams, Event Coordinator (South Shore Marine Park Society 634 7230) and Rick Welsford (Lunenburg Marine Park 624 1557 fx 624 1537). Accommodation and charterboat arrangements should be made directly with operators; recommendations are available from your favourite dive shop or the South Shore Tourism Association. Several dive shop and dive club events are running concurrently in Lunenburg all week-end long.

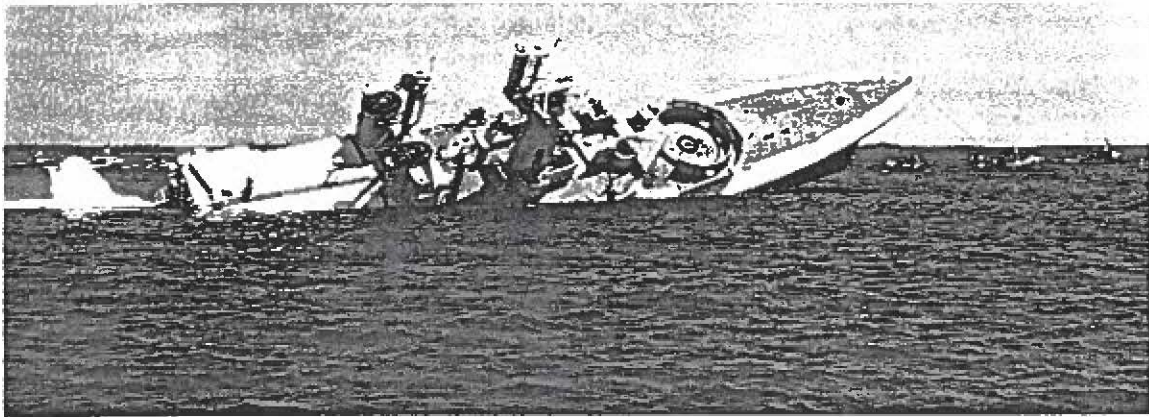
Tickets available at:

Official Dedication of the Lunenburg Marine Park and Anniversary of the Sinking of the HMCS SAGUENAY

(A "G7" Open House Event)

Lunenburg Bay, Nova Scotia, Canada

June 23-25, 1995



Friday, June 23

*Diving in the Park.

*Fisheries Museum Open 9:30-17:30.

*19:00 Informal Supper at Piaro's Pizza, Lunenburg. ✕

*20:00 Night Diving in the Park.

*20:00-24:00 Knot Pub get-together and late evening chowder supper for night divers and friends.

Saturday, June 24

*8:30-9:30 NSUC Board of Directors Breakfast meeting at Wheelhouse Motel.

*8:30-9:30 PADI Canada Instructors Meeting in Fisheries Museum Boardroom.

*9:00 Nova Scotia SCUBA Association Meeting. ✕

*10:00-12:00 SCUBA Diver Evacuation for Marine Parks Workshop, Jim Perkins, VG Hospital and Austin Baird, 3 Dolphins Dive Shop Presenting (Dave Williams coordinating 634 - 7230) Lunenburg Fisheries Museum Boardroom. Fee: donation at door.

*Diving in the Park.

*Fisheries Museum Open 9:30-17:30.

Lunch- 12:00- 13:00 NSUC Directors' Luncheon- Old Fish Factory in Fisheries Museum.

*13:30 Annual Meeting of the Nova Scotia Underwater Council- Fisheries Museum Boardroom (Colin Frazee-Whitlock coordinating 864 2802) Open to all:

*13:30 Introduction by Colin Frazee-Whitlock, President;

✕*13:45 Presentation by DFO on Scallop Diving in Nova Scotia by Mr. Robert Barnes;

*14:15 Presentation by N.S. Museum on Shipwreck Policy by Mr. Robert Ogilvie;

*14:45 Refreshments;

*15:00-15:30 Presentation by Lunenburg Marine Park on N.S. Marine Park System by Mr. Rick Welsford;

*15:30 Break;

*15:45-17:15 Business Meeting of the Nova Scotia Underwater Council.

*Park closed on Saturday Evening only.