National Défense Defence nationale



# CANADIAN NAVAL TECHNICAL HISTORY ASSOCIATION

### **CNTHA Forging Closer Ties with the Naval Support Community**

It seems like only yesterday that we put together our first CNTHA newsletter (March 97), and it's already time for the summer issue. Our first edition received a lot of positive comment – all of it verbal, so it's difficult to pass the specifics on to you. Your written comments would be most welcome and could be passed on to our readers.

As mentioned in our last newsletter, the Ottawa and Halifax "naval support seminars" (regional professional development seminars sponsored by the Navy for support staffs) were opened to members of the CNTHA. Although notice of these events was rather short (no-one's fault, there just was little time available), a few of our members took advantage of the opportunity to sit in on the sessions and mix with some of their former colleagues. Our hope for the future is to devote a portion of the seminars to historical matters, thus providing a more direct interest to our members. At both the Ottawa and Halifax seminars interest was expressed by a number of serving personnel – both military and civilian – in the Association's mandate and activities. Tom Brown in Halifax has been working on some schemes to involve junior officers in this endeavour, hopefully in conjunction with their officer professional development activities.

In mid-June a small group met in Ottawa to survey the "technical domain" to see what areas the collection currently covers, to target areas for expansion, and to identify potential contributors. Jim Dean produced a 14-page, handwritten, thought-provoking overview from his "window" on the navy that could form the foundation for a number of lines of enquiry. (Jim says he produced most of it while spending a lot of time in doctor and dentist waiting rooms – I'm not sure whether this is a reflection on the state of our health care system or Jim's industry, perhaps it's both.) Similar pieces from other perspectives could go a long way toward identifying the gaps that need to be filled. It was a good start, but much more needs to be done. You'll hear more about this in the future.

One key ingredient to our program of work involves Subject Area Coordinators (SACs). There is an article on the functions of a SAC in this issue written by Sam Davis (who has volunteered as the SAC for ship design and construction). He addresses it in a much more interesting and more professorial fashion than I can. Read it. Perhaps the shoe fits you.

Elsewhere, Phil Munro gives a brief overview of the "Collection" as it currently stands. We expect to include a regular report on the growth of the Collection in each newsletter. Also in this issue is some information on how you can access the Collection.

The Looking Back section of this issue of the *Maritime Engineering Journal* contains an historical piece by Phil Munro on Project Mermaid, the genesis of the Sea Sparrow missile system in the Canadian Navy.

Lastly, we were sad to learn of the death this month of Commodore (ret'd) Tom Maxwell, a noted CNTHA contributor. This newsletter carries a short tribute to his memory.

Mike Saker

#### Inside this issue:

The Subject Area		
Coordinator2		
The Collection3		
Coming Events4	4	

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#### Canada



Dr. S.M. Davis, RAdm (ret'd)

#### The Subject Area Coordinator – A Key to Completeness

**D** erhaps it's appropriate in this short review to recollect that many of us in the CNTHA had the good fortune to serve in a period, the 1950s to the 1970s, when the RCN was in a state of major, varied and extensive technical creation and innovation. This is not to say that there have not been subsequent technical achievements, but in looking back it seems that finances and continued managerial reorganization were not, then, quite so dominant. Thus, whether or not the recollections are entirely clear in our minds, we were privileged to have served in this expansive time and could do well by recalling and recording those events or activities to which we contributed, to whatever extent.

In this regard, Dr. Sarty's article in the last newsletter indicates (and probably only as an initial review) the very wide range of questions that need to be considered and assessed for their overall impact. In this situation, there can be a wide-ranging trawl for "bottom up" contributions to the historical record. Where a particular situation, event, or activity has remained in your memory, this should be contributed in whatever form is most convenient for you.

However, it has to be recognized that this sort of endeavour, essential and valuable though it may be, produces a mass of "unsorted geological till." Or, as was once said of a somewhat loquacious Chief of Naval Technical Services, "Listening to him is like mining low-grade ore. There is an occasional nugget, but you have to go through a great deal to get there."

Accordingly, there is probably need for some measure of "top down" approach. Our collection of contributions (some 300, or so) relates to a wide range of activities, but there are still many areas of activity that are not covered, important though they may be in the overall picture. And this is where the Subject Area Coordinator (SAC) comes in. There are individuals among us who were senior enough, or had extensive enough relevant experience to give them a general understanding of a specific range of our endeavours, e.g. marine engineering, naval construction, power electrics, sonar, radar or whatever. As Subject Area Coordinators, these individuals could review what is currently available in our collection and discern where particular aspects have not been covered adequately, or at all. Once aware of the gaps, we could approach the appropriate people to fill in the details. This is not always an easy task. That is the key understatement of this piece. Individuals are often reluctant to engage in writing. There probably would need to be an approach to interviewing, an art which is not as straightforward as it might appear. Indeed, it will probably be desirable to review this procedure in a subsequent newsletter. Suffice it to say, for the present, that it is important for SACs to use their own knowledge and experience to:

- a) identify gaps in the Collection;
- b) search out individuals who might be well acquainted with material in those gaps; and
- c) formulate specific questions that would provide the information required.

The SAC has an important role to play in ensuring that we tap the resources and recollections of as wide a group of informed participants as possible. How about volunteering for this task?

Sam Davis

#### **The Collection**

O ur current data bank consists of about 300 items, of which 60 or so have been written especially for the project. The remainder have been published previously in technical journals or presented as technical papers. The topics range far and wide, from the first use of aluminum superstructure to the effect of the Mainguy Report on technical training. The principal category breakdown involves ships, technical disciplines, organization, management, personnel and training.

Experience has shown that anecdotal information concerning a given subject from more than a single source tends to be complementary rather than contradictory. With this in mind, we urge all readers to jot down memories of their naval technical experiences with either routine work or specific projects. A "one pager" is often as useful as a full-fledged treatise because it may contain that missing "gem."

We have received little or no data referring to the conversion of the original Tribal-class destroyers from their WWII configuration to their arrangement in the Korean conflict, nor do we know much about the conversions of *Sioux* and *Algonquin* as prototypes for the original *St. Laurent* class. Another "bare cupboard" is the use of *Ontario* and *Quebec* as training cruisers, as well as the use of *Crusader* as an experimental/trial vehicle after her Korean sojourn. These examples are not meant to imply that only these data are needed. It is really impossible to have too much personal experience data. All the technical description in the world will not give an insight as to how we achieved technical progress, or of the pitfalls and problems encountered along the way.

The article on Project Mermaid in this issue of the *Maritime Engineering Journal* illustrates the type of data sorely needed for the record. It is not the stuff of technical manuals but the real life accomplishments of our naval personnel which will, in the long run, tell our grandchildren who we were and what we did.

Phil Munro

#### Fallen Comrade

The naval community was saddened to learn of the death of Commodore (ret'd) Tom W. Maxwell on Wednesday 18 June 1997 at Montreal General Hospital, from complications following open heart surgery. He was 73. Tom who was born in Ottawa, served in the RCNVR during World War II and later studied naval architecture at Glasgow University. He had a distinguished career in the RCN and following his retirement entered into private practice. His last naval involvement was with the Canadian Patrol Frigate Project. Tom is survived by his wife Olga (nee Korlowski) and sister Emily Hauch of London, Ontario. Tom contributed to the CNTHA Collection with reminiscences of the hydrofoil, *Labrador*, NCDO, *Quest*, AORs, RAS gear and the GP Frigate. He also wrote about R&D in a humorous story entitled "The Saga of the Plastic Toilets," item 269 in our collection. We will miss Tom. Our sympathies go out to family and friends.

# How to Access the Collection

A prime purpose of the Collection is to make its information available to researchers and casual readers alike. So how can you get to read some of it? Good question!

For the moment, there is only one copy of the Collection, situated at the Directorate of History and Heritage located at 2429 Holly Lane (near the intersection of Heron and Walkley Roads) in Ottawa. DHH is open to the public every Tuesday and Wednesday from 0830 till 1630. Staff are on hand to retrieve the information you request and to help in any way. Xerox facilities are available on a self-service basis. Access to the building requires a visitor's pass, easily obtained from the commissionaire at the front door.

Copies of the index to the Collection may be obtained by writing to DHH.

Drop by. Give us a look.

#### **Did You Know That?**

he plotting table and gyro tape repeater developed for the St. Laurent class received much favourable comment during the evaluation of St Laurent by the US Navy in early 1956. They described the plotting table as being "superior to any presently installed in US ships." The gyro tape repeaters were also praised for their easy readability from a distance and freedom from parallax errors. These developments, initiated by the Electrical Engineer-in-Chief, took advantage of the Sperry (Montreal) gyro retransmission unit, which gave multiple synchro outputs using a magnetic amplifier. The plotting table, with the dual target plot attachment provided as an integral part of the projection head, was originally specified as using magnetic amplifiers. However, the developer, Marsland Engineering, proposed the use of transistor amplifiers, then

(1955) completely novel. The table was the first piece of RCN equipment to employ transistors, and was probably the first such equipment to go to sea in any navy in the world. The initial production run was for about 150 tables. Some 500 tables were ultimately produced, including sizeable numbers for the USN, a very significant accomplishment for a Canadian manufacturer. Naval personnel closely associated with the development were Lt (later Cdr) J. A. Strachon and Cdr R. R. Hind.

Sources: "An Engineer's Outline of RCN History: Part II," Captain(N) J. H. W. Knox, in *The RCN in Retrospect*, 1910-1968, ed. J. A. Boutilier, UBC Press, 1982; National Archives, RG 24, 83-4/167, file 1680 50 OP/S372/ASW, "Interim Report on Project OP/S372/ASW -- Limited Evaluation of ASW Capabilities of HMCS *St Laurent*," Commander Operational Development Force (USN), July 1956; CNTHA Collection, DHH 93/110, recollections of J. A. Strachon (item 228) and R. R. Hind (item 242).

#### About the CNTHA

The Canadian Naval Technical History Association is a voluntary organization working in support of the Directorate of History and Heritage to preserve our naval technical history. It is directed by a committee whose members are:

- RAdm (ret'd) M.T. Saker (Chairman)
- Dr. S.M. Davis, RAdm (ret'd)
- Dr. W.A.B. Douglas, Director General History (ret'd)
- Cmdre F.W. Gibson, Director General Maritime Equipment Program Management
- Capt(N) (ret'd) R.G. Monteith
- LCdr (ret'd) P.R. Munro (Executive Director)
- Dr. H.W. Smith, Cdr (ret'd), (Research Director)
- Dr. R. Sarty, Senior Historian (DHH liaison)
- Mr. R.A. Spittall (DGMEPM liaison)
- Cdr (ret'd) P.D.C. Barnhouse
- Capt(N) (ret'd) J.G. Dean (Ottawa Coordinator)
- Mr Brian McCullough (Maritime Engineering Journal liaison)
- Mr. P.D.C. Barnhouse
- Ms. Gabrielle Nishiguchi, DHH (secretary)

Membership is open to anyone interested in Canadian naval technical history. The CNTHA newsletter and a copy of the Maritime Engineering Journal are being sent to a list of serving and retired officers and civilian personnel compiled from various sources by the secretary. Names may be added to or removed from the mailing list by contacting DHH.

#### Coming Events

The West Coast Naval Support Seminar will be held on **9-10 September 1997** in Esquimalt.

For details, please contact

Cdr Tony Cond, (250) 363-2000, ext. 2038.

## We'd love to hear from you...

If you have information, documents or questions you'd like to pass along to the Canadian Naval Technical History Association, please contact:

Roger Sarty, Senior Historian, Directorate of History and Heritage, NDHQ, MGen George R. Pearkes Bldg., Ottawa, Canada K1A 0K2 Tel.: (613) 998-7045 Fax: (613) 990-8579

We look forward to hearing from you.

The deadline for contributions for the next newsletter is **Sept.30**, **1997**.