

The Canadian Hydrographic Association  
Association canadienne d'hydrographie



# NEWSLETTER

\*\*\* June/August 1993 \*\*\*

Vol. 7, No. 4

## Canadian Hydrographic Association

### Central Branch

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## Central Branch Committees

### Conference Workshop

Terese Herron, Rick Sandilands.

### International Members

Sean Hinds, Larry Robbins, Sam Weller.

### Conference Registration

Keith Weaver, J. Campbell, T. Herron, Bob Langford.

### Seminar

Brian Power, Ken McMillan, Paola Travaglini.

### Lighthouse

Terese Herron, Jennifer Campbell, Andrew Leyzack,  
Paola Travaglini, Sam Weller.

### NewsLetter

Sam Weller, Jim Berry, Brian Power,  
Larry Robbins.

### Wade Essay Award

Andrew Leyzack, Sean Hinds.

### Heritage Launch

Sean Hinds, Jim Berry, Andrew Leyzack,  
Ken McMillan, Brian Power.

### Social Events

BBQ: J. Campbell, A. Leyzack, P. Travaglini.  
AGM: T. Herron, A. Leyzack, K. McMillan, B. Power.  
H2O: Earl Brown, Rick Sandilands, Brad Tinney.

Membership/Nominations/Elections  
Terese Herron, Jim Berry, Jennifer Campbell,  
Paola Travaglini.

Message from the National President

A fantastic sight! There are many adjectives and superlatives that can be added to these three words but I know that the tremendous pride and team effort that Central Branch CHA members have demonstrated in the Heritage Launch Project is something that is better sensed than expressed. The glowing comments that have been expressed to me following the launching at the CHS/CIG conference have been numerous and, interestingly, from the dry as well as the wet side of the geomatics community.

One of the key elements in this project is that it is continuing, with the numerous national and international heritage events that the Heritage Launch and her crew will be seen at. As is highlighted in the Launch material, "living history" captures everyone's attention and through this avenue the public and professional interest in hydrography will receive broad exposure. All being accomplished by the very best people.

Well folks you've not only done just that, but you've accomplished it in a very captivating manner and, can I say, a physically demanding way (boy those oars are heavy!!).

Just fantastic!

On another educational note, I'm likewise extremely pleased to announce on behalf of Barry Lusk, the CHA Student Awards manager, that Mr. Darren Colford, a student at the College of Geographic Sciences in Lawrencetown, Nova Scotia is the winner and first recipient of our CHA Student Award. Darren, who will be receiving the \$2,000.00 cash award and a handsomely framed certificate, will as a requirement of the award's procedure be submitting for publication in the fall issue of Lighthouse a short note of appreciation. He is currently enrolled in the Survey Technology program at the college and destined, so I understand, to go on to the University of New Brunswick.

I would like to extend not only my congratulations to Darren but also my appreciation to Barry and his Student Awards Review Committee for their excellent and timely efforts in pioneering this worthy initiative.

It seems that wherever you turn in our Association, people, our people, are doing things that benefit hydrography. It gives you a good feeling, doesn't it?

Have a safe and fun summer.

Dave Pugh.

Notes from the Branch Vice-President

Many of us are taking one last glance back on the activities of the Surveying and Mapping Conference (best done from a hammock or beach side).

This was an excellent event and the CHA can take pleasure in knowing we were part of it.

Central Branch members were responsible for the CHA/GIAC Workshop, the Conference Registration, and the Heritage Launch Project. I am confident in saying these tasks were performed exceptionally well and this demonstrates the capability and pride that can be found in the ranks of the CHA.

The Heritage Launch re-enactment of the 1792 hydrographic survey of Toronto Harbour, held on the last day of the conference, was a memorable affair. Rear Admiral Steve Ritchie, RN (Ret'd), (known to one and all as Steve) deserves special mention as narrator for that event. The efforts of Steve to uphold the integrity of the re-enactment and to relate the activities taking place were "admirable". We could not have found a better ambassador and we are

extremely grateful to have had the privilege of meeting and working with Steve Ritchie.

The eleven crew members of the launch on that day deserved a pat on the back (or, at least, double rations of rum) for an excellent demonstration of heritage hydrography and seamanship. Well done.

So, what's next?!

The Heritage Launch is alive & well with a number of special events scheduled for the summer (see page 3). Those members who have not yet had a chance to see the launch are most welcome at any of these displays and will enjoy seeing and touching this piece of "living history".

The CHA summer BBQ, coming up on August 21, will be hosted by Cindy and Andrew Leyzack (see page 5). So, pack up your family and come on out for a day of food and fun.

— Sean Hinds.

From the NewsLetter Committee:

This summer edition of our newsletter has columns from Jim Berry and Larry Robbins as well as a letter from our National President and our V-P. We also have an update from Keith Weaver on the field activities of our In-House members, and an update on the re-enactment of the 1792 survey of Toronto Harbour with our Heritage Launch.

Don't miss the social event of the year. Note the ad [by Jennifer Campbell] about the annual summer BBQ, hosted this year by Andrew and Cindy Leyzack.

And mark this on your calendar! Thursday 2 December is the Annual General Meeting of Central Branch at the Mimico Cruising Club, Toronto. This is your opportunity to make your voice heard, to keep up with your fellow members, and to have an interesting and tasty evening out.

News from the other Branches

Section du Québec V-P Bernard Labrecque says about 50 people, three quarters of them from the general public, came to an evening meeting on 18 June to share the experiences of a family just back from a six year voyage around the world on a sail boat.

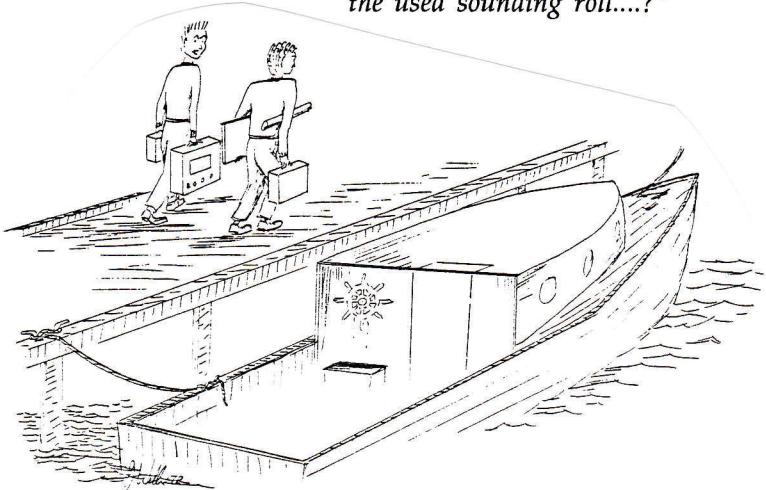
Then on 20 June the Branch had a guided boat tour around the islands of Bic Park, enjoying along the way the local tales of the past. They ended the day with an open-air dinner in the park.

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Ottawa Branch V-P Sheila Acheson tells us of a recent successful flurry of activity: "On May 25 we hosted a lunch hour seminar for fifty participants on *Electronic Charts: The Revolution is Happening*. CHA Ottawa Branch supplied the pizza and pop while Mike Casey and Paul Holroyd brought us up to date on the CHS Electronic Chart Demonstration Project and the impact of the purchase by Canada Steamship Lines of eleven ECPINS systems. We were very pleased to see a few new faces in the crowd and look forward to meeting them again. Then on June 14, Steve Glavin presented his paper on *Object-Oriented Data Bases for Electronic Charting*. Although the Branch couldn't supply lunch for this presentation, Steve presented lots of food for thought for the thirty people who attended!!!!

"The Branch held its annual picnic June 29 at Mooney's Bay. Once again Ralph Renaud organized it to perfection, including weather. Over 60 members and friends came out to enjoy the sun, food & fun. Master Chef Ralph was assisted on the barbecue by John Warren. Special thanks to Dee Mehlman and Jackie Pugh for helping out with the children's games and races."

"You mean I should have kept  
the used sounding roll....?"



Pacific Branch V-P Rob Hare says Barge *Pender* (George Eaton, HIC) is in Cultus Sound, mid-way up the B.C. coast, continuing surveys begun in 1990 around Hakai recreational area. The *R.B. Young* party (Kal Czotter, HIC) was working in and around Tahsis, on the west side of Vancouver Island, and returned for the July long weekend and a well-deserved mid-season break. The *Young* and the *John P. Tully* have now left for points further north: *Young* bound for Blair Inlet, *Tully*, under the able guidance of HIC Barry Lusk, for Coppermine area to ground-truth both LIDAR and TIBS surveys in Dolphin and Union Strait and Coronation Gulf. DGPS will be used for positioning. Some of the "converted" will be enjoying the Arctic experience this year so don't expect to see tanned faces.

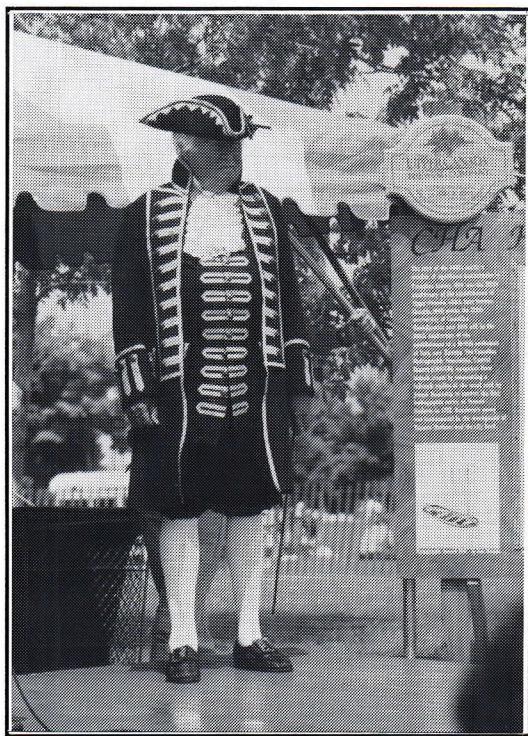
A BBQ/family picnic at IOS is planned for August, with delicious Silver Rill Farm's corn on the cob, then a social/seminar event in September and October.

The BC ferry *Queen of Esquimalt* has an ECDIS demo set up. In co-operation with Mary-Beth Berube, BC Ferries and Tony O'Connor (CHS Director), we hope to get all interested CHA and CHS personnel through the bridge to experience first-hand what ECDIS can do. Two day-trips (brown-bag lunch) are planned so that everyone can have a chance for at least 15 minutes exposure to the OSL system.

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Captain Vancouver Branch V-P George Pugach says they plan a meeting early this fall when people return from field work, and have sent each member a letter seeking input. All thoughts welcome!

CHA/CB Heritage Launch Project



*Rear Admiral Ritchie narrates the re-enactment*

The long-awaited moment came on 11 June 1993. For three days the CHA Heritage Launch had been on display as a focal point of the 1993 Surveying and Mapping Conference. CHA Central Branch Members and friends, in period costume, were now surveying Toronto Harbour with leadline and sextant.

The launch crew [Jim Berry, Joseph Delle Fave, John Dixon, Heimo Duller, Terese Herron, Ken Hipkin, Les Peer, Brian Power, Bruce Richards, Paola Travaglini, Bill Warrender] was under the command of Joseph Bouchette [aka Andrew Leyzack], a young surveyor with the Provincial Marine. The weather was perfect, warm and sunny with a few white clouds in the blue sky and a gentle breeze. The north shore of the harbour was alive with the bustle of a busy modern city but the south shores were much as they were two hundred years ago.

Rear Admiral Steve Ritchie was on shore directing operations and regaling the 200 on-lookers with the history of the people and the events which had led up to the first survey of Toronto Harbour in May 1792.

The survey went without a hitch. The young surveyor stepped ashore and offered the survey documents to the acting Commander, Admiral Ritchie.

The crew members were introduced & gladly accepted the day's pay, compliments of Upper Canada Brewery.

"Job well done", remarked the Admiral.

Events in 1993

June 8 to 11 CHS/CISM Surveying and Mapping Conference at Toronto's Royal York Hotel. Re-enactment of Bouchette's 1792 survey at Harbour Square Park.

June 20 Grimsby Historical Society. The Arrival by water of Lieut. Governor John Graves Simcoe at Waterworks Park, Grimsby, Ontario.

July 4 - 5 Take part in the Tall Ships Parade, Erie, Pennsylvania, USA.

July 19 - 23 On display in the Hydraulics Lab at CCIW. Rigged exhibit with lunch hour discussions.

July 23 - 24 At the Old Mill Restaurant in Toronto's Humber River Valley. Etobicoke Historical Board and the Etobicoke Historical Society sponsored this *Toronto 200* event.

July 26 - 30 In the water at CCIW. Training and maintenance after working hours.

July 13 - Aug 6 At Fort York, Toronto. Static display, 11:00 to 17:00.

Aug 7 & 8 Simcoe Day Celebrations at Toronto. The Toronto Historical Board is sponsoring this Simcoe landing. A battle re-enactment at Hanlan's Point to follow on Sunday.

Aug 14 - 15 Wooden Boat Festival at Toronto's Harbourfront Centre, Pier 4. Static display 09:00 to 17:00.

Aug 18 Lunch time BBQ. Benefit and hydrographic re-enactment.

Sept 10 - 12 Battle of Lake Erie at Put-In Bay, Ohio. Sponsored by the Canadian War Museum, this is a re-creation of the American victory of 1813. Tall and small ships to be engaged.

Sept 25 Fort George, Niagara-on-the-Lake. This proposed event would take place on the water near Navy Hall.

For further information please contact Andrew Leyzack or Sean Hinds at (416) 336-4851.

From our International Correspondent

The CHA marches steadily onwards and you will see news in this NewsLetter of our new Sustaining Member Seabeam Instruments Inc. of E. Walpole, Massachusetts, USA. International Membership is also at a good level — though far too silent for the particular liking of your Int. Correspondent! Even George Goldsteen and Gary Chisholm have been quiet! Oh well, I bet every newsletter writer says the same and it is but a cross we have to bear.

We do have some membership news, though. I hear that ANDREW REDWOOD has made a good recovery and is back at work with Racal in the U.K., now working with Racal Survey, as too is PAUL DAY. We seem to have lost touch with ALLAN DENNISON (formerly R.A.N.), KENNETH BURROWS and ROLAND O'NEILL, of Australia. If you know their current addresses please advise. MATTHEW SMITH is now resident in Brisbane (Australia). JACK WALLACE's organization seems to be moving within Maryland (USA), and I have been interested to receive a number of NOAA's newsletters with details of their innovative ventures in hydrography.

We also seem to be losing touch with DAVID A. CASWELL and WILLIAM S. LAWTON of USA, DENNIS A. KNOX of New Zealand and Dr. STELIOS MERTIKAS of Greece. Anyone knowing their whereabouts, please pass on a nudge from us...

I was interested to talk with Sam Weller recently and hear that the launch of the Launch went well; Admiral Ritchie was his inimitable old self and the ceremony was held in beautiful weather. The sun shines on the righteous (no doubt!). I look forward to seeing reports in "Lighthouse".

I hope that CHA members who were able to be at the launching all took advantage of the chance to purchase the Admiral's book "No day Too Long — An Hydrographer's tale". It is still receiving rave reviews in various places, the latest being in the journal of the Royal Institute of Navigation. The review is near the end of the journal, which in its early pages has an excellent article entitled "International Hydrography" by Rear Admiral Haslam. This paper traces the history of organized hydrography through to the formation of the IHO/IHB and goes on to cover much of the organization's work. "International Hydrography" — Rear Admiral Sir David Haslam, Journal of Navigation Vol 46 No. 2, May 1993 pp 159 - 173 — is worth reading. "Navigation News", also from the RIN and for May 1993, has an article by CHA member Adam Kerr examining "A Worldwide Electronic Navigation Chart Database". A very timely study as we dip our toes in the exciting waters of the Electronic Chart in its various forms.

I am returning to sea in January next year in the RNZN survey ship HMNZS MONOWAI, initially following in the footsteps of Captain Cook and surveying in Fiordland (a beautiful and largely empty area in the SW corner of the country). Actually, one of the first areas to be surveyed next year contains a small harbour (Pickersgill Harbour), the plan of which is the last area on a NZ chart still to be directly attributed as being "from Captain Cook's survey 1773". There is some debate in the hydrographic office about resurveying that harbour (it is small and rarely frequented by other than small fishing boats) and thus deleting Cook's name from NZ charts. I shall report in due course, on how the conundrum was sorted!

The NZ Hydrographer, Commander W. (Bill) Friskin, Royal Navy, is returning to the UK in February '94 and will be replaced by Cdr. Peter Usher RNZN. Although Bill is part Canadian he is not (yet) a CHA member. Perhaps seeing his name in print here will prompt him to apply?! CHA members in Ottawa next year may care to look out for a former RNZN hydrographer, Captain Ray Gillbanks, who is to be the NZ Defence Attaché, beginning in January 1994.

The Hydrographic Society has issued a call for papers for Hydro 94, in Aberdeen, Scotland, 13 to 15 September 1994. Details from George Ritchie, FAX +44 224 574354, or from me.

To end ... Quote of the Week (from Alice's Adventures in Wonderland by Lewis Carroll): "Alice had no idea what latitude was, nor longitude either, but thought they were nice grand words to say." A Longitude Symposium is being held at Harvard University 4 to 6 November 1993 to commemorate the 300th anniversary of John Harrison whose chronometer made possible the first absolute determination of longitude at sea. Alice would have been pleased!

- Larry Robbins [Commander, RNZN].

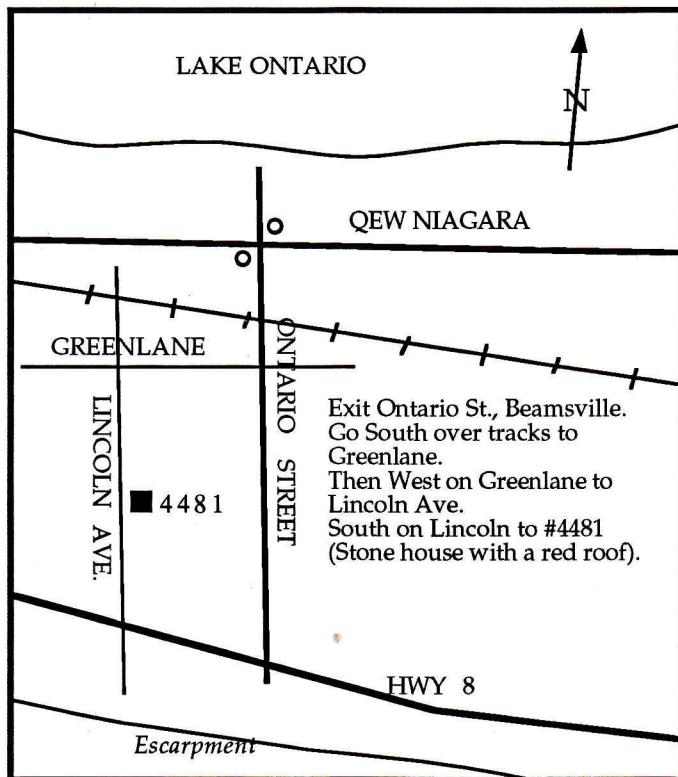


*Re-enactment of 1792 survey of Toronto Harbour*

All CHA members and their families are invited to the  
Canadian Hydrographic Association  
Central Branch

# ANNUAL BARBECUE

*Saturday, August 21, 1993.  
3:00 pm  
at the home of Andrew and Cindy Leyzack  
in Beamsville*



Hotdogs and hamburgers with all the fixings  
Beer, wine and pop  
Please bring a salad or dessert and a lawnchair

See you at the BBQ!

Branch Members on CHS Field Surveys

by Keith Weaver

This summer marks the return of an Arctic Survey from Cambridge Bay. Not only did the crew have to acclimate to usual warm climes, but they had to contend with an extraordinary heat wave. This had been strictly a TIBS survey; soundings were collected with electromagnetic sensors through the ice.

A continuation of the survey in Victoria Strait area using conventional hydrographic survey techniques begins in mid-August. The first load of equipment was deployed on Coast Guard ship FRANKLIN, sailing out of St. John's, Newfoundland, in mid-July. This survey sports 2 Nelson launches with Elac sounders, Magnavox MX300 GPS receivers for positioning, and ISAH data loggers. Data processing is with a VAXstation 4000-60 and Tektronix graphics terminals supporting Central & Arctic Region's processing software & CARIS (same equipment used for processing in Cambridge Bay).

Both southern surveys have Ross sounders and are processing with MicroVAX 3100 and Tektronix graphics. The difference is Lake Huron survey (in Port Elgin) is using Syledis and cassette loggers, while Lake Ontario survey (Oshawa) has Sercel DGPS receivers and ISAH data loggers. Each survey has two Hourston launches and two McKees. Revisory Survey is in Manitoba for a few weeks, attending to requests on Lake Winnipeg.

Mike Bennett and George Fenn installed DGPS beacons for the Electronic Navigational Chart Pilot Project in co-operation with Canadian Coast Guard. A major part of their work was in the Killarney area of Georgian Bay, to get the stations on air for the Chee-Cheemaun (the ferry between Tobermory & Manitoulin Island).

#### **FIELD SURVEYS PROGRAM - 1993**

Arctic Survey (Coppermine and Cambridge Bay) (Al Koudys, HIC; Jon Biggar; Terese Herron; Mike Crutchlow; Ken Halcro [Pacific Branch]) 1993 is the first year of a four year project to survey Coronation Gulf & Victoria Strait. A reconnaissance survey of the western part of Coronation Gulf was completed in March/April, collecting preliminary data to define a safe shipping corridor, using airborne Through-Ice-Bathymetry-System (TIBS) to measure over 13,000 km of continuous depth profiles. TIBS data was supplemented by more than 4,000 spot soundings obtained by helicopter. TIBS was operated under contract by Aerodat Ltd of Mississauga, Ontario.

The survey had logistical and financial support from the Department of Energy Mines and Resources, Polar Continental Shelf Program. It was also supported by the Department of Indian and Northern Affairs, and by the Government of the Northwest Territories.

The next phase of the project started in early May, with a TIBS survey of the proposed shipping corridor

between Cambridge Bay and Victoria Strait. Initial indications are that TIBS depths in Coronation Gulf are accurate to within one metre down to 50 metres. Deeper TIBS depths are not included in final data plots, but are used to show that no shoals shallower than 50 m are present in the coverage area.

Arctic Survey (Victoria Strait) (Bruce Wright, HIC; Ray Treciokas) The CCG icebreaker SIR JOHN FRANKLIN will be home to a survey complement of 7 staff & crew from mid-August to end of September for a survey of Victoria Strait. TIBS data collected earlier will determine areas for detailed launch survey work. Shoals found by TIBS will be examined. The launches & the ship will use ISAH to navigate & log data, including real-time differentially-corrected GPS positions.

This information will be used by mining companies to help develop specs for deep-draft vessels to carry Arctic ore to worldwide markets. The project is partly funded by Government of the Northwest Territories and Department of Indian and Northern Affairs.

Lake Huron Survey (John Medendorp, HIC; Raj Beri; Hermo Nepomuceno) This continues a multi-year project from 1991 to survey the Lake Huron coastline from Point Clark to Cape Hurd. Data was collected in 1991 by an airborne LIDAR system. Launches will examine shoals & obtain depths in deeper water, between Point Clark and Stokes Bay. A survey complement of 17 staff and crew have three launches with Sercel Syledis in the multi-range mode and Ross 801 portable sounders. All data is collected, processed & submitted in digital format. Survey is from early May to mid-September.

Lake Ontario Survey (Mike Johnston; Ken Halcro [Pacific Branch]) The area from Cobourg to Toronto will be re-surveyed to complete the sounding program on Lake Ontario. Harbours at Newcastle and Port Darlington will also be surveyed. Sercel DGPS gives positions accurate to one metre. Data is logged and processed digitally, and the digital files will be used to produce new charts. A Search and Rescue facility, co-ordinated by the Department of Transport, operates on a 24 hour standby basis with CHS personnel. Survey is from May to mid-September.

Revisory Survey (Paul Davies, HIC; Ken Dexel; Chris Gorski; Peter Knight) The 1993 survey will review compilations of New Charts 1434 and 1435 in the St. Lawrence River, and the project will include revisions to charts in Lake Erie and Lake Huron. In response to a request from the Department of Transport, three areas of Lake Winnipeg are being surveyed to produce chart patches. Some of the problems with off-datum charts will be resolved by collecting horizontal control information as required. Survey is from May to end of September.



Jim Berry's column

**What a day!!**

The sun was reflecting off the water like glowing sparklers shooting flames through the air. The sweat from my brow kept running into my eyes, blinding me at times, but I pressed ahead, knowing that if I stopped my rhythm even momentarily, I might lose the pace I had set.

The pain shooting through my arms and back kept reminding me that I am far too much out of shape for this kind of torture to my body, with me frequently sneaking a quick look out of the corner of my eye for some signs that the critics were pleased with the results of my pain and suffering.

When done, Elaine applauded and the kids came running up to hug me as their sign of a job well done.

At long last the pond was completed.

It started only three years ago when Elaine and the kids got this brainy idea that we needed this 10 by 6 by 2 foot deep pond in the yard. They dug the hole for days during their summer holiday from school, and there it sat collecting litter for the next few years.

I couldn't stand to look at this hole in the ground any longer. Off to White Rose for a liner, add a little water. And then the hard part started. I luggered about a hundred field stones from the lake and placed them around the pond like a jig saw puzzle. Back to White Rose for a few shrubs and flowers, and back to the lake for some water plants. An old bilge pump, with PVC pipe on the discharge end, connected to a battery charger provide a fountain. What a way to spend my vacation. Well, at least this was the second week; the first week was better.

Spent the week in Maryland, USA, and visited the Blue Jays at Camden Yards. It was their first shut-out of the season. They lost 6 zip. Things didn't get much better for the Jays when we got back; we went to the Dome and watched Texas Rangers beat them easily. The PA announcer requested the Berry family to please stay home and watch their team win on the tube.

It worked; we are now in first place.

It has been said that "it is not so much what we set out to achieve as why we set out to achieve it that ultimately determines how successful we are".

The pond is now a success through hard work, a dream, and with perseverance to carry it through.

Like the pond, the CHA Heritage Launch will be a part of our lives forever. It is a success not only because it had a clearly defined purpose, but also through hard work, dedication, and commitment.

\*\*\* SPECIAL EVENT \*\*\*

**Thursday 2 December 1993: CHA AGM.**

The Annual General Meeting of CHA Central Branch will be held at the Mimico Cruising Club, Toronto.

Mark your diary in big red letters. More details later.

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**Lighthouse Edition 47**

The Spring 1993 Edition of Lighthouse was mailed out to Members and Subscribers on 29 July. It is sent by air mail to overseas people so if it didn't reach you yet please let us know. If, perchance, you haven't got around to sending your 1993 dues yet [\$30. or equivalent in £ sterling or US dollars], please do so PDQ and your Lighthouse will be on its way to you by return mail.

Bruce Richards, our Lighthouse editor, is always on the lookout for good articles, so if you or one of your colleagues has been doing interesting things lately, this is a good time to share it with the hydrographic community. Articles can be technical or of general interest. If in doubt about your subject, drop us a line.

There are annual prizes of \$100. for the best technical and non-technical articles, and a sterling silver Lighthouse lapel pin is awarded to first-time authors.

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**CHA/GIAC Workshop**

The Geomatics Workshop, sponsored by CHA and the Geomatics Industry Association of Canada, was a very successful standing-room-only event. There will be a full report on the workshop in our next NewsLetter.

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We welcome SeaBeam Instruments as a Sustaining Member of CHA Central Branch. SeaBeam specializes in underwater acoustics, signal processing, beam-forming technologies, and the design & development of transducers and sonar systems. Recently featured in Sea Technology, they market sophisticated multibeam survey systems around the world.



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