

CSS ACADIA – 100TH BIRTHDAY

Presented to the Halifax Master Mariners Association

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Good afternoon, ladies and gentlemen.

It is my honour and privilege to have been asked to speak to you this afternoon as part of World Hydrography Day and to commemorate the 100th birthday of CSS Acadia. I sailed on the Acadia as a newly recruited hydrographer in 1966 and celebrated my 19th birthday on board.

I'll start off with a very brief history of the Acadia.

It was in July of 1913 that the newly built Acadia arrived in Halifax from the shipyards of Swan, Hunter and Wigham Richardson at Newcastle-upon-Tyne , England, and one month later she headed north for Hudson Strait to commence her long and illustrious hydrographic surveying career. In her 56 years of charting, the Acadia had a noble and splendid record of service, which covered all of the waters of Canada's Atlantic Seaboard, from the western shore of Hudson Bay to the Saguenay River in Quebec, and the coastal waters of all of the Atlantic Provinces, including the Bay of Fundy, Gulf of St. Lawrence, and, once Newfoundland joined Confederation in 1949, the waters of that province as well.

Her activities, however, were not exclusively confined to hydrographic work.

In wartime, she served her country as a patrol vessel from 1916 to 1919 (which included surviving the Halifax explosion), and as a training vessel from 1939 to 1945.

In addition, although she was not built as an icebreaker, she was at times assigned to icebreaking duties, including the winter of 1922-23 during which she had to break through 18 inches of ice in Bedford Basin on a morning that was so cold that the liquid in the compass was frozen and another had to be substituted before leaving the wharf.

The Acadia can also proudly claim to have been present at the birth of Canadian oceanography. In 1914-15, she occupied 105 oceanographic stations over the Scotian Shelf and Grand Banks as part of a herring fishery study. She did additional oceanographic work during 1929-31 in Hudson Bay and Strait, and again from 1949-59 en route to her survey areas. One record which the Acadia is likely to hold for many years is the longest length of time over which one ship has occupied stations – 44 years.

Now, I would like to relate some of the rescues she carried out.

Ships, like the Acadia, working in remote areas of this vast country, are often called upon to render assistance. On her first tour of duty in 1913, the Acadia rescued the crew of 28 from the M/V Alette, whose bow had been stove in by ice near Mansel Island in Hudson Bay. On another occasion, she tracked down a seaplane that had slipped its moorings on the western shore of Hudson Bay.

However, the Acadia's greatest mission of mercy was the evacuation of 600 old men, women, children and stretcher cases in 1961 from areas threatened by forest fires along Newfoundland's northeast coast from Bonavista Bay to Gander Bay. She evacuated people from Musgrave Harbour, Aspen Cove and Ladle Cove. I have seen a few photographs of some of these evacuations, including one of several babies lined-up side-by-side in a row in the bunk of one of the navigating officers.

She was also involved in numerous other mercy missions in areas such as Belle Isle, Labrador, Aspy Bay, Cape Breton, and Port Burwell, Hudson Bay, and several others throughout her work areas.

I'll now try to give you a glimpse of life on board the Acadia.

I'm not going to dwell on the specifics of the ship herself as those are well documented

The Acadia was a coal-burning vessel, and her signature trademark, the plume of black smoke, was often visible long before she appeared above the horizon.

Through the course of her career, she was used as a testing ground for new devices and techniques, starting with the hand lead-line and astronomic methods of position fixing and ranging through to the echo sounder, radar and electronic positioning.

The ship's officers and crew were mainly Maritimers. The last five captains of the Acadia hailed from Newfoundland, with Captain Jack Taylor being the Master when I was on board, while the majority of the crew came from the eastern shore of Nova Scotia with surnames such as Pellerin, Richards, and Avery dominating the lineup for most of their careers.

Regardless of their background, everyone who worked and sailed on the Acadia was devoted to her, which created a happy and homelike atmosphere unlike other any ship I've sailed on.

Life on board the Acadia was always interesting and pleasant. The living quarters for hydrographers were good (those of the hydrographer-in-charge were palatial!), with hot and cold running water in each cabin. I have read that she had her own silverware, dishes and linen, all with the ship's crest, but I don't recall seeing this. Most important of all, she always had a good cook on board. (I recall one evening we were having T-bone steaks for supper and I thought I was on the verge of starvation. My steak was delivered more well-done than I had ordered or cared for, and not realizing that the steaks were always partially pre-cooked, I sent it back for a new order and to be sure that it was rare. To shorten the story, I was eventually delivered a steak that came directly from the refrigerator to the plate!

The ship was always kept spotlessly clean. Rainy days always meant the teak decks would be holy-stoned and the brass polished. Within 24 hours of leaving St' John's after loading coal, the decks would be spotlessly clean again. She could only carry enough coal for 18 days, which meant a trip to St. John's every couple of weeks, and there always seemed to be some sort of minor mechanical delay just before sailing which usually resulted in another evening ashore!

The work day began with the launches going over the side at 8:00 a.m., and returning to the ship at 6:p.m. Following the evening meal, the days sounding operation would be transferred to a collector sheet, and all of the other survey notes, etc., would be annotated and filed.

Leisure time was often spent playing cards, 'jigging' for fish, playing 'ring toss' on deck, or doing laundry. When the opportunity permitted, Captain Taylor would give lessons in seamanship and navigation in the crews' quarters in the evenings, and he would organize dory races between teams to hone their rowing skills. Consequently, the Acadia had a very competent and skilled crew.

The survey seasons normally ran from the first of May to the end of October, with a one week break somewhere in the middle, so separation from home and hearth was a condition of employment and a way of life

Now, with some of the background of the Acadia related to set the tone, I'd like to share with you some of the experiences, conditions, methodology and a few anecdotes from the summer of 1966.

The Acadia was wintered each year in Pictou, NS and brought to the Bedford Institute of Oceanography in the spring to be outfitted for the upcoming field season. The primary reason for leaving her in Pictou during the winter, so I was told, was so that the soot from her stacks wouldn't dirty the office windows.

We sailed from BIO about mid-May for the Magdalen Island in the Gulf of St. Lawrence to do harbour and wharf surveys in Amherst Harbour, conducted Decca calibrations down the west coast of Newfoundland, carried out a small survey in Baie Verte, NL, and then proceeded to Carmanville to continue a previous coastal survey in Sir Charles Hamilton Sound. The ship carried 4 launches: the Baldpate, Harlequin, Gull and Loon, which were equipped with a Kelvin-Hughes MS 26B echo sounder, a Spilsbury-Tindale 2-way radio, and little else. (I should note that we carried Coleman stoves in the launches at that time to cook lunch for the launch crew. That practice ended with the introduction of electronic positioning a few years later as the cooking fumes were deemed bad for the electronic equipment.)

The ship's navigation equipment was mainly a Kelvin-Hughes wet-paper echo sounder, radar, compass and Decca, although I'm not sure if there was a Loran-A receiver on board or not.

I would like to emphasize at that time survey operations were essentially manual and quite labour intensive. Hydrographers had to be seaman, navigators, carpenters, mechanics and labourers, as well as surveyors.

Horizontal control consisted of building a network of intervisible shore stations in sufficient density to accommodate sextant sounding operations. This meant landing ashore with lumber, tools, theodolites, tellurometers, 12-volt car batteries, tripods, etc., carrying all of this on our

backs up to the desired survey point, building the stations, measuring the angles and distances, keeping legible notes, and ensuring all observations were completed to the required accuracies.

Once all the observations had been completed, the computations for positions and elevations began. Again, this was completely manual – no calculators or computers at that time. All computations were completed using logarithms to seven decimal places, and tables of geodetic constants. Needless to say, this could be prone to errors that would propagate, so two hydrographers would work concurrently on the same computations checking their results at each logical step to ensure they had the same results. No wonder such care was taken to monument the stations for future recovery – which also often involved drilling a hole in granite using a star drill and sledge hammer, and mixing the cement to anchor the monument in it.

Vertical control, which primarily meant recording the tides relative to an established or computed elevation, or datum, required the installation of a stilling well with a protective house on top. The tide gauge was a mechanically driven stripchart connected to a system of gears and pulleys. A float on a long wire with a counterweight on the other end hung in the stilling well and over a pulley on the gauge. The tides were thus measured and recorded against time on a paper strip chart in wet ink. The gauge would have to be visited at regular intervals to ensure the clock was wound, the pen was full of ink and that the paper supply was still adequate. The tides collected were then used to reduce the soundings and calculate elevations to a common datum.

Once the horizontal and vertical control had been established, the launch sounding operations could begin. The launch crew consisted of a coxswain to drive the boat, the hydrographer and his second angle taker (usually a junior hydrographer or a summer student) and a seaman to tend the sounder. As this was a sextant sounding operation, it was visibility dependant, which meant there was usually a considerable amount of downtime due to weather. This time was normally spent manually scaling the soundings from the sounding graph and reducing them for tides, again manually. This was a two-man operation as one was always needed to record the notes.

That's enough about surveying, although much more data was recorded about the survey areas from these open survey launches than is now gathered by the exclusive depth measuring operations with multi-beam echo sounder, GPS and computer data processing.

Before I finish, I'd like to share a few anecdotes from the Acadia, both from my own limited memory and from a few retirees that I contacted.

I previously mention Captain Taylor. He was a career sailor and didn't marry until late in life, and settled in Pictou, NS. As a youngster raised in Newfoundland, he had developed a taste for smoked caplin, which has long been considered a staple and delicacy there. On one trip to St' John's for coal, Mrs. Taylor flew over to spend a couple of days with her husband. Captain Taylor decided to treat her to a meal of these fish, prepared by himself, by laying them directly on the hot stove to brown up. Now, these caplin are pickled in brine for some time before they are smoked, so you can imagine the aroma when they come in contact with a hot stove surface, and this odour would spread throughout pretty well the entire ship. Well, Mrs. Taylor was not impressed at all, and informed the Captain that he would never be preparing this delicacy in their house, and in a voice sufficiently loud for many of the ship's compliment to hear.

We carried a few movies on board which were viewed occasionally during our off-hours using a 16-mm projector. In Carmanville, there was a shed on the wharf beside where the Acadia tied up, and on occasion, the projector would be set up on deck and the movies would be projected onto the side of a shed, much like a mini-drive-in theatre. The local citizens would be invited down to the wharf to enjoy the movies with us.

I mentioned previously that we had to build wooden stations for our horizontal control. One of these stations on a point near Carmanville was adjacent to a spot where the local young people would gather to have a bonfire and party in the evening. Of course, the wood from the survey station was an easy source of fuel for the bonfire, so we often had to land ashore on this point and rebuild that station en route to our work area in the morning.

Now, being away from home in relatively isolated circumstance for an extended period, and with few leisure activities, a lot of effort and creativity often went into preventing boredom. On one occasion, myself and the electronic technician were sitting in the wardroom when one of the hydrographers, who shall remain nameless, went through en route to his cabin and made a passing snide remark at us. This would not go unchallenged, so while he was in there with the door closed writing a letter home, we found a newspaper and completely enclosed his doorway with the aid of masking tape. We then proceeded to retaliate to his comments and added considerable more meat to the insults to prod him into coming out of his cabin. The ploy worked and he came charging out through the wall of newsprint. A few years ago, you probably heard

the phrase ‘shock and awe’ used in the news; this aptly describes the look that was on his face, much to our delight! (Sorry, Walter!)

There are countless more stories of the Acadia, her staff and crew, some of which can be told and others which are better off not being related.

The Acadia was decommissioned in 1969 and transferred to the Maritime Museum of the Atlantic in 1981. She was the grand old lady, and the workhorse, of the hydrographic fleet on the East Coast, and everyone who sailed on her has a special spot for her in their memories. In closing, I’d like to quote Burt Smith, the last Hydrographer-in-Charge to sail on the Acadia, who sent me this:

“The Acadia was a very quiet ship with competent and cooperative officers and crew.”

That pretty-well says it all.

Thank you so much for listening to my ramblings, and please enjoy the rest of your afternoon.