



Oral History – Written submission

Interview Control Number: 6-W01 Stephens

Contributor: Vice Admiral R. St-G Stephens (Ret'd)

Written Submission Number: 6-W01
Vice Admiral R. St-G Stephens

[**Note:** The original faxed response did not print well and it was decided to re-enter the information provided. Every effort has been made to preserve the original format and content. Webmaster]

January 2006

1. GENERAL

Keynote address to the Canadian Naval Historical Conference on 22 September, 2005.

- a) In your opinion which of the many events/issues/projects etc. mentioned in the paper (both your father's and yours) merit further research bearing in mind the objectives of both CNTHA and CANDIB?
- b) There was the strong but inevitable link with the Royal Navy. Did your father ever set down or talk of the 1941/42 Battle of the Atlantic crisis?
- c) Did your father ever set down or reveal his views of the relationship of the Defence Production Department with DND?
- d) You were one of the few Technical Officers to hold a "Command" appointment in Winnipeg. It was probably a consequence of unification of the three services. What are your thoughts on that turbulent period?

General

a) In a sense I think you have touched on many of them yourself by posing many questions in what follows. Overall perhaps the RCN were asked or attempted to do too much, considering the lack of experienced personnel and the inability to acquire the necessary equipment to modernize the Canadian ships or the time in harbour to do it.

Critical analysis after the event is much easier than resolving endless problems occurring at the time, and perhaps we need to balance the books by describing some of our successes as well as our failures.

After all it was Churchill who remarked that the Battle of the Atlantic could never have been won without the significant support and effort of the RCN.

b) Link with the RN

There was a very close link between my father as CNEC and the British Admiralty Technical Mission in Ottawa – especially under R/A Sebastian. He felt considerable frustration with the continual criticism from the RN regarding the lack of modernization of RCN ships – much of it caused by the RN unwillingness to provide weapon equipment to ships visiting Liverpool despite their agreement to carry out A&As whilst they were in harbour after convoy duty. Also the report of the AASWSB infuriated him and caused him to write to CNS suggesting RCN should withdraw their ships from operation to provide time for modernization (on pages 14-15 of my speech to Naval Conference – I maybe able to provide more details after consulting my draft biography of my father).

He would obviously have discussed all these problems with First Sea Lord RN EinC when he visited UK in 1943 but this was basically a post mortem on his main task here was to discuss future acquisition of ships from British for post war RCN.

c) Yes to some degree through official correspondence. I will need to research this further as I know I have discussed this to some extent in my father's draft biography.

d) I think you are correct up to a point. My two predecessors as Commodore of Training Command were General Carr (Air Force) and General Milroy (Army). The Navy's turn? Don't know but I was very frustrated at the time because of the new organization at the H/Q where no technical officer (engineer) had been given a senior position in the hierarchy. (I was a Rear Admiral by this time and running ACIHA – the Information Handling Agency.) I went to see Harry Porter (who was the Comptroller) and indicated I was thinking seriously of packing it in. I think he spoke to Doug Boyle (who was CNP). They spoke to Dextrase (CDS) and I was offered Training Command.

I was both surprised and delighted as a non executive officer had never held Command in the Canadian Forces. I always had an interest in Personnel matters and in Training – found the job both challenging and of great interest and thoroughly enjoyed my three years there.

As to Unification I always thought it was a step too far. Undoubtedly we needed better co-ordination and co-operation between the three services – particularly related to budget allocation – and advantageous in logistics and personnel terms and conditions. But INTEGRATION would have sufficed and proved more effective without the necessity of rank restructuring or a single uniform much of which destroyed “esprit de corps” and was divisive.

I thought the way Landymore was treated was a disgrace and unnecessary as he deserved better.

I never hid my views but there was little opportunity to express them. I never seriously considered resigning to a large degree based on Admiral Brodeur (Nigel's father) advice that the only way to fight unification was to stay in and attempt to prove there was a better way. Whether that has been accomplished and to what degree is open to discussion and different points of view.

January 2006

2. CNTHA

- a) Please list the specific ship projects with which you were associated along with the position you held at the time.
- b) Of these projects listed in a) above which in your view were:
 - Successes and why
 - Failures and why
- c) You were associated with the first investigation of the purchase of SSN in the 1950s. What is your appreciation of the merits/demerits of that proposition at that time. What was the USN view?
- d) What are your views on the relationship between DDP and DND?
- e) What are your views on the role of the senior Civil Servants within DND?
- f) You were involved in the early days of Information Technology within DND. In retrospect was it timely, effective and implemented wisely?
- g) You were probably aware of the inevitable jockeying for positions of influence between the technical branches in the Navy. How was power exercised within the technical world and how would you describe its influence on policy decision makers ie the Naval Staff?

CNTHA

a) DDE and St. Laurent Class 1951-54

Minesweeper – construction

Frigate – conversion

Engineer in Chief department – Boiler Pipe and Valve Section

Provider – Replenishment Ship 1963

Director Mechanical and Electrical Engineering

b) Successes

The whole St. Laurent program was a great success based on a design by Cmdre Baker the Constructor in Chief (on loan from the RN)

It was the largest destroyer program ever undertaken by the RCN and allowed significant development of Canadian shipyards and Canadian industry.

From an engineering point of view it introduced greatly advanced steam conditions in the boilers and turbines, and saw the introduction of hardened and ground gearing (Maag) requiring the establishment of the largest Maag gear manufacturing facility in the world. It also allowed the substitution of British electrics by North American design (mostly USN) and provided an opportunity for many Canadian inventions.

Indirectly it also led to the establishment of NEDIT and NETE.

In the case of Provider it allowed the development of a completely new system for the replenishment of ships at sea. I might add not without its many teething problems which were finally resolved.

Not associated with the above but in the same time frame DMEE staff was much involved in the design and development of the bear trap and haul down device for helicopters.

Failures

I'd like to believe NONE but many of our efforts were fraught with difficulties – mostly due to inexperience on part of the Navy as well and particularly Industry – often resulting in overrun of both time and money.

c) SSN

In some senses we should never have started because it became evident that the Canadian government was not prepared to face up to the cost.

I tried unsuccessfully to get the RCN included as a junior partner with the RN development of modern submarines but this became impossible once the RN decided to adopt the American PWR (Pressured Water Reactor) as the USN had a condition that the RN could not divulge or work with other parties.

The NSST which took them one year and a team of 7 or 8 people was a very successful study and we came to the conclusion that the boat and much of the machinery (but not the reactor) could be produced in Canada. Most of the weapon system would have to have come from US.

Study was based on the Thresher Class with an estimated cost of \$70 million a boat.

In my view it was a good idea to acquire nuclear submarines and would have significantly improved the RCN's A/S/ capability.

I don't think the USN really wanted the Canadians to acquire nuclear boats – presumably for two reasons – they did not wish to see a proliferation of this type of vehicle (only the Soviet Union, the US, British, French had and were acquiring nuclear subs at the time) and secondly Rickover was afraid that if he aided the Canadians he would be forced (expected) to share with others (eg the French).

Not even the fact that he had used facilities at Chalk River to help in research when he was constructing Nautilus convinced him to look kindly on our endeavours. But we had great difficulty at his level of gaining co-operation during the NSST study.

As I have said before I would be pleased to add/amend the history of the SSN saga but only if D/Hist is prepared to let me have copies of what he holds as I have no desire to repeat what already exists.

d) DND/DDP

Some good, some bad – depended a great deal on the level of which one is speaking. In the early days (1950s) during the DDE St. Laurent program the working staff lacked experience although they were responsible for all purchasing. Many of them had little or no knowledge of naval requirements. For example one day I had one of their staff call and ask what was an anchor as they had to order some. Gradually their staffs became more efficient but they poached many of our good middle management engineers at the EN3 level by offering them promotion to at least one level higher. This had the effect of DND losing good engineers who were hard to find and turning them into purchasing officers who with their background often tended to second guess the DND staff.

I never had much dealing with the DDP hierarchy but by and large the co-ordination and co-operation was probably better. I always felt DND could have done better by being their own purchasing agents.

e) Senior Civil Servants

Here again it depends on the level of which we speak. We had some very good engineers, mechanical and electrical, in the Technical Departments and we should remember all NEDIT staff were civilian (except the Directors) and very professional – some excellent eg Don Nicholson.

At the more senior level they varied a great deal but the good ones were good – Lou Crutchlow, Bob McGregor in his own way – with great sense of continuity and vast experience but some, who shall remain nameless, I fell afoul of when I was more senior.

f) IT

Yes I think it was timely and the right way to go in integrating both staff and program. There were numerous small groupings working on their own and consolidation permitted more effective management, as well as design of program. One should remember there were no desktop PCs at the time and all systems were based on punched cards and large (and expensive) computers. So centralization at the time made sense. Also, as Assistant Chief of Defence Staff for Information Handling reporting direct to the CDS gave us a lot of clout and authority – much to the chagrin of the Comptroller and Deputy Minister.

g) Technical Branch Organization

As I recall it was an ever changing scene. When I first went to Ottawa in 1951 there was the three departments of EinC, EEC and NCC under a CNTS – successor to my father's old role of CNEC. CNTS was always a Marine Engineer or Electrical, never a Constructor as they were not senior enough or on loan from RN or other reasons.

This seemed to work reasonably well and depended a lot on the individual CNTS. If I remember correctly there was usually an assistant A/CNTS who did a lot of the detail work and was usually the opposite stripe to CNTS – Engineer/Electrical or Electrical Engineer.

By the time I was DMEE in the 1960s it had been reorganized again. DG Ships existed with DMEE (as you remember) responsible for mechanical and electrical engineering (power) and another Division for Ship Design. Another department looked after Electronics. I think included Weapons, and Air Engineering another department.

In the early days (1950s) had a lot of argy bargy with Electrical Group vis-à-vis EinC – mostly occasioned by the fact they had gone practically totally USN and we were still oriented to British designs.

Of course all changed again with Unification. A Chief of Technical Services (3 star level) existed at the HQ and a Command, Material Command (2 star) looked after all Maintenance and Logistics. By 1970 Material Command was disbanded and subsumed largely into CTS. Then came merging of A/DMs with a Deputy Civilian/Military, which fortunately I never became part of.

By and large, fairly good relations between Naval Staff and Technical Branches in my time.

3. CANDIB

- a) The role of the Naval Dockyards. In your view what was the relationship between the Naval Yards and the commercial enterprises?
- b) In your view which commercial shipyard dominated the scene and why?
- c) Canada's Navy attempted to support R&D in specific fields – one example being sonar. Do you feel that a similar objective should be applied today?
- d) On your view is there a basic rationale that if Canada intends to maintain a Navy it should also plan to have a shipbuilding industry?
- e) Your father was made a special consultant to the Minister of National Defence shortly after WWII. What was his role in this position and what results flowed from his endeavours?

CANDIB

a) When I was Manager Ship Repair and later Commander of Halifax Dockyard, we had a Contracts Officer on the staff of MSR who oversaw all maintenance and repair carried out by Commercial Yards. This did not replace Overseeing Staffs at the shipyards but they were responsible to him and not Ottawa which was H/Q for ship construction. This applied to all shipyards on the Coast and in the St. Lawrence river.

The Contracts Officer would ensure the terms of the Contract were met and if I remember correctly he would chair the "acceptance" conference at the end of a refit. Worked quite satisfactorily – Contracts Officer was a Commander.

Only on one occasion during my tenure was this rule not adhered to. HQ arbitrarily decided that the refit of Bonaventure in the mid 60s should come under HQ jurisdiction. I argued vigorously against this, but in the end was glad I lost the argument because you know the outcome of this disastrous episode leading, I believe, to so much blame being levelled against the PNO.

I don't know, but I presume, a similar arrangement for commercial contracts pertained on the West Coast.

b) In the 1950s Canadian Vickers dominated the scene because they were the lead yard for the DDE (St. Laurent) program. Why? Don't know. Perhaps it was advanced as being fairly central

considering the program was distributed over all of Canada from Halifax to Victoria. Also close to NSHQ with whom there was continual interface, and Central Drawing Office was established there.

I think Marine Shipyards in Sorel were lead for Frigate Conversion and Minesweepers.

Davies were lead for the Replenishment ships. Of course, all this changed as DND (H/Q) gave contractors more and more control of design eg St. John Shipbuilding for most current ships.

c) Yes. Only in this way can you ensure best naval talent is brought to bear, and also encourage young naval officers to join Navy and stay in with a fully professional and engineering career.

d) No question. No argument. Goes together like a "horse and carriage".

e) Special Adviser to the Minister of National Defence.

Shortly after the cessation of hostilities a Special Committee was set up under the joint sponsorship of the Minister of National Defence (Abbots) and the Minister of Reconstruction and Supply (Howe). Its membership was to include President of Wartime shipping (Carswell), Manager of Dartmouth Yard of Halships (Patterson), Deputy MND (Mills) for Naval Services and CNEC (Stephens) now on retirement leave.

They were to study the role of Naval Dockyards in peace and war, and make recommendations concerning their organization and management. Much of their work was based on a paper produced by the former CNEC (copy attached).

The above Committee made the following recommendations:

1. The essentiality of the Naval Dockyards as bases for servicing the Fleet.
2. These facilities should be maintained and operated as part of the Naval Services both in peace and war.
3. The commercial yards were not organized to provide these facilities such as special equipment and trained personnel.
4. The role of the Commanding Officer of the Coast and that of the Superintendent of the Dockyard should be separated.
5. It was their considered opinion that a civilian manager or superintendent would not be successful in obtaining the desired results, and that the superintendents should be the best qualified and experienced Naval Officers irrespective of Branch and proposed Captain Porteous and Captain Davy for the task.
6. The function of the Dockyards should embrace Supply, civilian Personnel, Accountancy, Master Attendant, Civil Engineering, Naval Armament and Three Departments – Engineering, Naval Construction and Electrical Engineering.
7. The establishment of a temporary full time civilian special advisor to the MND for "Naval service or Repair and Maintenance Facilities" to ensure "that proper reorganization and economy is successfully effected and kept under constant detached review". The Special Adviser was to have no Executive Authority and his responsibilities be limited to advising the MND and maintaining close liaison with the Naval repair facilities and with comparable commercial organizations and practices.
8. A small permanent Board should be appointed with membership of one civilian with background in ship repair, the Naval officer at NDHQ responsible for Naval Dockyards the DM of Naval Services and the Special Advisor.

The committee's report and recommendations were fully accepted by the Government and the Naval Service and Stephens was appointed as Special Advisor.

The first report was predicated solely on the East Coast situation so the Committee felt compelled to examine the West Coast situation as well. This did not change in any sense the conclusions or recommendations, but did recognize the major differences on the two coasts. In Halifax the problem was primarily one of drastic reduction in the work force as the Navy moved from war to peace, whereas on the West Coast the major problems involved the improvement of the infrastructure as the fleet was now evenly distributed between the two coasts. Also there was a recognition for greater training of civilian employees due to insufficient availability of naval technicians with a decision to support an improved apprenticeship scheme.

Stephens mandate as Special Advisor was wide and diverse and he was asked to explore and investigate varied aspects of Dockyard management, employment, training, inspection to name a few either by government request or on his own volition.

He was asked to consider the possibilities of the two Dockyards being made crown companies. He concluded that whilst this might relieve the Naval service of problems associated with civilian labour and political interference, it could only be done by "the Navy dodging responsibility at the expense of the services and the security of the nation".

A study of the utilization of the Dockyards in all types of commercial work of manufacturing of agricultural tools, small forgings, metal ductings etc and the repair of electrical appliances and fixtures was undertaken. This was in an endeavour to use the large work force and skilled talent available, at a time when industry was not geared up for peacetime production. The repair of aero engines was also considered but by and large none of these proposals was adopted.

He was asked to look at the feasibility of the Naval Dockyard being responsible for repair and maintenance of all marine vessels belonging to the Canadian government eg Transport, RCMP, Fisheries etc. This met with some success but a considerable reluctance on the part of several government departments to give up the responsibility.

By this time the MND (Abbott) had moved on to be a Federal Judge and the Minister of Health and Welfare, Brooke Claxton, was to succeed him. Brooke Claxton readily accepted Stephens as his Special Advisor and asked him to continue in his role.

Another function requiring urgent review was the re-organization of inspection and quality assurance. A survey team was established known as the Stephens Committee with the Special Advisor as Chairman (1947). The committee was to consist of twelve members – one from each of the three services, DRB, the Minister's Office, the Inspection Board of Canada, Canadian Arsenals and the Canadian Commercial Corporation. After long deliberations it was recommended that a centralized Inspection Services was essential. That it should be a Branch of DND under the administration of the DM but the Naval Overseeing Organization should be preserved and not part of the Inspection Service. One other proviso was that should the Head of Inspection Service be a civilian and his deputy should be a Military Officer. This new organization was not to come into being until 1949, with Gordon Mills the former DM for Naval Affairs becoming Controller General.

One of Stephens last studies was carried out at his own volition. It concerned the lack of any pension scheme for Dockyard workers. Stephens was to propose a compulsory scheme for all employees, with employer contributing to the pension fund. With persuasion and support from the Minister a superannuation scheme was finally introduced before his departure.

By 1952 my father expressed his desire to leave public service and he was reluctantly released by the Minister who spoke highly of his endeavours.