



Oral History Interview Transcript

Interview Control Number: 6-C9

Interviewee: Frank L. Porter

Interviewers: Tony Thatcher and Don Wilson

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Transcribed by: S. Johnston

Transcription of Interview 6-C9
Interviewee L. Frank Porter
Interviewed 19 September 2006
By Tony Thatcher and Don Wilson

INTERVIEWER: This is a second CANDIB Oral History Project Interview with Frank Porter that was recorded at Ottawa on 19 September 2006. Frank was interviewed by Tony Thatcher and Don Wilson. The participants have signed the copyright release form. This is still part of tape one side one.

The subject of this interview is submarine refits undertaken by the naval dockyard in Halifax during the period 1975 to 1978. The design authority for submarine refits in the National Defence Headquarters during the period 1979 to 1984. Now Frank has already described his career in the previous interview but perhaps Frank I could ask you to describe your responsibilities regarding the submarine refits in these positions.

PORTER: When the submarines were brought over here and they came up for refit an organization was set up in Halifax dockyard which by then was called the Ship Repair Unit Atlantic. A special hydro lift had been put in to lift the submarines, a special..... synchrolift - sorry, had been put in and a shelter built and the submarines could then be transferred into the shelter so that the inclement weather that you get in Halifax in the winter didn't affect the refit. Special workshops were put aside for the submarine equipment and special quality assurance levels were instituted. Some of the work force had to be trained with specialized welding because the hull steel is HY80 which requires special treatment. The treatment was actually specified by NDHQ National Defence Headquarters Ottawa. Then the grade A welders were trained to this standard. To meet the dates for the submarines in refit a special project organization was set up. I came over here on exchange and was in the project organization. The majority of staff were SRUA civilians with two or three military officers who were in the chain of command.

INTERVIEWER: And Ship Repair Unit Atlantic stands for SRUA.

PORTER: SRUA stands for Ship Repair Unit Atlantic yes. A lot of the work was undertaken there because, as I say, it required specialized skills. But there was a lot of support from the area around. We had to place contracts with people like Halifax Shipyard for certain machining to do with the A brackets which had an asbestos-containing-material in them. So it was undertaken under special conditions which we didn't feel was worthwhile setting up in the shipyard [Dockyard]. And a lot of the other equipments including ordinary hull valves were obtained from the United Kingdom which required the stores organization to have lots of contact with the suppliers in the UK and with the Ministry of Defence. I have to say that, in fact, the CF stores support from there in SRU(A) was tremendous. The ones I particularly remember were the Captain (N), Russ Butler, and a civilian stores officer, Marg Dobson, who I believe got some sort of commendation for her work with this.

Also we did get a lot of support from people like the military police. There was one item that we had to have made in the United Kingdom, which was a forward hydroplanes cross shaft made of a particular steel that had to be forged and machined in the UK and it had to be flown in to meet our dates. It arrived at CFB SHEARWATER in a Hercules from the Air Transport Command, was met by the military police who passed it straight through the customs, drove it to the dockyard where we lifted it straight out of the container and put it into the submarine and we were able to meet our dates.

One of the things that impressed me was the interest of the MARCOM, Maritime Commander at that time, who was Admiral Boyle, took in the submarine refit. He was most insistent that we meet our dates and in the event, we did, but it was a very close shave. ONONDAGA was the one we refitted that time then we took in OKANAGAN. The only thing that I can particularly remember happening at that time was that the press were there to see us roll the submarine out of the shelter on the synchrolift and the propellers were secret and they weren't covered when we rolled it out. So we had to speak to the television people, hurriedly, to get them to remove that part from the film before they showed it on local television.

But the synchrolift itself was a tremendous asset to the whole of the dockyard because, when it was purchased, we had it to lift up to 6000 Tonnes, although SRUA is not supposed to refit surface ships you could actually lift a 280 in an emergency.

WILSON: We lifted NIPIGON once I recall.

PORTER: We lifted NIPIGON. The submarine battery shop was set up there and they refitted the batteries and also they fitted new batteries which we obtained from Germany which lasted longer than the old original ones. Most of the work there was done by the Ship Repair Unit with qualified Quality Assurance players from the United Kingdom. We did look at supplying them from Canadian sources but the costs would have been astronomical to get that sort of special standards set up in workshops ashore.

INTERVIEWER: Was any of the work subcontracted to industry? You did mention Halifax Shipyard.

PORTER: Yes Halifax Shipyards, they did work for us. They also docked the submarines for us on their marine railway for maintenance when we required, on the Dartmouth slips. Another thing I recall is that we trained a lot of welders up to Grade A welding standard and Halifax Shipyard offered them more money because they were building oil rigs at the time and they needed Grade A welders. But that was assistance to Halifax industry.

INTERVIEWER: Frank perhaps you tell us about some of your experiences in DMEM 5?

PORTER: DMEM 5 was a very interesting organization in fact because it was responsible for all the various ship's support that was not stores but we were responsible for saying what was required in the way of spares with refit planning, refit dates and coordination. We had to work with each other to get DSS and all the other organizations to come together to really complete a plan for a refit.

One of the groups was responsible for auxiliary ships. Another one was responsible for destroyers and we were responsible for the submarines, DMEM 5-5. We had to deal through our boss with the other organizations in NDHQ and the ones that I particularly remember were DMCS which looked after the weapons systems for us. We put together an update for the submarines called SOUP, Submarine Operational Update [Project] with six major changes. DMCS was responsible for the periscope and the torpedo control systems.

DMES was responsible for all the standards and the special work that was going on. A particular one I remember was Mr. Marc Lamarche who we went to with all our welding problems. He was absolutely first class in responding. He had a young engineer there... nothing was too much for him. He would fly down to Halifax. He would set up with the Halifax Dockyard Laboratory, which I forgot to mention, which was very, very well involved because we had to have special organizations to do material checks on the submarine, material checks on the submarine systems and also to do post work assessments to make sure that the submarine was safe to dive.

The organization was also responsible for coming up with estimates of how much we would need

and dealing with foreign governments, in this case the UK. For that I would have to say that the United Kingdom was very supportive of our requirements and also very helpful. They were very interested in our operational update in fact. I think they were trying to pick our brains a bit on this one.

We also, through DMEM 5, dealt with the Australians who were doing a similar thing with SWUP which was a Submarine Weapon Update [Project]. Now the six items they were changing were slightly different than the six items we were changing so we were able to negotiate exchanges of equipment. We were not changing the sonar they were putting on a proprietary sonar, we were removing our telecommunications mast and they weren't changing theirs so, in fact, we arranged exchanges on this. Also on the weapons control systems we were able to have a common system there because they were using the American Mk 48s and so were we. So I was there [DMEM 5] for four years and I found it a very, very interesting and worthwhile job. And I was so glad I came.

INTERVIEWER: Frank could I ask you just to expand on the submarine industrial base aspects?

PORTER: The industrial base was really in NDHQ and SRUA because a lot of it was very specialist and we had to train people to meet the requirements. I mentioned the dockyard laboratory they were very, very important in all the metallurgical tests and things that we had to do. The specialist equipments a lot of them were classified, so we had to have people who were cleared to certain levels before they could work on them, so this was very difficult to pass out to local workshops. The other thing was the quality assurance requirements, the quality control had to be a very high standard. In fact just to show this the nuts and bolts that are on the pipelines and anything subject to full diving pressure all have to have the Quality Assurance stamp on them.

One of the things that we did do is we set up a PERT [Planning Evaluation and Review Technique] planning organization using the computer at MT&T [Maritime Telegraph & Telephone] up the road and each week we would update our plan from the information we got back from the coal face and one of the dockyard officers would then take a whole keycard change, we did our own punch cards there in the planning office, up to the computer at MT&T. It would all be put through and then we would have another 7 feet of plan returned. This actually was of keen interest both at NDHQ and strangely enough to industry because we were able to forecast things like supply requirements, manpower requirements and movements and all these sort of things affected the timing of the refit, so it was most important to keep that up to date.

The planning organization in the dockyard was geared to the workshops and to the number of people they had. So we had to go and negotiate with the people who determined the various trades to see who we could have. This was OK except that we couldn't use a number of them because they didn't have the skill requirements that we required. But everybody was very, very helpful in the Ship Repair Unit and that allowed us to meet the date that we had set and which had been to by the Maritime Commander.

INTERVIEWER: Excellent I guess it was a very, very complex subject to put to a PERT diagram and it must have been a good testament to the planning to department.

PORTER: It was I mentioned a friend, a person who was instrumental in getting this together, Gerry Smuck [LCdr] who was in SRU planning and, for the first two or three months we did have some problem areas. But getting around the table we were able to sort things out. We had these loops that would turn up where you would find that the job you had done was turning up again or had suddenly disappeared off the grid. After the first few months it ran fairly smoothly.

WILSON: My recollection was that it was particularly difficult when the fleet all came home from

an operation and needed some running repairs in the ship repair unit and no doubt it was threatening the work force that was busy working on the submarine. I know you had to do some re-planning occasionally when you lost the resources that you were counting on and this was a difficult challenge that the SRU had to face in order to attempt to allow you to maintain your timeline, without having the Admiral jumping up and down our throats saying these destroyers need to be remembered, you need to look after that as well.

PORTER: This is very true and it was at those times that we were able to use the two percent shift work [overtime] that the Admiral allowed us. Which, quite honestly, the workmen quite enjoyed because it was extra money - which the Admiral didn't enjoy. But there were periods of high activity in SRUA. Especially the one I remember when STANAVFORLANT came in and we then, in fact the submarine project organization a couple of times, took over the planning for the support of STANAVFORLANT which was always very pleasant because a): the workmen enjoyed working on the other ships, but also [b]) they were always very agreeable when we went to inspect them at lunch time.

INTERVIEWER: You talked to the strong support you had from SRUA were there other organizations you mentioned NDHQ, United Kingdom at one point.

PORTER: Well it was NDHQ mainly but there was the Supply and Services which we did mention I believe and we always had tremendous support. That was not only from the coal face but also from NDHQ because a lot of this equipment was one-off's and were not cheap so that we were quite a bit of added expense to the Supply and Services organization. We would put in our bids each year and generally they were filled.

INTERVIEWER: Thank you very much Frank. That gives us an excellent insight into both TRUMP and submarine refit business, most interesting.

This completes the interview

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