SHEARWATER AVIATION MUSEUM FOUNDATION NEWSLETTER

Summer 2008

www.samfoundation.ca


NAVY
245

A wise nation preserves its records, gathers up its muniments, decorates the tombs of its illustrious dead, repairs its great public structures, and fosters national pride and love of country by perpetual references to the sacrificeand glories of the past. **Joseph Howe , 31 August 1871**

Submissions: Text submissions can be either paper, email or electronically produced - Word Perfect (preferred) or Word. **We will format the text for you. No need to centre headings, indent paras etc.**

Graphics are best submitted electronically, they should be 300dpi and a .tif file. A jpg file at 300dpi is acceptable if no compression is used. We will attempt to use any pictures, whatever the format.

NOTE WELL: When sending mail of any kind, newsletter articles, letters, membership renewals, donations etc., please ensure the envelope is addressed correctly to:

Shearwater Aviation Museum Foundation or

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Deadlines for receiving submissions are:

Spring	20 February
Summer	20 June
Winter	15 October

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Photos are provided by several sources: DND, SAM Archives, 12 Wing Imaging, SAMF website and those sent in with individual submissions.

Cover Photo: HMCS Labrador, fondly nicknamed 'Queen of the Ice,' the RCN's first Arctic patrol vessel, is Commissioned. The twenty million dollar ship was a floating scientific laboratory designed to incorporate the latest ice breaking technology. The following November she would enter Halifax Harbour, via the Panama Canal, becoming the first ship to circumnavigate the North American continent. Her accomplishments would go on to include being first to circumnavigate Somerset Island, to chart a safe Northwest Passage for deep draught ships through Bell to Straight, between Boothia Peninsula and Somerset Island and completed Canada's first, full scale survey of ice conditions in the Gulf of St. Lawrence. *Credit: DND*

From the Curator's Desk

As I write to you, the wheels of change are turning, and churning in our case. Major construction is being done right outside our door, with the complete upgrade of pipes and other underground services on Bonaventure Street. The wooden-staved pipes are so old the contractors want to give them to the museum! The construction has blocked our parking lot, but group visits and events are thus far keeping our numbers up, especially graduation parades and upcoming anniversary celebrations over the summer.

We're very proud of our maintenance crews; the HUP team has the project just about complete, and with some good luck and speedy production, we'll have windows in our Piasecki later this summer. As I reported in the last issue, the paint is finished, decals applied and interior cleaned and repainted; all we're waiting for are those beautiful windows. Many thanks to Mr. John Goebel of Connecticut for his leg work in making this phase of our restoration a success.

The Firefly Team has added an evening crew to look after bringing the engine to life; we continue to work toward the goal of engine run-ups this fall and this new evening team under the supervision of John Webber and Tony Humber are making great strides. We can't wait to hear the V-12 make some noise!

The T-Bird Team has replaced the vertical stabilizer as well as preparing the aircraft for a new paint job. After much time and effort (and a bit of heartache and controversy), we have finally been able to match the proper orange paint! It's only taken more than a year…

The "Into the Delta" list regretfully includes friends and long-time members of SAMF and supporters of SAM, but also recently includes members of our own SAM team. Specifically, Bill Farrell, Bill Cowan, Jim Adam and most recently Ed Hill, have joined this roster. We are all saddened by the loss of these modest, talented volunteers, whose dedication to this museum was unwavering. These gentlemen ensured SAM's development each in their own way, Bill Farrell with his constant drive to save Shearwater's runways and to advocate for the flight of the Firefly, Bill Cowan and Ed by interacting with the public as guides, sharing Shearwater's rich heritage, or in the case of Jim, giving of his spare time to improve the quality of the Avenger and T-Bird exhibits. They are all terribly missed. The SAM team is grateful to have had the benefit of their experience and dedication, as through their commitment, they improved the quality of this facility in many, many ways. We'll continue to improve this museum to honour their memories. ***Christine Hines, Curator***

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From the President.

The lazy, hazy days of summer have arrived - so, lets enjoy them!

I want to thank everyone involved in our recent annual Dinner/Auction held 1 June. I was a huge success with a variety of prizes to bid on. A large turnout of people and the meal was super! Thanks to the competent staff for planning and coordinating this event.

On behalf of myself and the Board of Directors for SAMF, I extend condolences to the family of J.B. Adam. He was a director, a loyal dedicated volunteer of SAMF and was instrumental in preserving the history of Naval Air. Condolences is also extended to the family of Ed Hill who was a dedicated guide for the Museum.

I hope lots of CNAG members will be at the Swordfish Chapters Reunion in Vancouver on Thanksgiving weekend. We need to keep the spirit up!

Keep those stories and pictures rolling in; they are a real link with the past. Your memberships keep everyone in touch and fill a need in our finances.

The next fund raiser will be the Annual Golf Tournament. It will co-inside with the N.S. International Air Show, to be held 3 September at Hartlen Point Golf Course. For more info, contact Chuck Coffen through the SAMF office.

Enjoy a safe and relaxing vacation and come visit the Museum if you are in the area.
Eugene (Buck) Rogers

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Editor's Note:

Congratulations Shearwater - this is the 30th Anniversary of your Aviation Museum.

HMCS LABRADOR Opens Canada's Arctic

By Ernest Cable, Shearwater Aviation Museum Historian

Canada's Arctic Archipelago is the largest group of islands in the world. Yet, its geography is unfamiliar to most Canadians and despite its strategic importance it remains an enigma to the rest of the world. The area stretches across 70 degrees of longitude from Cape Chidley, Labrador's most northern point, to the Yukon-Alaska border; a great circle distance of just over 2,000 miles. The southern coastal island group of: Baffin, Somerset, Prince of Wales, King William, Victoria, Banks and some smaller islands, is divided from the northern Queen Elizabeth Islands by Lancaster Sound, Barrow Strait, Viscount Melville Sound and McClure Strait. These waterways form the main axis of the long sought after Northwest Passage which is the principal east-west route through the Arctic Archipelago.

Beginning in the sixteenth century explorers took nearly four centuries to find the Northwest Passage in their search of a shorter trade route from Europe to China and India. However, after the existence of the Northwest Passage was confirmed early in the twentieth century Canada showed little interest in the northern waterway traversing its Arctic frontier. It wasn't until well after the Second World War that the Royal Canadian Navy (RCN) showed any interest in the Arctic when it finally sent its first icebreaker, *HMCS Labrador*, on four epic voyages into the Northwest Passage.

The lusty British privateer, Martin Frobisher, was the earliest explorer to search for a north-west route to Cathy, as it was then known. Between 1560 and1578 Frobisher convinced English merchants and British royalty to finance three voyages but he never got farther than the bay that bears his name on the southern tip of Baffin Island. In 1819, Sir William Parry's expedition marked the first European ships to enter the Arctic Archipelago through Lancaster Sound and reach 113 degrees West longitude near Melville Island. Parry's incredible voyage was recognized by naming the Lancaster Sound, Barrow Strait and Melville Sound section of the Northwest Passage the "Parry Channel"; it also qualified him for the £5,000 prize offered by the Board of Longitude as the first vessel to cross the 110th meridian at northern latitudes. Parry's ships, *Hecla* and *Griper* became trapped in the winter ice and were the first Royal Navy ships to winter in the Canadian Arctic. Perhaps the most notable arctic expedition was that of Sir John Franklin whose ships *Erebus* and *Terror* became frozen in the ice in 1848 near King William Island where all 129 members of the expedition died. British mariners searched for Franklin for the next 15 years without success, but in doing so a much larger area of the Arctic was explored and mapped. By the right of discovery the Arctic islands became British possessions. In 1850, Captain Robert McClure approached the Arctic Archipelago from the west after passing through the Bering Strait and the Beaufort Sea. He immediately discovered Prince of Wales Strait between Banks Island and Victoria Island, but his ship became trapped in the winter ice. Undaunted, he continued to explore eastward by sledge and linked up with the position reached by Parry on his west bound voyage. This was the last piece of the puzzle that confirmed the existence of the long sought after Northwest Passage. McClure and his crew were awarded the £10,000 prize for finding the Passage.

In 1880, the British saw no commercial value in the Arctic and turned over all her North American possessions including the Arctic islands, but not Newfoundland, to the young Dominion of Canada (Confederation 1867). However, it wasn't until 1905 that Roald Amundsen and his Norwegian crew of seven became the first to navigate the entire length of the Northwest Passage. Amundsen set off in 1903 in the 47-ton herring fisher, *Gjoa,* to locate the North Magnetic Pole and to navigate the southern coastal route of the Northwest Passage. He entered Lancaster Sound then turned south through Peel Sound and spent two winters in Gjoa Haven on King William Island (near the Magnetic North Pole); he spent a third winter in the western Arctic before exiting the coastal route along the Canadian mainland to the east of present day Inuvik.

By 1900 American whalers were becoming more and more active in the Arctic and there was concern in Canada that the U.S. might try to take over the islands. As in previous events in Canadian history fear of American action triggered an interest in sovereignty over the Arctic islands. The Minister of Marine and Fisheries, L.P. Brodeur who played a key role in establishing the Canadian navy, was the driving force in upholding northern sovereignty; ensuring a Canadian presence was maintained with regular expeditions and patrols. Between 1904 and 1911 the Canadian Coast Guard Ship (CGS) *Arctic*, commanded by Captain Bernier, made several voyages and brought back a wealth of information including valuable surveying in the arctic islands. In 1908, *CGS Arctic* lay in McClure Sound beyond Parry's farthest point in 1819 and ice-free water stretched as far ahead as Bernier could see. Had he followed the open water, Bernier might have been the first to navigate the Northwest Passage in a single season. But he had no instructions to proceed through the Northwest Passage and he turned back to Winter Harbour to lay up for the season. Bernier was a prodigious surveyor and built up a wealth of Arctic navigation. On Dominion Day (1 July) 1909, he planted a plaque on Melville Island asserting Canadian sovereignty over "the whole of the Arctic Archipelago lying north of America from longitude 60 West to longitude 141 West" (Yukon-Alaska border).

Captain Bernier made one more voyage after the First World War and other mariners continued the yearly patrols until 1940. The RCMP patrolled the islands and channels each year with small vessels and sled-dogs. During the Second World War Canada agreed to the American building of the Northwest Staging Route, a series of 13 airfields, between Edmonton, Alberta and Snag, Yukon to ferry lend-lease aircraft from the U.S. to Russia through Alaska. As a counter to the increased American presence in the north the RCMP vessel *St. Roch* embarked on a historic sovereignty voyage through the Northwest Passage that took two years. It left Vancouver in June 1940, and after spending two winters frozen in the ice, finally docked at Halifax on 11 October 1942. It was the second ship to

navigate the Passage, and the first to go from west to east. In 1944, *St. Roch* returned to Vancouver by way of the more northerly Parry Channel route of the Northwest Passage cutting the transit time down to just 86 days. Today, the *St. Roch* is a Canadian national heritage site at the Vancouver Maritime Museum.

After the Second World War Canada, as a consequence of geography, became a buffer between the two Cold War antagonists; Canada and the United States faced the Soviet Union across the Arctic Ocean. Suddenly, the Arctic gained unprecedented strategic importance in the world. However, the RCN was slow to recognize the new significance of the Arctic; Vice Admiral Jones, Chief of Naval Staff, declined to participate in starting the Canada/U.S. Joint Experimental Station for cold weather work at Churchill Manitoba. And in 1946, the RCN refused to join the large U.S. Navy Arctic exercise "Nanook". The next year Admiral Reid advised against getting into Arctic operations; stating that naval ships weren't designed to sail in ice-infested waters. Not appreciating the strategic importance of the Arctic as recognized by the U.S. Navy, he declined to send the RCN north to explore the capabilities of Canadian warships in the northern waters. Reid didn't even send representation to join the U.S. Navy in building more Arctic weather stations in 1947.

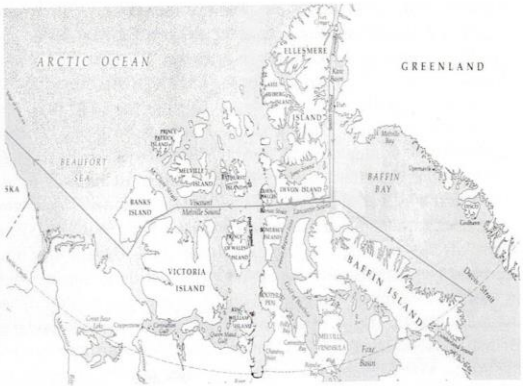
If the Admirals weren't looking north the Prime Minister was. Mackenzie King perked the navy's interest in the Arctic by refusing to keep *HMCS Warrior*, the first of two aircraft carriers intended for the RCN, because it wasn't winterized for the North Atlantic let alone Arctic operations. But he did agree to one carrier *if* it could be used in the Arctic. According to the Royal Navy *HMCS Magnificent* was "arcticized" with an acceptable heating system and upper-deck machinery engineered for cold weather. In 1948, *Magnificent* sailed into Hudson Strait as far as Wakeham Bay (Kangiqsujuaq QC); but like any other aircraft carrier of the day she was highly unsuited for the Arctic. A description of *Magnificent's* cruise, "Sovereignty and the 1948 Northern Cruise" by Leo Pettipas occurs elsewhere in this newsletter.

A naval presence in the Arctic required an ice capable ship. Therefore in early 1949, the RCN gained approval for the construction of *HMCS Labrador* for northern operations. Ironically, the U.S. Navy provided the technical details which were based on their "Wind" class icebreaker. *Labrador's* Captain-designate, Captain Owen Robertson spent two years with the U.S. Navy and Coast Guard before his ship was commissioned, learning the intricacies of navigating in the Arctic. Feedback from Robertson's Arctic experience resulted in *Labrador* receiving a hangar and an enlarged flight deck for three helicopters as well as big improvements over the U.S. Navy's communications and radar and superior living and recreation quarters. She was modified to include then state-of-the-art scientific equipment changing her from a purely military patrol vessel to a self-sufficient explorer with an elaborately equipped laboratory and hospital. Labrador was also a transport, rescue ship and school.

Because icebreakers have a round bottom to work in ice they have an extraordinary roll in open seas, therefore, *Labrador* was fitted with retractable stabilizing fins. She d a deep 30-foot draft with large screws tucked well below to avoid the chunks of ice that would cascade down her hull. *HMCS Labrador* was designed as a conventional icebreaker with the ability to drive forward so that her bow mounted the ice then using her weight to break it downwards. Another technique was to roll the ship from side to side by pumping water into her heeling tanks at an impressive 40,000 gallons per minute; similar tanks were fitted for trimming fore and aft. Her six diesel electric engines were capable of delivering 10,000 shaft horsepower to drive her 6,900 ton displacement at a maximum speed of 16 knots (30 km/h).

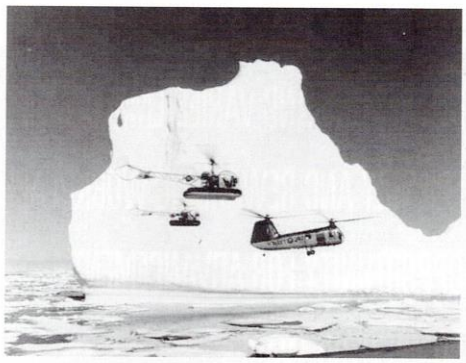
HMCS Labrador was commissioned in Sorel Quebec, on 8 July 1954. She had just two weeks to sail to Halifax, test and calibrate all her complex equipment, store and provision for three months. She embarked 80 tons of coal for the RCMP detachment at Alexandria Fiord and flew on her three helicopters, a Piasecki HUP-3 and two Bell HTL's, before setting sail for the summer season in the Arctic. In 1954, Canada's navy was finally in the Arctic and, notwithstanding the sparse RCMP patrols; Canada's Arctic waters were no longer the sole domain of the U.S. Navy.

At the end of July, Captain Robertson sailed *Labrador* up Lancaster Sound and anchored off Resolute Bay, Cornwallis Island. The ship's company conducted surveys and set up beacons to open the harbour at Resolute so that the airfield, weather and scientific stations could be resupplied by heavy ships. Supply tasks took *Labrador* back to Baffin Bay and northward through Kane Basin to deliver RCMP Special Constable Ariak and family with 17 dogs and the 80 tons of coal to Alexandria Fiord. *Labrador* returned to the Parry Channel and continued west where she rendezvoused with her



American sister ships, *Northwind* and *Burton Island* off Melville Island. This marked the first time naval vessels from east and west met in the Arctic. The three ships surveyed, collected hydrographic, oceanographic and scientific data through Prince of Wales Strait and into the Beaufort Sea.

During the last week of September, *Labrador* passed through Bering Strait into the Pacific Ocean and became the first warship or large ship of any description to sail the entire length of the Northwest Passage. She sailed on to Esquimalt and home to Halifax via the Panama Canal, making *Labrador* second only the RCMP's *St. Roch* to circumnavigate North America. More importantly, *Labrador* had proved to be the finest Arctic vessel in the Western world with a ship's company that was ready for any challenge the North could offer.



The value of *Labrador's* two Bell HTL's and Piasecki HUP-3 helicopters was quickly recognized when 45 miles of surveying was completed in four days compared to 10 miles being surveyed in 18 days using the previous laborious method of a land-based tracked vehicle. The helicopters were also used to locate suitable sites for positioning beacons, mail delivery and medical missions. The most important were the ice reconnaissance missions where the helicopters would scout ahead of the ship providing navigational guidance around the ice floes in the waters ahead. Lieutenants John Laurie and "Duke" Muncaster, pilots of the two HTL's, enjoyed the unique flying opportunity to demonstrate the helicopters' versatility in the Arctic environment. They each flew four to five trips per day and between 23 July and 20 September each accumulated nearly 70 hours flying time.
The HUP-3, one of three acquired specifically for *HMCS Labrador*, provided a heavy lift (900 pound / 408 kg) capability and was used to lift heavy radar navigation beacons ashore for oceanographic and hydrographic surveys and to support marine biology and ice physics research and a host of other Defence Research Board activities.

Many naval authorities had doubts about the ability to operate helicopters from small ships in open ocean conditions. However, *Labrador* proved that a stabilized vessel, a helicopter with good deck handling equipment and a capable crew made flying operations from a small ship entirely feasible. The small team of highly qualified aircraft maintenance personnel supervised by Chief Petty Officers Shorten and Turner set the standard for technical support for small-ship helicopter operations. During *Labrador's* subsequent summer excursions to the Arctic in 1955, 1956 and 1957, the concept of helicopter operations was expanded and refined. These cruises provided a cadre of experienced pilots and technicians who were instrumental in pioneering the development of the "Beartrap" and the operation of large ASW helicopters from small destroyers.

With the advent of Soviet intercontinental bombers capable of delivering atomic bombs via the polar region the Arctic gained even more strategic importance. In 1955, Canada and the United States started to build the Distant Early Warning (DEW) line; initially a chain of 22 radar stations that eventually grew to 63 sites, stretching from Alaska along the Canadian Arctic mainland coast and islands to Baffin Island. The gigantic task of sea lifting materials and equipment fell to the U.S. Navy's Military Sea Transport Service. With her previous year of hard Arctic experience, *Labrador* was Canada's sole vessel capable of contributing to the northern sealift. As the only ship flying the Canadian flag, her lone representation of Canada in Canadian Arctic waters was no mere token. *Labrador* was placed under U.S. Navy operational control, but Captain Robertson was given command of the U.S. Navy's Eastern Arctic Task Group of 23 ships. Robertson's job was to chart and clear the approaches to beaches in the Foxe Basin area of the eastern Arctic so that enormous loads of equipment and materials for the new DEW line sites could be taken ashore by landing craft.
In 1956, *Labrador*, under the command of Captain T.C. Pullen, returned to the eastern DEW line. Similar to the previous year *Labrador* helped to prepare the way for 95 ships to land 250,000 tons of dry cargo and three million barrels of fuel at the various radar sites. Pullen noted that the Americans had operated thin skinned ships in all areas of the Arctic, thus gaining valuable knowledge. They had done more pioneering, surveying, charting, oceanography and exploring in Canada's northern waters than in all the previous years of history combined. Canada and her navy had much to learn. Besides her sealift duties, *Labrador's* crew made major revisions to ten charts and produced 12 completely new ones which opened numerous Arctic channels and harbours to deep draft ships. During the 1956 and 1957 seasons in the Arctic, *Labrador* navigated and charted Bellot Strait for the first time, discovered a deep channel into Frobisher Bay, and surveyed and erected beacons around Foxe Basin that opened a huge area of the eastern Arctic for safe navigation.

In 1958, as a cost reduction measure the RCN had to choose between an icebreaker and more ASW destroyers for NATO. Consequently, *HMCS Labrador* was paid off and turned over to the Department of Transport where she served for 29 years before being sold for scrap in 1987. *Labrador*, in her four short years with the navy, contributed more to science, hydrography and oceanography in the Canadian Arctic than any single ship in the twentieth century. Additionally, *Labrador* paved the way for submarines to make submerged transits of the Arctic under the polar ice. In 1958, *USS Nautilus* made the first underwater transit of the Arctic Ocean by submerging in the Barrow Sea, north of Alaska, sailing northward to the North Pole and surfacing east of Greenland. Then in 1960, the USS *Seadragon* made the first submerged transit of Canada's Northwest Passage by sailing under the ice through Parry Channel and McClure Strait; ironically,

Labrador's first Captain, Commodore Owen Robertson, was aboard. Once clear of the Strait, *Seadragon* turned north and surfaced in a polynya a mile from the North Pole.

The loss of *HMCS Labrador* forced the RCN to withdraw from the Canadian Arctic and lose the ability to expand on its recently gained wealth of northern knowledge and operating experience. The RCN also lost the opportunity to exchange information with the U.S. Navy. With no information to trade, the RCN had to rely on the good graces of its southern neighbour for advances in Arctic science and submarine operations under the polar ice. But most importantly, Canada's Navy surrendered its sole capability to uphold Canadian sovereignty in its northern maritime frontier.

Bibliography:
The Sea is at our Gates, Commander Tony German;
Hands to Flying Stations, Volume 1, Stuart E. Soward
The Arctic Grail, Pierre Berton

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Tom's new job.

Tom retired in his early 50's and started a second career. However, even though he loved his new job, he just couldn't seem to get to work on time. Every day, he was 5, 10, sometimes 15 minutes late. But he was a good worker and really sharp, so his was in a quandary about how to deal with it.

Finally, one day, his boss called him into the office for a talk. "Tom, I must tell you, I truly like your work ethic; you do a bang-up job. But, your being late for work nearly every day is quite annoying to me as well as to your fellow workers." "Yes, sir," Tom replied. "I know, I'm truly sorry and I'm working on it." "That's what I like to hear," his boss said. "However, the fact that you consistently come to work late does puzzle me, because I understand that you retired from the Royal Canadian Navy, and they have some pretty rigid rules about tardiness. Isn't that correct?" "Yes, sir, I did retire from the Navy, and I'm mighty proud of it," said Tom. "Well, what did they say when you came in late?" asked his boss. "They said, 'Good morning, Admiral'."

SAMF Annual Dinner & Auction 2008

This year's dinner and auction was a great success, not only for the food which was superb, nor for the auction items which were fabulous but for the proceeds of $11,700 which was a new record!

The Wing Commander, Colonel Bruce Ploughman and Mrs. Ploughman attended as did our local MP, Mr. Peter Stoffer.

Patti Gemmel outdid herself in organizing, in acquiring auction items, and setting up assisted by her husband Dwayne and her mother Kay Collacutt. The sound system was once again provided by Bruce Nelson (son of Chuck), thanks Bruce! Barb Ryan and Christine Dunphy assisted with the auction for which we are most grateful.

Our thanks to the WO &Sgts. Mess and the Warrior Block Galley staff for the bar service and the dinner. The meal was outstanding, as always.

The Patti and Glenys Adam booked a table for 10 and Patti, who works at the Bank of Nova Scotia brought a group of fellow employees including Debra Dodge and Jessica Heaton (granddaughter of the late Cyril). Debra, Jessica and Patti conducted a 50/50 draw which netted $260, half going to the lucky winner Michael "Mickey" Stephenson. **Debra advised us that the Bank of Nova Scotia has a program to assist local charities whereby they will match funds raised from $1,000 to $5,000; and, following the evening she recommended to her bank that we merited the maximum amount, which we have received!**

I would particularly note the family connections with the Adam, Collacutt, Heaton and Nelson families helping out in one way or the other; it would be nice if more offspring of former Shearwaters got involved. Blood is thicker than water! The Master of Ceremonies for the evening was yours truly, I had the easiest job of all, no one threw anything at me and they let me stay till the end of the evening so I guess I passed? It appeared that everyone had an enjoyable evening, we raised a significant amount for the Building Fund; so, in my book that spells SUCCESS!!!
Eric Edgar

(Thanks to Helen Trenholm for providing the photos. Ed)

L-R Dennis Shaw, Marie Peacocke, Mary Elizabeth and Eric Edgar

Picking the winning ticket for the 50-50 draw L-R Christine Hines, Museum Curator, Peter Stoffer, MP, Col Bruce Ploughman, WComd and Patti Adam. Bank of Nova Scotia Rep.

Ready to accept funds from the winners of the Auction items L-R Barb Ryan and Patti (Collacutt) Gemmell.

WAYNE PETITPAS - VOLUNTEER OF THE YEAR 2007

There are many deserving people in the city but we want to recognize our candidate in a special way by making him the Volunteer of the Year for the Shearwater Aviation Museum. It was no small task to single out one person but our candidate represents all of the volunteers in his dedication to the Museum. The Shearwater Aviation Museum is proud to present Wayne Petitpas as the Museum's Volunteer of the year 2007.

Wayne has been a quiet but very dependable fixture in the Firefly restoration project for several years since his move from Montreal. He recorded 448 hours in 2007 in addition to many hours at home helping out with research on the internet. When we researched his activities beyond the Museum we found he was also very active in the community. He was the "go-to" person when projects of all sorts needed to be completed. This combined with his cheerful team spirit helped seal the choice. Wayne was presented with a certificate and we intend to have his photo prominently displayed on our volunteer wall. Bravo Zulu to Wayne. ***Submitted by Michael McFadden, Volunteer Coordinator.***

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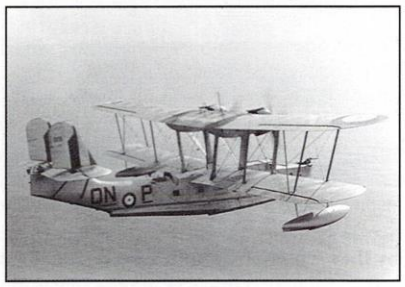
Stranraer Shearwater Bound?

Ernest Cable, SAM Historian

The Shearwater Aviation Museum received a welcome phone call this past summer from Captain Bill Thompson from Garden Bay in Pender Harbour B.C., located approximately 90 km north of Vancouver. Captain Thompson is a retired Master Mariner and founder of the Canadian Museum of Flight in Langley B.C. For a number of years Mr. Thompson has been in possession of the wreckage of former RCAF Stranraer 915 and is looking to donate the Stranraer to a museum that is willing to restore the biplane flying boat to exhibit condition. Knowing that the first Stranraers flew at RCAF Station Dartmouth, Captain Thompson contacted the Shearwater Aviation Museum to determine if the museum was interested in preserving this rare Canadian maritime aviation artifact.

Although, the first five Stranraers (serial nos. 907 to 911) did serve at Dartmouth with No. 5 Bomber Reconnaissance (BR) Squadron, subsequent Stranraers were allocated to both the east and west coasts. Stranraer 912 was the first RCAF Stranraer to be ferried from the Canadian Vickers factory in Montreal to the west coast in July 1939 where it served with No. 4 (BR) Squadron at RCAF Station Vancouver, more familiarly known as Jericho Beach. Stranraer 912's squadron identification letters were FY-A. Shortly thereafter, in Sep 1939, Stranraer 915 was transferred to Jericho Beach where it joined Stranraer 912 on No. 4 (BR) and assigned squadron identification letters FY-B.



Canada declared war against Germany on 10 Sep 1939 and by early November the first Stranraers from Dartmouth were ferried to Jericho Beach as they became available while No. 5 (BR) Squadron was re-equipping with the more modern Catalina flying boats.

In May 1940, Stranraer 915 accompanied No. 4 (BR) Squadron to its war station at RCAF Station Ucluelet on the southwest coast of Vancouver Island from where 915 supported the squadron's war task of conducting seaward reconnaissance of the strategically important Barkley Sound area. In December 1941, No. 9 (BR) Squadron was formed at Bella Bella BC, located on the inside ship passage approximately half way between Vancouver and Prince Rupert. The squadron's first two aircraft, Stranraers 936 and 949 were eventually joined by Stranraer 915 which had been transferred from No. 4 (BR). In August 1942, Stranraer 915 was tasked to proceed to Calvert Island

to assist in the recovery of a U.S. Navy OS2U-1 Kingfisher which had crashed. The two man crew escaped injury and was brought back to Bella Bella. Shortly after the Second World War on 7 February 1945, Stranraer 915 was struck off RCAF strength after having accumulated a total flying time of 1821 hours 20 minutes. It was one of 20 venerable Stranraers, tentatively allocated civil registrations CF-BYA to CF-BYT that War Assets sold to Siple Aviation; the Montreal Company intended to use the aircraft commercially in Canada, the Caribbean and South America. Civil registration CF-BYJ was intended for the former RCAF Stranraer 915. On 11 September 1946, Siple Aviation offered to sell CF-BYJ to Morris Summit Gold Mines of Vancouver which was desperate to replace its crashed Stranraer before the lake at the mine froze over. However, this offer was not taken up. On 17 September 1946, CF-BYJ was sold to Queen Charlotte Airlines of Vancouver and named "Nooka Queen". Interestingly, not all of the Stranraers purchased by Siple Aviation received their civil registrations at the same time; it was not until this date that the Canadian government officially issued CF-BYJ's Certificate of Registration (No. 6589). This aircraft was one of five Stranraers, CF-BYI (907 - the Canadian prototype), CF-BYJ (915), CF-BYL (909), CF-BYM (949) and CF-BXO (920), operated by Queen Charlotte Airlines to pioneer scheduled air service on the B.C. coast. In April 1949, the 920 horsepower Bristol Pegasus X engines on CF-BYJ and CF-BXO were replaced by 1,000 horsepower Wright GR-1820-205A Cyclone engines to increase performance (maximum speed 165 mph) and maximum take off weight. These two aircraft were known as "Super Stranraers".

On Christmas Eve 24 December 1949, Captain Bill Peters landed CF-BYJ near a logging camp at Belize Inlet B.C. in a slightly nose down attitude causing the nose to dig in and the aircraft to flip over. The nose section broke off and sank while the remainder of the aircraft stayed intact, even the wing struts and wire bracing were still rigged. As part of the accident investigation the Department of Transport raised the aircraft, minus the nose, to remove the bodies of two passengers who were killed. The aircraft was then allowed to sink to the bottom of the inlet again.

In the spring of 1949, CF-BYJ was dragged up onto the beach to allow Queen Charlotte Airlines to salvage the new Wright Cyclone engines for another Stranraer conversion. Thirty-four years later, in July 1983, Captain Thompson salvaged the wreckage off the beach and used his marine towing company, Totem Towing, to barge the decrepit Stranraer to the Canadian Museum of Flight in Langley B.C. Fortunately for Shearwater, Captain Thompson never formally gifted CF-BYJ to the Langley museum and he became concerned that the museum may be more interested in selling the Stranraer for scrap than preserving it as an exhibit of Canadian aviation history. Therefore, several years ago he moved the wreckage back to his home at Garden Bay where it remains today.

As recounted on page 34 of the 2006 Summer edition of the Shearwater Aviation Museum Foundation newsletter, the Stranraer played an important role in the history of Shearwater and, in deed, Canadian maritime military aviation. Therefore, the Shearwater Aviation Museum has agreed to accept Captain Thompson's offer and restore former RCAF Stranraer 915 to exhibit condition, probably wearing the mantle of RCAF Station Dartmouth's No. 5 (BR) Squadron as an example of the aircraft that formed part of the base's history. Interestingly, Stranraer 920 (CF-BXO), one of Stranraer 915's (CF-BYJ) stable mates in both the RCAF and Queen Charlotte Airlines, is the only restored Stranraer in the world and is on display at the RAF Museum in Hendon, England. Stranraer 920's Canadian heritage is preserved in that it bears the colour scheme and markings of RCAF Dartmouth's No. 5 (BR) Squadron. When Stranraer 915 is restored at the Shearwater museum it will be only the world's second Stranraer on display. The next step is figure out how to transport the wreckage of Stranraer 915 from B.C. to Shearwater.

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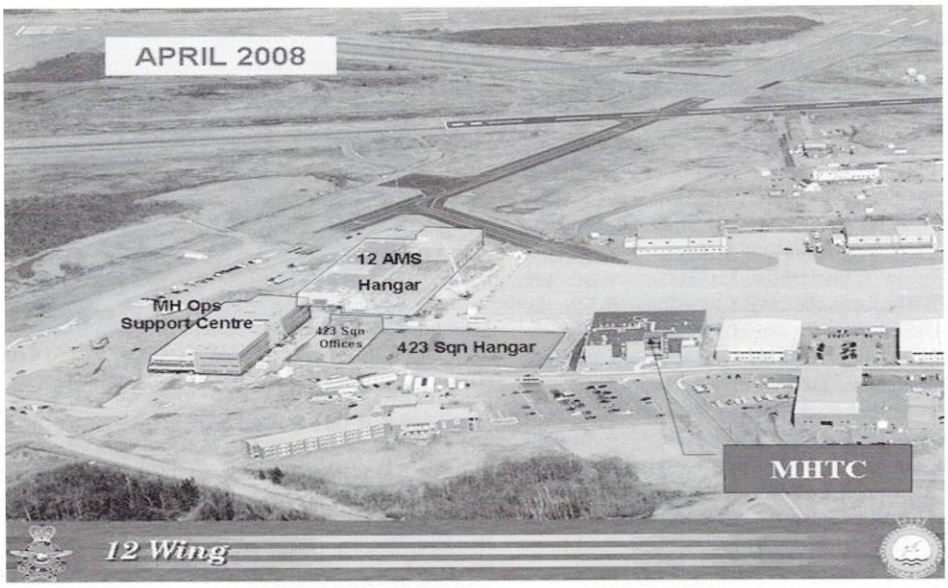
2007 CNAG Reunion - Correction

In our Winter 2007 nsltr there was an error, pg 15. In the Photo with Dennis Shaw and Marie Peacocke we named the person speaking with them as Doug Cooke - it was actually Frank Reesor. Sorry dearheart.

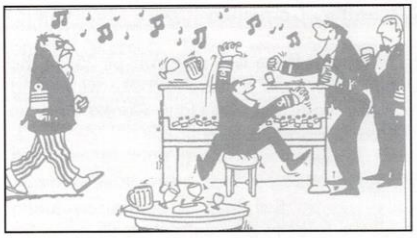
Spring Newsletter

Did you know all the folks in the centre pages?

1. Ron Beard
2. Bill Farrell
3. Wayne Petitpas
4. Rusty Releader
5. Mick Stephenson
6. Bill Gillespie
7. Peter Pennoy
8. Walter Bereza
9. Jake Birks
10. R.L. Smith
11. Gerry Watson
12. Roger Rioux & Butch Bellau
13. Al Whalley
14. Dog's name??
15. Dennis Shaw
16. J. Ramsay
17. Joe Vangalen
18. Les Rosenthall
19. Bill Moran
20. Eric Nielsen
21. Les Shatford
22. Ben Oxholm
23. Robert (Buck) Rogers
24. John Salmon



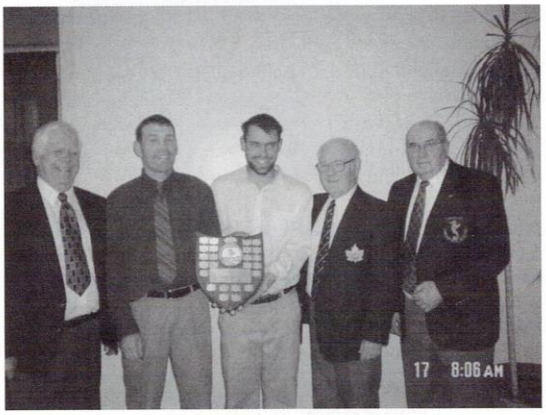
Construction of new hangars on inner ramp to date.
New runway 16/34H seen just above Tower and Fire Hall.
Long runway 16/34 seen at very top of photo.



HEART OF MY HEART

Heart of my heart, I love that melody
Heart of my heart, brings back a memory
When we were kids on the corner of the street
We were rough and ready guys
But oh how we could harmonize

Heart of my heart, how friends were dearer then
Too bad we had to part
I know a tear would glisten
If once more I could listen
To that gang that sang heart of my heart



The Atlantic Chapter of the Canadian Naval Air Group, Deserving Student Award Presentation

On June16, 2008, Dick Pepper, President of Atlantic Chapter presented the Deserving Student Award along with a cheque, to the top students in the Aviation Technical Course held at the Shearwater Campus of the Nova Scotia Community College. Left to Right: Dick Pepper, Chapter President, Bill Murray, Award Winner, Justin McCann, Award Winner, Rolly West, Committee Member, and David Shaw, Committee Member.

NAVAIRGEN is a mailing list (email) for friendly discussion and dissemination of useful information for those who have served as part of Naval Aviation.

VLIEGDEKSCHIP

A while back, I saw the above picture that was sent out on navairgen. I replied to the email as follows: 'Can you imagine if Canada had one of those carriers and aircraft - it would be great. One for each coast would make us a powerhouse to reckon with.' After that, the rest went like this..... ***Kay***.

Paul Peacey replied: And just where would we find the people for the rest of the Armed Forces? I would hazard that the Navy's present strength would find it a bit difficult to man one!

Jim McCaffery adds: It seems to me Paul Peacey is dealing with reality! Perhaps we could man the vessel with Canada's homeless??

Then ***Bob Edey*** wrote: Contrary to "peacey paul's" assertion that Canada does not have the population to man two carriers, he's dead wrong! With a workforce of 16,043,740 between the ages of 15 and 64 and an unemployment rate at approx. 5.8% there are 930,536 Canadians theoretically looking for work. To man two 40,000 ton (loaded) carriers, plus support squadrons ashore and serviceable escort vessels would require 12,000 - 15,000 additional sailors and airman, a Navy of fewer men than that supported during WW II.

Interesting to note France not only continues with it's fleet air arm it is projecting for a 75,000 ton super carrier to be launched in 2011.

The 5.8% mentioned before does not include out of work or unwilling to work Canadians no longer being counted by statistics Canada. Regrettably we are a country where a large sector of the population are content to let others work to support and protect their right to not have to make any sort of contribution!

From ***Kay*** again: The statement "interesting to note France not only continues with it's fleet air arm, it is projecting for a 75,000 ton supercarrier to be launched in 2011" - is true for other countries as well, but not Canada.

Ted Gibbon tells us: I happened to be in the BV's briefing room when Scruffy held the de-brief with the Defence Committee who were about to determine the fate of Canadian Naval Aviation. As usual our Captain fielded every question effectively, sometimes bluntly, usually with humour but frequently with obvious disappointment with the direction the committee was apparently headed. Nearing the end of the discussion during which Scruff blew every negative observation out of the water and caused the chairman (who happened to be a butcher- meat that is- from Southern Ontario) defending the obviously undefendable to state that if their decision was to get rid of BV circumstances might well lead to reactivation of the ship and the role within a few years. Scruffy responded with something like: "What bloody nonsense, it has taken us 25 years to learn how to do this right, in a year that expertise will be gone from this Navy forever". I doubt that we could ever find enough Canadians in today's society under 70 to take on those jobs under similar conditions to man another BV let alone a Nimitz class. May as well accept it as it is: the greatest experience we could have ever hoped for in our lifetime and revel in the knowledge that no matter how many blackberries/ raspberries/strawberries/blueberries they acquire none will hear the magic of a pipe followed by: "hands to flying stations" or; "up spirits- afternoon watchmen to dinner" or; gash is not to be dumped until further notice" or; "hands to stations for leaving harbour-secure Christmas presents for sea" or; "secure flying stations, movies for tonight are:" or; compliments of the beloved XO "Make & Mend". Fill in your own personal favourite. Time to "suck back and secure", fixed wing naval aviation is history. *Cheers,* ***The other Ted***.

And ***Sandy Dewar*** writes: How many aircraft carriers for Canada? Interesting. But there are two questions that must be asked: what kind of a navy do we need and what kind of a navy are we liable to get? The answer to the first question is simple: more - much more. The answer to the second question is also simple. What kind of a navy would Quebec like us to have? The answer is none.

From **Leo Pettipas:** Ted: Well said, and I think you're probably right about the prospects of future carriers in the Canadian Navy. However, a short note on your suggestion that "fixed wing naval aviation is history." It

is, in more ways than one. Speaking as a historian, history is something that can't be altered or obliterated -- what happened, happened. Fixed-wing Naval Aviation is gone from the Canadian context, as are many of those who were part of it. But what of the legacy? Museums and historical publications keep the story alive. Naval Air already has a small but respectable (and growing) library. A new generation of historians who were not in Naval Air are recognizing the value of that story and are writing books and articles about it. Some of the Old Salts are doing likewise. Naval Air, at the end of the day, was a real Canadian success story, and I'm confident that fact will be recognized in future generations of writers. The National Archives and those housed in various museums and libraries around the country contain the raw material from which the story can be told from many different angles. I sense a heightened public interest in the history of the Cold War, in which Canadian Naval Aviation played an inspiring role. If Canadians cherish their identity as "peace-keepers," well, isn't that precisely what the Navy was doing during the Cold War?!

People who lament the present (and probably future) absence of fixed-wing carriers in the Canadian Navy have grounds for feeling as they do. As a special-interest historian and advocate for the legacy of Naval Aviation, I am much more optimistic.

Ernie Cable writes: Leo, I fully endorse your comments about naval aviation's legacy; I also think naval aviation has to be viewed in the total Canadian context in that it was an unique segment of our Canadian aviation history. Most Canadians recognize that our proud aviation heritage played a fundamental role in the development of Canada from a very dependant British Dominion to an air minded sovereign nation. Canadian naval aviation's unique contribution to our aviation heritage stems not only from the skill to operate aircraft from aircraft carriers but also the perseverance and indomitable spirit of its personnel that enabled Canada to start comparatively late in the carrier aviation game and over a relatively short period stand as professional equals with larger nations which had decades of earlier experience flying from aircraft carriers. ***Ernie***

And ***Art Schwartz*** says: These positive and true comments on Naval Air are well and good but we did elect the governments that chose to ignore the lessons of history and put us in our present position. We have been misled to believe that Canada is a nation of peacekeepers (tell that to my uncle in the ground in Holton), that the peace dividend could be spent without consequence, and that "soft power" could somehow change the reality of human existence. With Canada's incredible aviation history and technical prowess we could still be a naval aviation player. Instead national security in Canada is part of discretionary spending.

Some wag once said that only Canada has statutes that support those who choose not to work but no statute requiring that vital national interests be secured
Read and heed Santayana.!

Again from ***Bob Edey:*** Kay, Your "carrier" email certainly "stirred the pot" and contrary to the defeatest tone of subsequent e-mails you are still correct. It would seem many can't recall the axiom "Where there is a will, there is a way"!

Our recent historian doesn't seem to realize our first carrier was Commissioned only 66 years ago. Hasn't even made it into the history books yet!

Paul Peacey's comment about who would man such vessels, although relevant, it is not insurmountable. With HMCS Warrior we got a lot of help from the RN. Could happen again, this time with RN, USN and France offering training and support. Wouldn't Quebecers eat that up? "Le Grand France" in support of the Canadian Navy! I'd bet dollars against doughnuts active pilots today would line up to sign on to fly off a Canadian aircraft carrier.

History repeats itself! Always did always will! No doubt economics and political will, will dictate the rebirth of Canadian Naval Air somewhere in our future. Any number cruncher today can make a viable case for providing air support from a Canadian carrier to our ground forces in Afghanistan. A much smaller Canada did it once not too long ago and when the number crunchers determine a carrier capability is our least cost option, it will happen again! Won't even have to calculate in the 12,000 - 15,000 jobs created, that is a bonus!

From ***Patrick Martin:*** The armed forces of any nation should be viewed with the analogy of a fire department. Once a fire has started in or near your own town, it is too late to think about ordering a new fire truck or those four extra firefighters. If the fires are springing up in several towns around yours, you can bet the next town's fire truck and firefighters are going to be busy - so do not count on them.

If you knew when a fire was going to start (like international trouble spots) you could plan ahead, but in this world - that is not happening. So build, invest in your own fire department (armed services), it not only protects you, but it is a resource to help your neighbours when they need it - because just maybe, one day you will need theirs.

Interesting - very interesting. Well there you have it! There were other email messages on this subject, but unfortunately some just couldn't be published. **Kay**

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LETTERS TO THE EDITOR

Ron Beard remembers: One day in the late fifties, Howard Parker and myself left the SE section for lunch. When we left one of the ratings had a beautiful new car parked at the back of the section. After lunch we were strolling back up the hill and we saw this black hulk at the back of the section. Upon approach we saw the remains of the new car that was there when we left.

We found out later that this is what happened. There was no heat in the building, so a Herman-Nelson heater was place outside with heater hoses taking heat into the building. The person who owned the car decided that this would be an easy way to get some fuel for his car. As he was transferring the gas from the heater to his car, the vapours ignited and travelled to the car, setting it ablaze and also scorching the rear of the building. As the heater was burning also, he managed to push it away from the building thus, saving the structure. He suffered severe burns while doing this.

For saving the building he was given a commendation, but for stealing the gas he was given time in detention, which he served entirely in the base hospital recovering from his burns.

From ***Peter Lawson*****:** Dear Kay; I have a copy of a letter written by Hammy Gray's Commanding Officer on 1841 Squadron, Lieutenant Commander Richard Bigg-Wither who retired in Chichester, England. This letter was written on July 7, 1992, five months before he passed away with lymphatic leukemia.

This letter is truly revealing and contains important information regarding two of his pilots, both Canadians and both killed August 9, 1945, " a day which will remain the most miserable day of my life," as stated by Richard: 'Andy' Anderson and 'Hammy' Gray.

Richard talks at length about the operations on August 9 and partly blames himself for Anderson running out of fuel a few feet short of Formidable's roundown since as C.O. of the formation, Richard had taken nearly 30 valuable minutes trying to find the 'picket' ship, under poor visibility conditions, after attacking four Japanese airfields.

Richard also indicates that it has always annoyed him that newsletters, journals, books, museum and commemorative displays show Hammy's Corsair marking as (ROUNDEL 115), which it was not. Richard explains that agreement had been reached among Captain Ruck-Keene, himself, and the C.O. of 1842 Squadron to delineate between 1841 and 1842 aircraft by having the 1841 aircraft markings changed to (1 ROUNDEL 11) ... (1ROUNDEL 24). Meanwhile, 1842 aircraft retained their markings: (ROUNDEL 125) ...(ROUNDEL 148).

One of the British Army Liaison Officers aboard Formidable was an excellent artist and agreed to make the changes to the 1841 aircraft. It is correct that during July and August 1945, all 1841 aircraft bore new markings and Hammy's Corsair read: (1 ROUNDEL 15)

May I then ask that your readers closely examine their war photo galleries and send me a copy of any 1841 Corsair showing the new summer 1945 markings?

Will a dying man's wish result in changes to Hammy Gray's aircraft marking in our museum displays before 2010?

Thank you for your assistance,

Peter E. Lawson caperbooks@yahoo.com

From **Kay** Thank you to those that sent email, letters, calls etc telling me what you thought of my first crack at being Editor. Your comments were appreciated.

Les Rosenthall writes: This a/c was our (Coastal Aviation) first a/c, a former RCAF and RCN C-45 I bought (over the phone for $6500!!) from Crown Assets in 1970-'71 and refurbished. Others involved were part-owner/pilot Peter Gallagher and part owner pilot/manager Harry Hollywood.

L-R Peter Gallagher and Harry Hollywood

We later acquired an old Navaho and a nice Cessna "Skylane". We lost all our money and had to fold the company and pay off our loans out of own pockets, but it was worth a try and fun for a while.

Bill Farrell was the 4th pilot/partner and the 5th part-owner was a civilian contractor named Dave Williams.

Keep up the great work.

Fritz Fralic writes: This is my first Navy band - the next would be the Bonaventure Drifters (Fall '59), concerts in Britain, Ireland and Scotland..Lots of memories, lots of great shipmates. "Bless 'em All".

HMCS BONAVENTURE 29 Mess - VS880
L-R "Velt" MacLean, Bob Fralic, Ed Place, Gerry Walker

From the late Bill Farrell

Arctic Sovereignty

Much has been said on this issue by pols and pundits. I'll be brief:

Our best defence, indeed our only defence, of our claim to the northern part of Earth' crust and to the mineral resources that may lie beneath the encircling ocean is the aegis of international law. A few lightly-armed icebreakers would be brushed aside by any of the world's superpowers – brushed aside cavalierly. Ironically, the most likely raptor of those resources is our great protector below our southern border – the military-industrial behemoth whose motto might well be not "In God we trust" but "Might makes right".

(*OK - now leave the Ouija Board alone, Bill. K.*)

Ron Beard and some taller guy at the IIHF Hockey Championships in Halifax.

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Sent to us by ***Jack Moss:***

Drug bust recovers stolen war medals.

Four decades later, hero's family reunited with badges of honour. ***James Keller The Canadian Press***

VANCOUVER–More than 40 years ago, a thief made off with a collection of 10 medals earned by Aeneas Bell-Irving in World War I and II. Yesterday, the medals were returned to his family after a surprising recovery in an unlikely place. Vancouver police happened upon them last month while executing an unrelated search warrant at a downtown apartment building as part of a drug investigation.

Bell-Irving retired as a brigadier and died in 1966. The medals disappeared during a 1960s break-in. "It's certainly a great surprise and a great pleasure," said Darg Bell-Irving, the war hero's 78-year-old son. "It's really extraordinary. It would be very interesting to know the background and the recent background of where they were found and where these people got them from."

The collection includes a 1914-1919 Victory Medal and the France and Germany Star. Several are engraved with Bell-Irving's name. The medals also include the Member of the Order of the British Empire, a gold cross first created to honour mainly non-combatants – both civilians and military members – who helped in World War I, according to Veterans Affairs. It has been awarded to 2,700 Canadians, though Bell-Irving didn't know the circumstances that led to his father receiving the medal.

Bell-Irving, the uncle of former B.C. lieutenant-governor Henry Pybus Bell-Irving, was born in Vancouver in 1897, the second-youngest of 10 children. He was a city councillor from 1962 to 1966. He joined the military in 1916 and was a balloon observer in World War I. After the war, he worked in China, returning to Vancouver in the late '20s.

Bell-Irving returned to the military at the start of World War II, first in recruiting, eventually becoming commander officer of the 2nd Heavy Anti-Aircraft Regiment, protecting an area east of London from German aircraft attacks.

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Les East writes: Hi Kay: Here's a photo of probably the finest Basketball Team ever to play in the inter city league. Faces to be recognized are front row **: Ron Caudle (8), Rob Hamilton (14), Les East (3).** Back row: **Ted Gibbon (4) & Don McBride (2).** The rest escapes me for the moment...

Ted Gibbon notes: Been away getting some sea time in the Baltic. This truly was an awesome Flyers BB team. Aren't the uniforms grand and the sneakers stylish? The only name I can add to Les' list is **Fred Hallas (12)**. I can't recall the name of the chap on his left or the one in civvies on my right.

This would seem to be an incomplete team picture as some prominent players are missing; however, it wasn't uncommon to enter a game with just five or six available. Add **Peter Hamilton, Bob Baird and John Hewer** to the roster. The Coach, when we had one was usually Ken Batchelor but he was frequently pressed into the game as the referee.

We did participate in the Halifax City League but our most memorable battles were with Stad during which we play a version of Dr. Naismith's game called "tackle basketball" and our inter-service rivals the Greenwood Bombers. There was frequently blood on the floor. This photo looks like the nucleus of the team that won the Zone B Championship in 1969. I still have the trophy.

One year we added Hugh Ireland to our team for the Atlantic Command Championships. Hugh couldn't play basketball but as you might remember, he was about 7 feet tall and had quite an intimidating demeanor. Our first game was against Chatham, an unknown quantity but reputed to be quite powerful. We had Hugh come out of the dressing room and join us on the bench just before the opening tip off. Our opponents took one look at Hugh and waited apprehensively for him to come on the floor. He wasn't in our opening lineup and the spent the rest of the game nervously awaiting his entry. We were able to take advantage of their uneasiness and had a good lead by ½ time without Hugh. We went on to win the game while Hugh watched from the bench. He then picked up his towel and strode off the court never to play a game but his mere presence at that game and the potential of an imminent return, helped keep the opposing teams on edge through the tournament.
Cheers *Ted*

CYCLONE CORNER:

GREASING THE SKIDS FOR CHANGE

Brian Northrup, Naval Aviator

Any discussion related to the soon-to-arrive CH148 Cyclone helicopter should first begin with the reality of change itself. For those of us ex-military guys that revere familiarity, stability, and structure, the concept of change does not come easily. In the case of a somewhat orphaned and sometimes insular Sea King community, the scope and scale of the Cyclone replacement program will be huge, far-reaching and abrupt. It will be so endemic that the basic tenets of MH culture will be subjected to a degree of instability not witnessed in Shearwater (and Pat Bay) since those tumultuous Unification days of the late 1960s. While some MH Community core values and corporate knowledge will carry over, many others will prove detrimental and need to be jettisoned. There can be little doubt, however, that the inherent naval aviation attributes of flexibility, versatility and perseverance will be required and put to the test.

The 1990s military retrenchment period was tough on the MH Community. Dramatic military cutbacks resulted in the departure of many senior experienced MH personnel, along with an exodus of corporate knowledge that had profound implications for those who remained. In a post-Cold War perfect storm of scarce resources, mission ambiguity and sinking morale, the MH community (now known as 12 Wing) became mired in a slow descending spiral not entirely of its own making. The Sea King, while still safe, was aging and certainly operationally restricted in its mission capability; concurrently, an increased operational tempo was dispatching Sea King Detachments around the world on extended cruises. The operational elastic band was stretched to its limits, and one wondered whether or when it would snap.

A few years ago (2004), some visionary folks including the serving 12 Wing Commander identified that the MH Wing system was 'badly broken' and in need of urgent repair. While the arrival of a new replacement helicopter offered up some impetus for change, the traditional 20th century way of doing business was assessed as outdated, inefficient and unproductive. How badly was it broken? Maintenance and aircrew training had passed a sustainable point to a level where future operations were at risk through a lack of MH-qualified personnel. Maintenance personnel were taking upwards of seven years to achieve sea-going qualifications, while the production of new aircrew graduates slowed to a mere trickle of its former self. Both maintainer and aircrew cadres recognized the disease yet lacked the cure. Change was not deemed an option but an essential for MH survivability. The Wing Commander seized the initiative and commissioned a Wing project to assess the situation and offer solutions. Even more importantly, he steadfastly supported the undertaking throughout its evolutionary course, despite the many demons that change often can set loose.

The transformation challenge was handed to a medium-ranking Shearwater-based officer with unique qualities of organizational vision, unbridled enthusiasm, and a firm yet fair leadership style. He adroitly assessed that the need for Wing transformation would be so fundamental and over-arching that a multi-person study group was necessary to also include west coast operations. Nine senior MH personnel were convened as a study team that included Pilots, Navigators, and AERE Maintenance Officers; all of whom were dedicated to the multi-month project on a full-time basis. The undertaking proved to be a challenging period of introspection, in which all aspects of Wing organization and operations were placed under the microscope and studied from a multi-faceted perspective.

The rules of the game were few and straightforward. There were no sacred cows and while the discussions were designed to be freewheeling, they also were focused towards reaching a consensual conclusion. All members were deemed equal while all arguments were respected and exhausted through careful reflection and extensive discussion. As an analogy, the well-worn fabric known as 12 Wing was unraveled thread by thread and laid bare on the table. Each thread of Wing structure then was carefully woven back into place through a group-wide effort, having survived the trials of institutional bias and parochial views until all agreed on the optimal solution. Often an initiative would emerge that seemed smart in some quarters yet overridden by a valid reason from another. The underlying precept was that the solution had to be the best one from an overall Wing perspective, thus both historic aviation solitudes (aircrew/maintenance) soon came to realize that transformation was not only essential but needed to be for the greater common good. A second and just as vital prevailing principal was that the new MH organization had to be capable of supporting future Cyclone operations.

Once the proposed transformation solution was identified, briefed and approved by the Wing Commander and his Unit Commanding Officers, the implementation process became fast and furious. Various town hall meetings were

held throughout the Wing establishment to ensure all members understood the need for change and the rationale behind the proposed new way of doing business. A centralized approach to running the Wing and its myriad activities began to be implemented, as opposed to the conventional Squadron concept of years past. A centralized A-staff organization was created and assigned to guide 12 Wing from both a long and short-term perspective. Even the Flight Standards organization eventually would be centralized and established as a separate entity of the Wing A-staff organization. Innovative information management and technology would be employed to organize, manage and evaluate Shearwater flight operations and all that supported it.

The initial, short-term results seemed disastrous. By employing more efficient centralist procedures, controls and techniques, it had been anticipated that a sizable cadre of serviceable Sea King aircraft would be available on any given day; all this despite flight-capable aircraft intentionally withdrawn from flight operations to satisfy a dedicated maintenance training program. A streamlined flying program would see upwards of four flights assigned daily to a single aircraft line with several lines operating concurrently. Aircrews would be briefed and ready to accept the aircraft once the previous crew returned for a hot-fuel and crew change. A team of centralized flight operations personnel, co-situated with dedicated maintenance support technicians, ensured that the IT-based flying program met the daily flight assignment; concurrently, a second planning team was engaged in producing the following week's flying program and ensured its execution by exchanging mandates on a weekly basis.

The theory was noble yet reality proved otherwise. The first year of post-transformation activity was excruciating for both aircrew and maintenance personnel. There would be periods when not a single aircraft was available for Shearwater flight operations, while a good day may have one or two available on the flight line. While maintenance training results were impressive, many began to question the folly of dedicated aircraft to training while aircrew remain grounded. Tempers flared, finger pointing became widespread, and a frequent mantra of "told you so" broke out in some quarters, yet the nascent system remained in effect and senior leadership stayed calm and supportive.

What had gone wrong and more importantly, could change eventually meet expectations? Retrospect implied that a primary cardinal tenet for successful change had been forgotten – Communication. For change to be successful, it is vital that all personnel believe they are part of the process by being offered the ability to participate. Although subsequent town hall meetings improved the change process, it became evident that a greater emphasis placed on the change effort earlier and throughout the evolutionary process would have paid huge dividends. A better understanding of the restraints, constraints and background situation may have encouraged greater shareholder response and resolution to the overall transformation effort. In hindsight, the decision not to include senior NCM representation was a particular major error that could have had disastrous consequences, yet ever so slowly the collective changes became accepted and supported. The proverbial adage was confirmed that "Change doesn't happen overnight", as it would take some considerable time and effort before the Wing regained its operational composure under the new centralized Wing concept.

Was it all worth it? Those who follow Shearwater operations on a regular basis have to believe the pain was well worthwhile. Today the Shearwater flying program is both ambitious and yet accomplished on a routine basis. The flying program is published a week in advance yet retains the flexibility to be amended on short-term notice. Aircrew arrive having confidence that their weekly flight assignments will be met, while the maintenance organization now possesses the flexibility to train, repair and service aircraft. Perhaps best of all, the new CH148 Cyclone will be able to seamlessly operate within the new system to ensure an efficient and effective flight schedule. Does it get any better than that?

In conclusion, what transitional lessons can be drawn from the initial transformation exercise that can be transferred to introduction of the replacement CH148 Cyclone Weapon System? Actually, many deductions may be made but arguably none more important than to recognize the requirement, define the transformation process, and ensure that critical MH shareholders are involved *at all levels* of the Wing structure. Perhaps it's important also to occasionally reflect back on those intrepid naval airmen of the early 1950-60s era, whose ingenuity, tenacity, and Herculean effort built the solid foundation on which maritime aviation rests today. Never has the need been greater…

****

Canadian Naval Air Group

ACROSS THE FLIGHT DECK
FLIGHT DECK

Chief of Maritime Staff VAdm and Mrs Drew Robertson pause for a pre-dinner photo with CNAG National Chairman Peter Milsom and his wife Carol and Past National Chairman Paul Baiden and his wife Debbie.

The Battle of Atlantic Ball, organized annually by Karen and Martin Foubert of Ottawa, is a very enjoyable event for a number of reasons. The meal is always a delight and the dancing and visiting afterwards are great fun but perhaps more importantly, the cocktail reception beforehand is a superb opportunity to "meet and greet" with old comrades and new, younger faces from the naval profession of arms. It is one of the true pleasures of our service to be able to periodically reacquaint oneself with people with whom you have served at sea or in staff appointments or training courses and to get the latest buzz about what is happening in their lives and careers and with the Navy generally. For those of us who have left the service, it is a wonderful opportunity to get caught up with all things Naval – surface, sub-surface and air – that do not get discussed in the newspapers.

With Navy 2010 looming largely on the horizon, it is also a key opportunity to keep the fact of Naval Air in Canada up front in the perspectives of many who appear to have relegated it to the operating realm of the Air Force, where it now functionally and organizationally resides. Both Paul and I, who, like you, act as CNAG ambassadors at such gatherings, in our discussions with naval members at different rank levels encountered interesting "historical" and "current operational" perspectives. Perhaps a few observations from those discussions will prompt some discussion.

When one speaks as a strong proponent of naval air strength in current naval operations, one often encounters a curious reaction where the person you are speaking to, in some sort of vast intuitive leap, decides you are advocating the rebirth of the Fleet Air Arm in Canada, complete with carriers and all the "Airedale" trappings. Rejoinders like "patently unaffordable", "Have to be practical" and "can only ask for what is acceptable to cabinet", etc., were interesting and at the same time, slightly worrying.

One can understand the preoccupation with sustaining the Navy's hull count and its collective capability – and the even more difficult problem these days of manning the vessels we have. But any discussion of naval air capability should not be regarded as a simple predatory incursion (presumably by those air guys) on the naval budget. Or for that matter as a flight of fancy into nostalgia. Naval air strength is a mandatory component of the offensive and defensive capability of the modern fleet as well as offering an unparalleled measure of flexibility and capability in the modern operating theatre. Given the potential threat of burgeoning navies in Russia and particularly in the Pacific and the nature of combat

operations of the past ten to fifteen years in the Gulf Region, capable, specialized naval air assets will be even more important as time goes on.

While not everyone endorses or buys into his paper "The *Future of Canada's Navy: Strategic Initiatives and Requirements*" delivered at Navy Summit 2008, Senator Hugh Segal offers some compelling arguments about future non-state actor and major power scenarios a future Canadian Navy may have to confront. It will require both the assets and flexibility, he says, to allow it to respond to the will of the Canadian Government in serving the national interest. Senator Segal talks about a "Robust" capacity within the naval task force scenario which includes flexible, multi-threat and multi-tasked naval air assets already being built into the fleet modernization plans of foreign navies.

It is not my purpose here to paraphrase the Senator's paper or to comprehensively endorse what it proposes. What I do suggest is that naval air is not a matter of history, it is and will continue to be a vital component of fleet capability. Any plan for the future Navy should not be about what the PCO finds palatable today but rather about what realistic threat scenarios suggest we must have in comprehensive, robust naval capability to protect our country and its citizens against a wide range of future threats (just consider competition for oil) at home and abroad. It must be able to work collaboratively with other navies and their assets – but it must be able to stand alone.

Many distinguished military experts have addressed the task force concept and the need for naval air support and capability. The recently appointed CDS, General Natynczyk, during his visit to HMCS Iroquois in the Persian Gulf, spoke to the pressing need for new naval helicopters and for transforming the Canadian military onto a "more agile, flexible force". In his words describing the operational scenario in the gulf, "it is the maritime dimension that connects this complex theatre of operations." These are issues we should think about and talk about. Yes, the old Fleet Air Arm is gone but naval air is very much here to stay. Looking back during 2010 at naval air and what it has accomplished for the Navy should remind us of the need to look ahead at meaningful naval air capability and what it can do for the Navy of the future.

Peter S. Milsom, National Chairman

Canadian Naval Air Group

BATTLE OF ATLANTIC CEREMONY

By Dennis Shaw

The weekend of 2 - 5 May 2008, I had the honour to represent the Canadian Naval Air Group at the 65th Anniversary of the Battle of the Atlantic being held in Halifax, NS. The event was coordinated by the Dept. of Veterans Affairs, the Hon. Greg Thompson, PC MP Minister. The Official contingent consisted of fourteen veterans, plus representatives from the Royal Canadian Legion, Army, Navy and Air Force Veterans in Canada and Mr. Clifford Chadderton from the National Council of Veterans Association.

The veterans represented every province of our country with by far, the grater number having served in the Canadian Merchant Navy. This left two ex WRENS, a representative from the Royal Canadian Naval Association, one from the Naval Officers Association of Canada and the remaining two of us representing the Canadian Naval Air Group. Personally, I was delighted to see so many from the Canadian Merchant Navy present for the occasion. For far too long, the contributions of the Merchant Navies of this country and other countries, have not been properly acknowledged. I saw Merchant ships sunk during the Battle of the Atlantic and know what a terrible price they paid for our eventual victory.

I felt particularly honoured to be included in this gathering as all my war time experience was with the Royal Navy. In addition, as we all know, as far as the Royal Canadian Navy was concerned, the Battle of the Atlantic was a small ship operation. The smallest ship I ever had in the Navy was a cruiser, the rest of my time was in aircraft carriers!

It made me wonder if the Dept of Veterans Affairs shouldn't have done a little more consideration about who they select to attend this kind of function. Although, in defence of the Department, the number of veterans who actually experienced the Battle of the Atlantic are getting fewer and fewer. Regardless, I was happy and honoured to attend.

The first event we attended was the Friday night dinner which was sponsored by HMCS SACKVILLE in the Shearwater Aviation Museum and was MC'd by Vice Admiral Dusty Miller. Much to my delight during the proceedings, the Admiral invited all those who had been involved in Naval Aviation to stand. I noticed Admiral Gordie Edwards, Ted Smith, Sam Allen, and myself rose among the two hundred guests present. It may sound a bit

mushy, but I felt very proud that Admiral Miller had selected us for a special accolade.

Saturday morning started off with a visit to the magnificent Chapel of Remembrance in Stadacona where we viewed the memorial windows dedicated to those RCN ships lost during the Battle of the Atlantic. This was followed by a short service conducted by the Command Chaplain.
From Stadacona we journeyed to the Maritime Museum of the Atlantic for a ceremony which honoured the Merchant Navy. This included a rose laying ceremony at Sackville Landing as well as a visit to the various memorials in the area. Being a member of the Atlantic Chiefs and Petty Officers Assoc. I was delighted that it included a visit to our Sailors Memorial. We then adjourned for lunch at the Holiday Inn in Halifax. Following lunch, we attended a ceremony at the Camp Hill Veterans Memorial Building. I must admit I ducked out of some of the ceremony in order to go and visit a couple of old shipmates who are patients in their rooms. I never visit Camp Hill without thanking God that our shipmates are so lovingly cared for. For this, Canada deserves our appreciation. Saturday night we had dinner at Peggy's Cove which I am sure pleased the out of town attendees. For a tourist visiting Nova Scotia and not going to Peggy's Cove is like going to London and not viewing Buckingham Palace, or not visiting the red light district when visiting Amsterdam.

Sunday started with what I suppose could be regarded as the highlight of the weekend, the Battle of the Atlantic Commemorative Ceremony at the Memorial in Point Pleasant Park. The weather was kind to us, and with HMCS SACKVILLE sailing in the background, the whole event was impressive. From Point Pleasant we attended a lunch at Pier 21. This was followed by the group being shown a visual 4D presentation entitled "Oceans of Hope" after which we had a conducted tour of Pier 21. While viewing photographs of the many troop ships which came in and out of Halifax during the war, much to my surprise, I saw one in which I had sailed in the Mediterranean in 1943 - RMS FRANCONIA.

Sunday night we attended a reception and a performance of the orchestral suite "Within Sight of Shore" at The Bridge in Juno Tower. The work was written by the distinguished Nova Scotian musician Scott MacMillan. Scott is the son of Lt Comd Robert MacMillan, DSC and Bar, who was in command of HMCS ESQUIMALT when she was sunk off Halifax Harbour on 16 April 1945. HMCS ESQUIMALT thus became the last Canadian warship sunk in WWII. The musical work details her sinking in four movements. I had the opportunity to speak to Scott MacMillan and to discover we had a number of mutual friends as a result of my own involvement in the entertainment business. I found his work to be imaginative and emotional. It left me with the impression of a proud son paying due homage to his father. Of the crew of 71 in HMCS ESQUIMALT, only 27 survived.

The major event to really close this momentous weekend was the Minister's Dinner which was held in the Stadacona Wardroom. I was awarded the Convoy Cup at the dinner and was privileged to have the opportunity to briefly address the gathering. Firstly, I told the assembly how pleased I was that finally the Canadian Merchant Navy was getting the recognition for its part in the Battle of the Atlantic it so richly deserved. Although, I must admit, this recognition has greatly improved over the last twenty-five years. Secondly, I thanked the Minister and his staff from the Dept of Veterans Affairs for the way we had been treated during this wonderful weekend. Not by any stretch of the imagination is the Dept of Veterans Affairs my favourite department of the Government, but I must admit, I gave them credit for the superb way they conducted this occasion.

I am not a veteran who believes that because we experienced WWII, and, all the blood and agony that went with it, that Canada owes me something. Rather, I would prefer to thank God that I am privileged to live in this wonderful Country which has been so welcoming and generous to me in the over sixty years I have called Canada my home.

Once again, my thanks for allowing me to participate in this Battle of Atlantic Ceremony.

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Swordfish Chapter - Canadian Naval Air Group 2008 Reunion, 10,11,12th October, Richmond BC.

Contact Roger Rioux, Reunion Chairman
4B-46354 Brooks Ave.
Chilliwack BC V2P 7S8 or
rjrioux@shaw.ca

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Rate for reunion is $115.00 + tax per night.

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Further questions - contact
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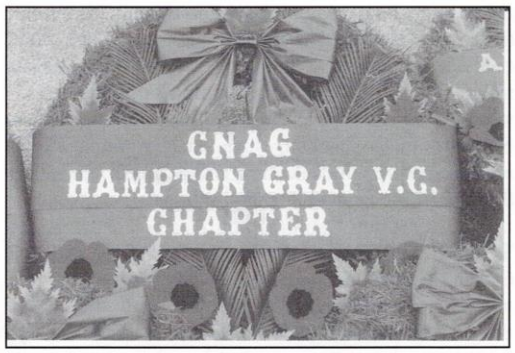
BATTLE OF ATLANTIC SUNDAY
OTTAWA

VADM (RET) R. HENNESSEY LAYING WREATH FOR RCN

Paul Baiden, Ted Forman, Stan Conner, Al Darwin



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NATIONAL WAR MEMORIAL

THE MARITIME DIMENSION OF THE SOVEREIGNTY AND SECURITY CHALLENGE IN CANADA'S NORTH

Commander Hugues Canuel, Executive Secretary to the Chief of the Maritime Staff

While this article is not intended to tackle the scientific data fuelling the public debate on global warming and the receding ice cap in the Arctic, one can accept some form of relationship between the two phenomena and the general proposition that easier access will result in an upsurge of traffic in the North. Increased used of the Arctic waterways and growing interest for the region's natural resources present Canada with both opportunities and challenges. The Canadian Navy will be called upon to play a pivotal role in tackling this sovereignty and security challenge given its fundamentally maritime nature as will be discussed below.

THE ARCTIC CHALLENGE

Although threats to Canadian sovereignty are denounced with much stridency in some circles, one must first understand that, with the exception of Denmark's position regarding Hans Island, no one country is challenging Canada's claims over the lands of the Arctic archipelago. Differences occur over the interpretation of the maritime domain claimed by Ottawa, mainly in reference to two specific covenants of the 1982 United Nations Convention on the Law of the Sea (UNCLOS).

Canadian government claims that the application of the baseline principle to the Arctic archipelago makes all waterways among the islands – including the various routes of the famed Northwest Passage – "internal waters" where Canada exercises absolute sovereignty. Other nations dispute this application of the baseline principle, instead considering these waterways an international strait, where foreign vessels have the right of "transit passage". Under this regime, Canada would continue to exercise sovereignty over the islands and retain the authority to implement various environmental, fiscal and criminal regulations but not the right to refuse passage to foreign vessels.

The second contentious element contained in UNCLOS is that of the continental shelf. This provides for those nations claiming responsibility over the management and exploitation of sea bed resources – but not those of the water mass above as in the case of the 200 nautical miles Exclusive Economic Zone – along geological formations extending to seaward from the coasts, beyond the EEZ. Canada is making extensive claims in this area, particularly in the Atlantic and the western Arctic. These reclamations have not come under scrutiny yet as formal submissions remain to be made at the relevant UN commission but challenges are bound to arise, particularly in the North, as the five Arctic nations are likely to make overlapping claims.

As much as the issue of sovereignty remains an emotional topic for Canadians, greater access and increased traffic in the North present even more of a security challenge when one considers the wider sense of the word. While the dramatic events of 9/11 generated a particular focus on the terrorist threat, the larger post-Cold War era brought forward the multiple dimensions of national security. Although the menace of nuclear Armageddon receded, the country is now facing a range of threats that effect Canadians in their daily lives and the three maritime approaches to Canada – in the Atlantic, the Pacific and the Arctic – may prove as much sources of weakness as of prosperity if not properly monitored and enforced. Smuggling of narcotics, human trafficking, unlicensed exploitation of our fisheries by foreign vessels, dumping at sea of pollutants by merchant ships; these are only some of the ways in which Canada's maritime approaches can be abused.

Threats may also result from the innocuous use of the sea, as can be perceived nowhere more clearly than in the Arctic. On-going activity in Canada's North includes commercial fishing, scientific research, re-supply of isolated communities by cargo ships, merchant traffic proceeding to and fro commercial ports, cruise shipping and adventure tourism. Whether the Canadian Arctic is used as a way to transit from one ocean to the other or remains a destination in and of itself, such traffic is likely to take place during an increasingly long navigation season (roughly from June to November) and that is when incidents – be they collisions, groundings, environmental violations, illegal smuggling, etc – are likely to occur. This is the period when Canadians need an active military presence in the North to tackle challenges to our sovereignty and security, resulting from conscious initiatives as well as those resulting from unintended actions.

THE CANADIAN FORCES AND THE ARCTIC CHALLENGE

One must underline, however, that military initiatives require close coordination with other federal

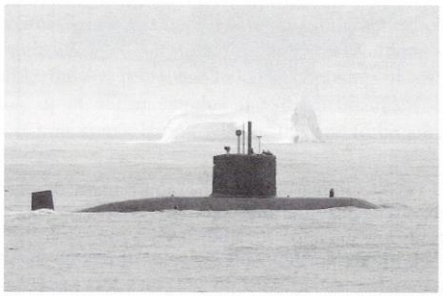
departments and agencies. Such cooperation is necessary as the Canadian Forces is not mandated to *lead* security missions within Canada. The CF is instead tasked to *support* other federal departments and agencies during specific events, providing means and capabilities not found elsewhere within government.

In the maritime context, such missions occur on a routine basis. For example, agents from the Department of Fisheries and Oceans – holding the legal mandate to enforce Canadian jurisdiction with respect to the management of fisheries in the Exclusive Economic Zone (EEZ) and beyond (in accordance with the Northwest Atlantic Fisheries Organization Convention) – often embark in naval platforms in order to leverage the ships' particular surveillance capabilities and ability to provide armed enforcement when required. Similar measures are invoked for contingencies such as the interception of vessels involved in criminal activities (human smuggling, drug trafficking, etc), when agents of the Canada Border Services Agency and/or the Royal Canadian Mounted Police would be embarked.

This construct, whereby the CF supports other departments and agencies, espouses the government's resolve to improve security in the North within a wider, integrated Arctic strategy such as that defined in the Speech from the Throne of October 2007. It is put to practical use through a number of sovereignty and security operations conducted in the Arctic in recent years under the command of Joint Task Force North, headquartered in Yellowknife, Northwest Territories. One of six regional commands reporting to Canada Command in Ottawa, JTFN is responsible for the conduct of all routine and contingency operations in Canada's North, including Operation NUNALIVUT in the high Arctic, Operation NUNAKPUT in the Mackenzie Delta region and Operation NANOOK in the Eastern Arctic.

Such joint and integrated operations, repeated on a yearly basis, allow the CF to develop a persistent and effective presence in Canada's North while exercising with representatives from the relevant government agencies and other departments. Government also announced last summer its intention to reinforce its military presence on the ground through the creation of the Canadian Forces Arctic Training Centre (CFATC) in Resolute Bay – a multi-purpose facility capable of supporting the delivery of individual and collective training in the harsh arctic environment – and the expansion of the Canadian Rangers from last year's strength of 4,100 members to a total of 5,000. Such initiatives, combined with increased surveillance conducted by CF aircraft and space-based assets such as RADARSAT 2, will markedly contribute to tackling both sovereignty and security challenges in the North.

THE CANADIAN NAVY AND THE ARCTIC CHALLENGE



HMCS CORNER BROOK

The latest instalment of Operation NANOOK took place in the vicinity of Baffin Island in August 2007. As in previous years, all elements of the Canadian Forces participated, including a Halifax-class frigate (HMCS *Fredericton*) and a Maritime Coastal Defence Vessel, HMCS *Summerside*. Unprecedented though, was the deployment to the Arctic of a Victoria-class submarine, HMCS *Corner Brook*. The submarine distinguished itself by conducting an extensive covert surveillance patrol in the Davis Strait that included tracking an exercise "vessel of interest" that had escaped all other means of detection due to the particularly challenging weather conditions during that period.

This event, to occur again with different participants this summer, demonstrated the fundamentally maritime nature of the sovereignty and security challenge in Canada's North while also reiterating the long-standing principles of sea power necessary in tackling it. Ultimately our capacity to defend our sovereignty and preserve security throughout the Canadian maritime domain derives from an ability to understand what is happening in our ocean areas, by being able to exert our presence where and when it is needed, and in being able to control events through the latent or actual use of force at sea.

Two projects will specifically address the maritime nature of the Arctic as a theatre of operations as announced in the summer of 2007.

First, Ottawa outlined the requirement to establish a deep water refuelling facility in Nanisivik, Nunavut. This site, located inside the eastern entrance to the Northwest Passage, will enable the Canadian Forces to sustain a persistent naval presence in Canada's Arctic waters by developing an already existing commercial berthing facility with an airstrip nearby. While the facility will also be used by other government agencies operating in the high Arctic, it will primarily serve as a staging area for naval vessels, enabling them to re-supply, refuel, embark equipment and supplies, and transfer personnel as required to operate in the region for the full extent of the navigation season.

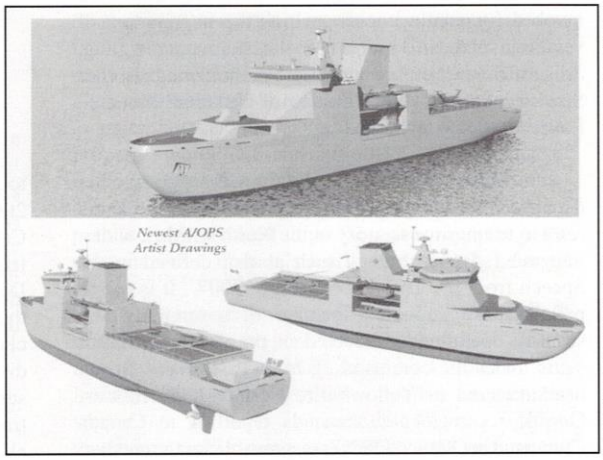
Government also stated its intent to acquire up to eight Arctic/Offshore Patrol Ships (AOPS). These ice-capable vessels will enhance Canada's ability to defend its sovereignty over its entire maritime domain, including the Arctic. The primary task of the AOPS will be to conduct armed surveillance to the edge of our Exclusive Economic Zone and beyond. The AOPS will also be tasked to support other federal departments, throughout Canada's three ocean approaches.

The vessel's design will enable it to operate in ice and in the heavy weather areas of the Grand Banks in the Atlantic and the northwest coast of the Queen Charlotte Islands in the Pacific. The AOPS will be fitted with gun armament, be able to conduct boarding operations, have a limited ability to support operations ashore, have a sufficiently robust command and control system to contribute to the national surveillance picture, and be fitted with a flight deck to operate a helicopter when required. While not designed to fulfill the role of an icebreaker, the AOPS will be built to operate in medium first-year ice (of approximately 1 metre in thickness), which may include old ice inclusions (hard ice built up over many years) to allow for safe operations in the North during the navigation season, *when it counts.*

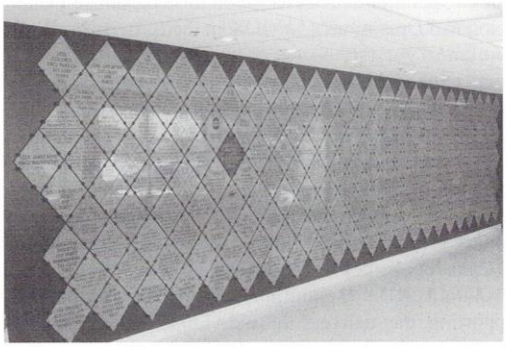
CONCLUSION

The conduct of operations on a yearly basis will allow Canadian sailors to develop the Arctic navigation expertise, as well as the joint and inter-agency experience, required to develop a persistent and effective presence in the North as part of the wider CF effort within an integrated approach. This experience, combined with increased resources and future ship acquisitions, will ensure that the navy is poised to act throughout Canada's vast maritime domain, based on a clear understanding of what is happening off our coasts, as well as being able to exert control over events at sea, where and when required.

(Photos by DND)



Newest A/OPS Artist Drawings



Do you have a tile on our Wall of Honour?

Hi there:

2008 is the 90th Anniversary of Shearwater and in our Fall edition, we will try to cover many of the exciting happenings at Shearwater during that period. Naval Air was one of them. We are depending on you to send in some of the best things you can remember that happened. I don't want to hear the same old stories about how no one would want to read what you wrote or it isn't printable for whatever reason, or you don't write well etc. Guess what? You're not alone. The volunteers working on the aircraft are wonderful guys who give freely of their time and work diligently to bring the aircraft to static display status. As for the Firefly - a rollout for 2009 may be possible. Will it happen? Will it fly? Wait and see. Your donations are making all this possible - so don't stop sending them now. Your help is still needed.

A vital concern for future funding and volunteer support of the Museum, its Foundation and Newsletter is at hand. You will note 'In the Delta' that we are losing many good friends. Time has a habit of creeping up on us and perhaps you should be thinking about ensuring your history is not forgotten. That's what the Museum is here for. If it wasn't for you, it wouldn't be here. It is of great concern to me just who will support it, when we cannot be here to do so. Think about it! Don't count on personnel financial support from the Base/Wing. The Wing Commander and two others from the Base are Foundation members. That's it. The 'two others' are my sons in law. (I nagged a lot.) Please support the Museum by continuing your membership in the Foundation and by participating in fund raising projects/events - perhaps by purchasing a Wall Tile for the Wall of Honour. You don't have to be looking up at the grass to have one. If your family asks the burning question - 'What do you want for Christmas' or 'What do you want for your birthday', ask them to consider 'their' membership in the Foundation as a tribute to you, or a Wall Tile for you or for you and the family. Our families **must get involved** in order that your Heritage will be remembered. The best time Shearwater ever had was your time - Naval Air time. Don't let it be forgotten.

I want you to know that being Editor of the newsletter isn't always fun. Sometimes there are so many articles that we just can't use them all in one particular edition.

This edition is one of that kind. Wow - they're good, but every now and then I have to make the call to use part of an article or not use it for the present edition. This can be annoying to you - I realize that. Sometimes when this happens we do add your articles to our website www.samfoundation.ca and then, when possible, they go into the nsltr. The choosing of articles, setting up of these articles and the nsltr itself is my job. If you aren't happy with it, the one to be annoyed with, is me.

The response to my plea for articles for the nsltr, this time, was overwhelming. I was thrilled with the replies. This does not mean I want you to slow down on sending me articles. Not at all. Please keep them coming. I'm certain everyone enjoys them as much as I do. I'm depending on you to help me do my job. You are the best.

Well dearheart, it's time to call it a day, for now. I think of you often. Keep well and keep in touch. Because of you, I'm here. ***Kay***

PS ***Don't forget your article for the Winter Edition.***

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Christmas Gift Suggestion

Why not order a full tile for your loved one before 1 Dec and you will be entered into the SAMF draw for a 2 year Sustaining Membership in the SAM Foundation. (Value $200) If you order a half tile and win you will receive a 1 year Sustaining Membership (Value $100).

This contest includes all who purchased Tiles in 2008. The draw will take place at the Museum on 10 Dec by some celebrity (infamous ol' dog) you probably know.

Ken Millar - Wall of Honour Tile Coordinator.

FORMER NAVAL AIR PILOTS IN NORTHERN CANADA

The April 1, 1918 shotgun wedding of the Royal Naval Air Service (RNAS) and the Royal Flying Corps (RFC) into the Royal Air Force (RAF) took away the identity of Canadian-born naval air pilots but not their initiative. By December, 1918, as indicated in Foster's THE BUSH PILOTS, these "Canadians who had reveled in the comradeship and excitement of wartime action were welcomed home as heroes, then quickly dismissed from the service as part of their government's post war austerity measures." Actually, not all gave up their dream machines to find 'honest' employment.

Some volunteered to join the British Military Mission and flew during the Russian Civil War between 1918 and 1920. Others like Redford H. Mulock, Wilfred A. Curtis and Lloyd Breadner served in the Canadian Military and achieved high ranks. Meanwhile, Canadian-born RNAS pilots like Alfred W. Carter ultimately served as very senior officers in Britain.

A significant number of those former RNAS pilots who had left the service and returned to Canada, considered the various opportunities which quickly evolved in the 1920's for aviators: Barnstorming, national and international air races and meets, fire patrol, crop dusting, patrolling fisheries, mining surveys, aerial photography and mapping, flying club instruction, mail service, bush piloting, air cargo, passenger transport, airborne research, and air ambulance service to name a few.

By the late 1930's, success in these air activities would achieve a dual Canadian purpose:

1. To join people and their needs in the Southern part of Canada.

2. To conquer the inhospitable Canadian North with the ultimate goal of establishing true sovereignty.

For each of these two objectives, I have given one example in which a former RNAS pilot provided outstanding service during the Inter-War years:

STUART GRAHAM

This pilot from the Annapolis Valley of Nova Scotia had gained considerable floatplane and flying boat experience in the RNAS while patrolling shipping lanes to hunt and destroy enemy submarines. Stuart Graham was convinced that in many parts of Northern Canada, seaplanes would perform outstanding service, once the possibilities received warranted attention.

Consequently, in the spring of 1919, over the period of some weeks, he flew two HS-2L flying boats from Baker Point to the Saint Maurice area of Quebec, with his wife, Madge, as acting-navigator. While in the service of the Saint Maurice Forest Protective Association in 1919, Stuart's log book shows a total of 57 flights with winter freeze-up putting an end to operations in late October. Most flights had been aboard the aptly named, 'La Vigilance'.

During the 1919-20 winter, Stuart invented and built a viewfinder/intervalometer to be synchronized with a camera for aerial photography. This device comp-ensated for aircraft scabbing when in a crosswind, and kept photograph overlap to less than 10%. During the flying season of 1920, in addition to forest fire patrols and the dropping of thousands of hand bills over villages and hamlets encouraging fire protection, Stuart and his crew took over 3000 photographs covering a staggering 543,000 square miles.

Stuart Graham is credited with the following Canadian achievements:

- The first aerial forest fire patrol.
- The first aerial surveys to estimate forest inventory.
- The first aerial photography mapping
- The first staking of mining claims using a floatplane to gain access to the site.
- The first civil harbor establishment.

In addition to the historic forestry flights that first established the value of the aero plane in wilderness operation, Stuart Graham served as Comptroller of Canadian Civil Aviation beginning in 1928 and during the Second World War, he helped organize the British Commonwealth Air Training Plan in Canada.

The Canadian Air Board has described his exploits as the first practical use made of civil aviation in Canada. The Canadian Aviation Museum goes on to describe former RNAS pilot, Stuart Graham as the world's first bush pilot, and as well, Canada's first peacetime professional pilot. Stuart Graham was made a member of Canada's Aviation Hall of Fame in 1974 and passed away in 1976. Much more of Stuart's exploits can be found in the following issues of the Canadian Aviation Historical Association

Journals: Winter 1968, 1970, Fall 1976, Winter 1981, Summer 1999, Fall 2001 and Winter 2002.___

ELMER FULLERTON

Imperial Oil Ltd. was first to conduct aerial surveys in search of oil in the Northwest Territories. Two Junkers JL-6 aircraft named, "Vic" and "Rene" were sent on an expedition to the Norman Wells region in 1921 with Pictou, N.S. native, former RNAS pilot Elmer Garfield Fullerton piloting "Vic". Both aircraft made it to Fort Simpson on the MacKenzie River but the "Rene" undercarriage and propeller were damaged on landing. "Vic's" skis and propeller were transferred to "Rene's" but it stalled on take off and crashed. Enough parts were collected to rig "Vic", except for a propeller.

Oak sleigh boards and moose-hide glue were used by Bill Hill, aero mechanic, and HBC carpenter Walter Johnson to create a new propeller. It took three weeks during which Elmer Fullerton helped overhaul "Vic's" engine. Elmer flew "Vic" 500 miles south to the Peace River while "Rene", after many repairs, was also flown south in the spring of 1922.

A great deal has been written about the epic "Vic" and "Rene" expedition and many conflicting reports are recorded. The reader is advised to read the Summer 1982 issue of the Canadian Aviation Historical journal and the end-notes to understand the various points of view.

The Junkers were the trailblazers of the Territories but they never reached the Artic Circle. The first flights in Canada's Artic region were actually made by three Loening COA-1 amphibians (N1, N2 and N3) of the United States Naval Air Service (USNAS) under overall command of Lieutenant Commander D.B. MacMillan in 1925. They operated at Axel Heiberg Island and at Etah, well within the Artic Circle demonstrating that it was possible to use aircraft in the high Artic, at least for a few weeks each year. The information provided by the Canadian government as a result of its 'Artic' ship expeditions of 1922 to 1925 to the Craig Harbor and Pond Inlet areas had been of significant assistance to the USNAS expedition.

As for Elmer Fullerton, he went on to serve in various settings as an air instructor including an appointment in the early 1930's to teach British Fleet Air Arm pilots how to land proficiently on aircraft carriers. Elmer retired in 1946 and passed away in 1968 having been made a member of Canada's Aviation Hall of Fame. Readers are invited to read a story entitled, "Pioneering Flying in the Sub-Artic" written by Elmer himself which appeared in the 1934, #6 issue of the journal, 'Canadian Aviation'.

The SIDCOT Suit

In fairness, the story of early flying in the northern parts of Canada must include recognition of Frederick Sidney Cotton, one of hundreds of RNAS WW I pilots flying during the inter-war years. He formed the Aerial Survey Company of Newfoundland and also pioneered airmail service while being the first to conquer Labrador by air.

Most importantly, however, is Frederick's contribution to all other aircrew in the formative years of flying. When in the RNAS near London, Frederick commissioned his tailors, Robinson and Cleaver Ltd., to develop what became known as the SIDCOT suit, versions of which were used for many years in tackling Canada's north from open cockpits and unheated cabins. One kept 'warm as toast' with a SIDCOT suit while doing high level, low temperature flying in Northern Canada! ***Submitted by: Peter E. Lawson, CD***

Stuart Graham

Canadian Aviation
Hall of Fame Photo
& sketched by Mrs Coucill

Elmer Fullerton

Canadian Aviation
Hall of Fame Photo
& sketched by Mrs Coucill

HU21 - HMCS LABRADOR

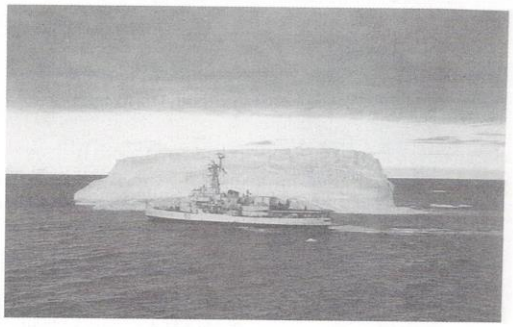
Provided Gordon Foster

The date was June 1956, we departed Halifax for the Easten Arctic as a detachment from HU21 Helicopter Squadron, embarked in HMCS LABRADOR. Out small detachment comprised of two Bell Model 47 helicopters and one Piasecki (HUP) twin rotor helicopter. Three officers and nine men. Unfortunately, after some fifty years, or more, all the names cannot be recalled.

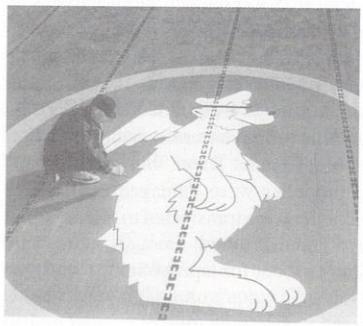
At that time, the ship had on board several civilian scientists with their equipment. Throughout that deployment period from June till October they conducted various test of Arctic waters and other scientific exercises. Our squadron pilots flew a number of sorties over the Arctic and the land in areas of Baffin Island, Frobisher, Fury and Hecla Strait etc. The ship also went into Fox Basin and made several trips to the shore landing area of the DEW Line site 30, with the ships LCP (Landing Craft Personnel).

HMCS LABRADOR, under Command of Captain T.C. Pullen sailed through Fury and Hecla Strait on Sunday 16 September to become the first ship to navigate this narrow body of water from east to west. The ship sailed through the strait with no difficulty and subsequently returned through from west to east. At that time, the USN ice breaker Edisto was in heavy ice west of the strait, having lost her starboard screw, making the LABRADOR's second travers all the more notable.

Another task given the helicopter det was to fly men and equipment to the low islands in the Arctic areas to install radar reflectors. These reflectors were mounted on steel pipes some thirty feet long and supported by cable to the



rock terrain fastened from the top to "dead heads" sunk into the rock by gasoline engine driven rock drills. The four by four foot square magnesium reflectors were mounted on top. As the arctic islands are so low, these reflectors provided the necessary navigation guidance. There still may be some standing! These aids to navigation were called "Cavanaugh's" after, I presume, the inventor. Photos - summer 1956 HMCS LABRADOR in the eastern arctic.



Ken Cann trimming up his "Bear" on the flight deck.

Ship's Musical group.

Ken Cann and Gord Foster clearing the deck. The HUP was still serviceable.

A Shared Heritage and Future - Shearwater 2008

Shearwater has been the focus of an often shared heritage in service of both our Navy and Air Force. Distinguished Canadian veterans of the Royal Naval Air Service helped establish and lead the Royal Canadian Air Force in 1924. The favour was returned by over 500 former RCAF pilots who largely staffed the second coming in 1945 of our Naval Aviation formed in 1918 and abandoned on the ending of the First World War. One of these, Robert H. Falls, was the first of our sailors to achieve the rank of full Admiral on appointment as Chief of Defence Staff. In 1975, the Air Force was richly repaid by Rear Admiral Boyle's cooperation in disbanding of the Air Branch and its mass transfer to Air Command with attendant loss of irreplaceable naval expertise, cross-trained in marine and aviation fields.

In all this, a central element has been the shared use and alternating command of Shearwater by each Service over its 90 year history. From its initial service as a flying boat base for anti-submarine patrols by the US Navy and subsequent aerodrome development for the short lived Royal Canadian Naval Air Service in 1918, it was recalled from 20 years hibernation to serve in the Second World War as RCAF Station Dartmouth. At war's end with drastic reductions in Air Force operations, it accommodated the establishment of RCN Air Section in 1946, serving as a shore base for squadrons of the Navy's first Light Fleet carrier, HMCS "Warrior". On July 1, 1948, now virtually an exclusive and fast developing naval facility, it was commissioned as RCN Air Station, HMCS "Shearwater". One of its most dramatic demonstrations of Naval Aviation's coming of age took place on the Centennial of Confederation July 1, 1967. In the ceremonial flypast down Halifax harbour, "Shearwater" launched a formation of about 80 naval aircraft and helicopters, over seven times that of RCAF Maritime Air Command, a record never before or since equaled.

Tragedy was soon to follow triumph. Against all common sense and the recommendations of an all-party special committee of Parliament, our last carrier "Bonaventure" was condemned to scrap in 1969 shortly after a mid-life refit, reducing sea going aviation to destroyer based "Sea King" helicopters. The destruction of naval aviation and a generation of hard won expertise was completed with the return of Shearwater to Air Command in 1975. Thereafter, Shearwater was progressively reduced to a shore base for the aging "Sea Kings" under what ultimately became 12 Wing of the Air Force. In a very real sense, however, Shearwater has continued to serve the Navy for virtually all of its active life. It commissioned under a flying sailor, the near legendary Captain A.B. Fraser-Harris, DSC and Bar, a member of Canada's Aviation Hall of Fame. Appropriately, it fell to another of our former naval aviators to strike the colours at the end of an era, Colonel John Cody, Shearwater's last Commanding Officer.

With infrastructure in serious disrepair, it was handed back to the Navy, relegating 12 Wing to the status of a lodger unit of CFB Halifax. Thus has the wheel again turned full circle at a time of renaissance in the rebuilding and transformation of our Forces under General Rick Hillier and a new visionary Minister of National Defence, the Honourable Peter MacKay. As noted by the article "Repairing the Neglect and Reduction of Shearwater" in the previous Newsletter, this absolutely priceless combined land, marine and air base was threatened with butchering and loss of the upper airfield to private development by hare brained action under a previous government in an "expedient" low profile transfer to Canada Lands Company at an absurd pittance of $1.6 Million. By what can be only described as an 11th hour rescue from disaster, the MND gave notice on March 28th of the intended recovery of Shearwater to its pre-sale borders by reacquisition of the remaining lands from CLC including the fully intact long runway #16-34.

In brief, the process is proceeding and on track to the formal return of ownership to the Crown under the authority and management of DND. It signals a new and robust future for Shearwater as a highly versatile base serving individual and joint operations of elements of all three services in Canada Command and Expeditionary Force Command. Literally, the post-Soviet and 9/11 world has required a sea change in the capabilities, organization and equipping of our military and security forces, including interoperability with allies. Much has now been published in mind glazing detail on seaborne projection of power arising from the fundamental shift in focus from blue water to littoral operations.

Its essence is presented in the following two extracts of the article by Rear Admiral (Rtd) Ken Summers on "Expeditionary Command ....." in the "Vimy 2008" paper recently published by the Conference of Defence Associations Institute.

"The Standby Contingency Task Force is tasked with rapidly deploying a Canadian Battle Group of approximately 1,500 personnel in order to stabilize and control a developing situation. Unfortunately, the planned acquisition of the Joint Support Ships (JSS) as replacements for the ageing AORs (whose main role is that of sustaining the fleet at sea) will not provide the SCTF with the maritime capabilities needed to pre-position or deploy the force, support it during the conduct of its land operation, nor provide it with a sea based national or multi-national command facility; capabilities that can be provided by a ship similar to a naval LPD or a modified commercial container or Ro-Ro carrier."

"Rapid and effective deployment of capabilities to the target area requires special equipment. Given that 70% of the world's population is within 100 km of a coastline, and that

Canada borders on three oceans and has the longest coastline in the world, a sea based capability should be viewed as an essential national requirement. The United Kingdom, the Netherlands, Australia, Spain and Italy have invested in such a concept through the purchase of commercial built amphibious ships that are far less expensive than modern war-ships; are manned with but a fraction of a warship's complement ; and are readily available. Canada must develop an amphibious ability, without it, we will not be able to rapidly deploy our crisis response capabilities to the Asia-Pacific region or to littoral sections of our own country. Government must act now".

The need for timely projection and support of joint forces by sea adequate to a broad range and scale of security and humanitarian missions has been widely recognized in Canadian military and political circles. Conservative party defence policy since 2004 continues to call for strategic mobility of ground forces by amphibious ships and heavy airlift. This has been strongly championed by General Rick Hillier from the outset of his appointment as Chief of Defence Staff in 2005. It is an inherently fundamental requirement of the transformation to joint operation commands and needs of the SCTF. At the same time, he has pointedly noted the modest but glaringly inadequate capabilities of the planned Joint Support Ships for deployment of expeditionary forces. All this is reflected as well in the decision to establish a headquarters building for the SCTF in Shearwater along with the Minister's action to preserve its joint operations capabilities under DND ownership.

In light of other funding priorities, it is not entirely surprising that currently there is no provision in the just published Canada First Defence Strategy or naval plans for amphibious sea lift capability. Except for Germany, we are the only maritime power among our major allies with no significant ability to project and support our ground forces by sea since loss of "Bonaventure" in 1970. In addition to the United States, the world's leader in the technology and art of amphibious warfare, Britain, France, Holland, Spain, Italy and Australia have versatile amphibious and helicopter landing and assault ships in service and development for military or civil tasks. Holland more than pulls its weight in the NATO alliance with two fine ships and a third anticipated.

Aviation is an intrinsic and vital element of naval power and its projection in joint operations with ground forces as repeatedly demonstrated by our allies. The remarkably limp interest and provisions for this capability by our naval leaderships are a consequence of handing over army and navy aviation to the Air Force, the loss of cross-trained air and marine expertise, chronic under funding and attendant priority and preoccupation on maintaining core capabilities of the fleet. A restoration of cross-training and experience of officers as pilots and air engineers has been strongly recommended. Its objective will be to rebuild the expertise needed in planning and procurement of sea going aircraft as integral elements of our ships and to ensure the most effective use of aviation in naval and joint operations including allied forces.

Ultimately we will match the Aussies. Their choice from many NATO designs and derivatives has been thoroughly evaluated and wisely selected in a construction program for two LHD ships of the "Canberra" class. Their exceptional versatility, advanced capabilities and potential are ideally suited to our long term requirements. They are highly efficient designs, operating with essentially the same crew strength at over five times the displacement of our "Tribal" class destroyers. Along with visiting NATO counterparts as well as the JSS, they will fit comfortably on the deep water jetty with about 1,100 feet of berthing at Shearwater. The latter's tri-service facilities, extensive renovations and additions for the multi-role naval "Cyclone", the new $23 Million heliport and their strategic co-location with the Atlantic fleet are the envy of our allies. Shearwater's rescue from destructive break-up now assures a superb base for deployments of our expeditionary ships and forces on amphibious training, task force exercises, work ups and operational missions in the 21st century.

Meanwhile, great strides are being made in the development of long range heavy and medium airlift with the procurement of four C-17 Globemasters and the new Super Hercules C-130J transports. However, it needs to be stressed that airlift is inherently limited in application and cannot alone meet the needs of expeditionary deployments. The vital deficiency is the Navy's continuing 38 year lack of ships to deliver and support security and humanitarian forces at viable levels for overseas missions. These are overwhelmingly in the littorals with coastal access to inland areas of conflict, human suffering and natural disasters around the world. Witness the recent tragedies in the Horn of Africa, Indonesia, Thailand, India and Burma.

Whatever the mounting investment costs, any wishful illusions that the planned JSS replacements for the old fleet supply ships will meet Canada's needs for sea lift have been shattered beyond repair. If crew size can be reduced to 165, each would at most accommodate 200 troops and provide about 1,100 lane metres for open deck storage. Even if all three were available and simultaneously diverted from their primary task of fleet replenishment on each coast, they could not deploy a single fully integral and equipped composite Canadian battle or disaster relief group of 800 to 1,000 men requiring up to 7,500 lane metres of covered and open deck storage. We have seen the humiliating consequences of neglect in the GTS "Katie" charter incident and the gallant efforts by our inadequately equipped Navy to deliver timely aid at New Orleans in the wake of "Hurricane Katrina". In sea lift assignments the JSS will have a useful but very limited capacity for small operations in unopposed landings, particularly where dockside berthing is available. Like Hellyer's eye rolling make over of the Forces, no other nation has been inspired to follow the all singing and dancing JSS concept, an inherent conflict and compromise of major fleet replenishment and minor sea lift capabilities. Of all the vessels now in operation or development, the "Canberra" class LHD would be an ideal choice and the most cost effective, especially if procured in series production with the Australian Navy. Principal characteristics are summarized in the foot notes.

Increasingly, tactical aviation has become a vital requirement and integral element of naval and ground

forces alike for combined as well as autonomous operations at home and overseas in defence of our security and national interests. The ultimate expression in terms of global mobility and power in littoral missions is to be seen in the harmonized development of US Navy carrier and Marine forces over the past 70 years. Our need has finally been recognized by establishment of three operational and a support command for domestic and overseas service. They will draw upon each of the three arms as force generators and suppliers for creation of composite task forces of the required mix and level of integrated land, sea and air power. Once again the pendulum of change and demand swings, often with unexpected consequences. In this, Shearwater's strategic location and powerful versatility have been and will continue to be a priceless defence asset. The near butchering and reduction of the 1,500 acre complex to a helicopter only capability would have been an enormous folly, destruction and waste. As airfield, marine and joint operations develop powerfully, far beyond the fractional utility by 12 Wing, it will re-commission as CFB Shearwater in the service of all three arms, other federal departments, NATO allies and Canada and Expeditionary Force Commands.

Transformation has been well served by the appointment of Rear Admiral Paul Maddison as Maritime and Joint Task Force Commander Atlantic. He brings a timely background of expertise in planning and leadership of the Contingency Task Force, including its exploratory amphibious exercises from Shearwater to Florida in the "borrowed" USS "Gunston Hall", a Marine Corps landing and assault ship. Despite the present stand down of the SCTF, studies are continuing on seaborne concepts and requirements at the Maritime Warfare Centre in Halifax.

Interesting times indeed are ahead as our political and military leaderships and especially those of the Navy, come to grips with the rising threats and immense challenges of a deeply troubled world. Free of parochial inclinations, turf and funding battles, it will require first class global mobility and support of our Forces by sea and air on joint operations to defend Canada's interests, economic well being and values at home and beyond our borders with the United States and other staunch allies. In this, Shearwater's strategic location and base capabilities are destined to play a major role in support of our naval and combined forces on joint operations and deployments in Atlantic and overseas theatres.

FOOT NOTE

(1) Australian "Canberra" Class

Type - Landing Helicopter Dock (LHD)

Displacement - 27,850 tonnes

Length - 760 feet

Beam - 105 feet

Draft - 23.5 feet

Propulsion - combined diesel & gas turbine

Speed - 20.5 knots

Range - 8,000 nautical miles at 15 knots

Endurance - 50 days before replenishment

Troops - 1,124

Crew - 243

Landing Craft - 4 LCM

Operations - command & control facilities

Aviation - 24 helicopters, ski ramp for F-35B fighter

Hospital - full casualty service

Program Cost - Less than Tribal destroyer replacement

(2) Advances in technology are revolutionizing naval force efficiency. The cost per capita in personnel recruiting, training, accommodation, medical services, pay, allowances and pensions is staggering, particularly for highly skilled trades. It is reflected in the enormous $250 Billion allocated to personnel costs in the Canada First Defence Plan. This amounts to over 50% of the entire $489 Billion budget for defence over the next 20 years. Crew efficiency is therefore a major aim of modern ship and overall fleet design. Australia's "Canberra" reflects the remarkable progress being achieved through automatic, computer controlled and managed systems and the complete shift from steam to diesel and gas turbine power. Though over 7,000 tons heavier, it requires an operating crew about one-third of our last carrier, "Bonaventure". Such improvements in sea going efficiency can have a powerful multiplier reduction in overall manpower requirements and costs, both civil and military.

Ralph Fisher – Sea Horse Group

Australian "Canberra" Class Expeditionary Ships

SOVEREIGNTY AND THE 1948 NORTHERN CRUISE - *Leo Pettipas*

Sovereignty: Freedom from outside control; independence in exercising power or authority (Gage Canadian Dictionary).

By the end of the Second World War, it had been realized that the development of air power had rendered the continental interior of North America accessible to a potential enemy via the northern approaches. Both Canada and the United States had accepted the fact that, in addition to security against seaborne assault, they must also have adequate protection against airborne attack, especially from the north, northeast and northwest. Lieutenant-General Charles Foulkes elaborated further in an address to officers of Army headquarters on 28 January 1948: "We can expect landing parties, up to a battalion, to be landed in the Canadian North, either by air or by ice-breaker. The main thing is we must be prepared to see off any landings in the Canadian Arctic."

By June of 1946, Canada and the United States had already developed a co-ordinated security plan that would provide for the defence of Canada, Newfoundland and the United States (including Alaska). A series of eight joint tasks was agreed upon, one of which was to defend the northern area of Canada and Labrador and to protect the land, sea and air communications associated therewith. The responsibility of the Royal Canadian Navy in this scheme was to guard sea communications in the coastal zone.

But the prospect of aggression from outside the continent was not the only issue troubling Canadian politicians and policy-makers in the early post-war years. During the War, experiences with the Soviets at various Allied conferences and as co-combatants on the battlefield revealed conspicuous incompatibilities between the value systems and interests of East and West. William Lyon MacKenzie King, Canada's Prime Minister, took the view that the USSR and the USA would ultimately be in serious contention – a scenario that would geographically place Canada squarely in the middle of any ensuing conflict. For their part, the Americans perceived Canada's North as an easy line of advance into the continental United States. They regarded the roads and airfields built across Canada's North during the war as assets of continuing importance to continental security and to the supply line to Alaska. They were also seen as liabilities if they fell into the wrong hands. If Canada did not undertake defence measures on a scale considered adequate by the Americans, it was feared that they might take matters into their own hands, thereby posing a challenge to Canadian sovereignty.

To contend with such concerns, as well as to comply with the joint security provisions worked out with the Americans in 1946, Canada took initiatives on several fronts. The Army's response was to form the "Mobile Striking Force" (MSF) in 1948. This formation was intended to provide an immediate and rapid counter to enemy lodgements seeking a foothold in the Canadian North. The MSF comprised three airborne battalions and appropriate artillery and supporting elements (e.g., communications and medical units, engineers to construct bridges, airstrips, etc). These were all based at various points across Canada; they were not actually garrisoned in the North. An integral element of the MSF operations was an air component, provided by the RCAF, that would transport paratroopers and infantry, tow troop-carrying gliders, evacuate casualties, and carry out interdiction, aerial reconnaissance and offensive air support to ground troops. To carry out its tactical role, the Air Force activated two fighter-bomber and two light-bomber auxiliary squadrons based in the Prairie provinces.

The Navy in the early post-war years was not as oriented toward northern operations as were the other two services. In fact, Canada's sole aircraft carrier, *HMCS Warrior*, was not even suited to activity in the North Atlantic, never mind in Arctic waters. That was not significantly changed with the acquisition of the "arcticized" *HMCS Magnificent* in mid-1948; without the benefit of an ice-breaker, which Canada did not have, its presence in the Arctic would be confined to the ice-free months of the year.

On the other hand, the Allies' productive experience with tactical aviation during the late war prompted the RCN to develop a post-war army co-op capability. In 1946, an Army unit, the No. 1 Carrier-Borne Army Liaison Section (CBALS) with headquarters at the Naval Air Section, RCAF Station Dartmouth became an integral part of the Navy's tactical air support program. Its role was to help train aircrews ashore and afloat in the particulars of Army co-op work and photo reconnaissance. In August 1948 the 18th Carrier Air Group attended the inaugural training session in offensive air support of the Army at the Joint Air School near Rivers, Manitoba. This training gave Naval Aviation a capability equivalent to that of the RCAF's tactical squadrons, and hence the means to deal with enemy landings in the Canadian North as alluded to by Foulkes several months earlier.

Other developments were afoot in the early post-war period that promised to adapt at least some elements of the Navy to cold-weather operations should they become necessary. At the height of the recent war, the Air Force had created No. 1 Winter Experimental Training Flight to investigate and solve problems brought on by the effects of extreme cold weather on modern military

aircraft. Originally based at Kapuskasing, Ontario, by October 1945 it had relocated to RCAF Station Edmonton where it assumed the name "Winter Experimental Establishment," or WEE. In 1946, the RCN was equipped with Firefly FR Is and Seafire XVs, and in September of that year a Firefly and two Seafires were dispatched to WEE for the winter test period. In subsequent years, later generations of operational types used by the RCN – the Sea Fury, Firefly IV and Avenger – also underwent cold-weather testing. Theoretically, if the aircraft carriers were not suited to the Arctic environment, at least the front-line naval air squadrons could join their Air Force counterparts in operating from northern land bases under extreme winter conditions.

At any rate, by the summer of 1948 the Navy was prepared to act on the desire within government circles to solidify early post-war sovereignty claims in the North, and particularly the northeast, with a military presence there. American and Russian interest and activity in the Arctic regions spurred the country into action, which culminated in a first-ever cruise by Canadian warships into the Arctic archipelago. The idea was not only to show the flag; there was, appropriately enough, an operational side to the undertaking as well: the intention was to conduct tactical drills alone and in conjunction with the RCAF that would benefit the crews of both aircraft and ships.

Accordingly, a small task force comprising HMC ships *Magnificent* and Tribal-class destroyers *Haida* and *Nootka* departed Halifax on 2 September 1948. Aboard the carrier were 803 (Sea Fury) and 825 (Firefly) squadrons of the 19th Carrier Air Group. "Exercise Grindstone," a double air-to-ground strike against one of the Magdalen Islands by the aircraft, was carried out early in the cruise. Subsequently, a Lancaster and a Canso from RCAF Station Greenwood conducted task force interceptions, shadowing, homing and patrols under simulated war conditions, weather permitting. The naval aircraft conducted fighter interceptions and shadowing drills, although fog and suspected contamination of the aviation fuel on board *Magnificent* curtailed these activities. All three ships proceeded together through Hudson Strait to Wakeham Bay at the extreme northern tip of Quebec, where the carrier topped up the destroyers' fuel and then shaped course for Halifax. With improving weather as *Magnificent* drew south, more drills were carried out with the RCAF. The Tribals meanwhile made their way across Hudson Bay to Churchill, Manitoba for a five-day social call ("Operation Seadog"). They arrived back at Halifax on 28 September.

Questions have been raised about the effectiveness of the 1948 northern cruise. Familiarization with Arctic waters, radio-testing within the auroral belt, bathymetric and magnetic readings, and hydrographic soundings were all part of the agenda. The tactical exercises with the Air Force, though limited, were useful, and good publicity and national pride were realized given the historic nature of the voyage. On the other hand, the extent to which Canadian sovereignty in the North was bolstered and reaffirmed is debatable. Whether or not the US or USSR took notice of the cruise is not addressed in the available records. In any case, as an exercise in sovereignty-assertion, the cruise was little more than a flash in the pan. NATO came into being the following year, budgets were tight, and the Navy had a choice to make: North Atlantic ASW within the NATO alliance, or Arctic patrols. In the event, the former carried the day; the threat to national security by a real potential enemy (the USSR) was deemed more urgent than were perceived threats to Canadian sovereignty by an ally (the USA). The RCN went on to develop a high level of professionalism and expertise in Cold War anti-submarine operations, and commitment to Arctic sovereignty patrols by HMC ships and naval aircraft went on the back burner.

LCdr J. Roberts, Pilot (left) and Observer Lt P. Berry reviewing charts before manning their 825 Squadron Firefly FR IV, *HMCS Magnificent*, during the 1948 northern cruise. DND photo.

HMCS LABRADOR

by Ronald E. Elliott CD. RCN (Ret'd)

"There is much talk these days about the sovereignty of Canada's arctic, it is very necessary that this be done and it pleases me to see action in that direction. But we should not forget, even though it is little known, that the Royal Canadian Navy's ship, HMCS Labrador, an icebreaker, or officially known as an Arctic Patrol Vessel was commissioned in July, 1954, specifically for the duty to safeguard Canada's far north, and did so from then until 1957. There were four voyages to the arctic, the first year she circumnavigated the Northwest Passage from east to west, the first naval vessel ever to complete this perilous task, she then traversed the Panama Canal and returned to Halifax.

In 1955, I had been wedded for two weeks when we left Halifax in April for a 6-month voyage in the Eastern arctic to carry personnel and equipment for the construction of the Distant Early Warning (DEW) Line. It was a frantic time for all concerned because we had many American transport vessels that we had to break ice for and where we were in Canadian waters we were responsible for their safe and perilous-free journey. Occasionally one of them would break away from the 'in line ahead' position and veer off and become stuck in ice, whereby our C. O. Captain O. C. S. Robertson, a majestic looking gentleman of 6' 7" stature would swear the blue blazes as to that 'deserter's' action and we would have to back track through ice, to free him and tuck him back in line with a severe warning that if he attempted to do it again we would open fire on him, which was rather an empty threat, for the simple reason that our one weapon was frozen solid from the seas breaking over and freezing everything solid, but it seemed to have worked as it did not happen again.

We also conducted many scientific experiments of all kinds, underwater, above water, in the air with weather balloons, taking soundings, we even discovered waters that were not even charted by early explorers so we made up new charts and even named some unknown waters after the Captain or other famous Canadians. We carried almost as many scientists onboard as we did crew (220), we also carried 2 helicopters, a Piazecki and a Bell, to break the monotony of the voyage, needless to say there was never any shore leave- we were working high above the Arctic Circle where there was nothing but icebergs and very thick ice. Occasionally there would be an announcement over the tannoy (speaker system) that a polar bear was dead ahead. We would chase him for a short while and he would stand on his hind legs and roar - we were the visitors and he was the owner of this land.

Rarely, would we receive mail, when it did arrive it would be weeks if not months old, but we did make up our own weekly newspaper named 'Bergy Bits'. It gave us a chance to catch up on current events - we even had our own flag besides the white and blue ensigns. It was a large one with a white polar bear on a blue background and we flew it entering and leaving harbour. We experimented with all types of dark glasses for ice glare. One day I forgot to put my glasses on and went on deck to do some chores where everything was white including the ship's hull and when it came time to go back into the messdecks, I was blind for two days before my eyesight returned with much pain, it was a lesson learned.

In 1956, many more explorations were carried out to safeguard our sovereignty, then in 1957, a break in custom was carried out when she crossed the North Atlantic for a show of the flag to Portsmouth, Oslo and Copenhagen, and in November she was paid off for refit and never flew the white ensign again as she was transferred over to the Department of Transport, and eventually to the Canadian Coast Guard."

HMCS LABRADOR

First ship to circumnavigate North America in 1954 transiting the Northwest Passage and back to Halifax through the Panama Canal. (A few photos from that trip.)

COMMANDING OFFICER - CAPTAIN ROBERTSON

American Icebreaker tied to Labrador

LS Russ Mackintosh, Stoker Aboard Labrador

Eskimos

Feeding Time U/K Seaman

IN THE DELTA

ADAM, Jim

BEARD, Thelma

BOVEY, Bill

CHASTON, Jake

DAVEY, Bruce

HIGGINS, Frank

HILL, Edwin (Ed)

HUNT, Ron

IVES, Vic

JOBIN, J.P.

LORD, Paul

MASON, David

MINGO, Marlene Rose

PORTCHMOUTH, R.S.

QUINTIN, Priscilla

SAWYER, Keith

SEARLE, Dorothy

WILLIAMS, Don

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NOTICE

Shearwater Aviation Museum Foundation

General Meeting

to be held in the Museum

Friday 5 September 2008 0900

"South" Any Way You Like It

Ernie Cable

Maritime patrol squadrons regularly flew sovereignty patrols in the Arctic and by the luck of the draw I probably spent more time flying in the Arctic than most maritime navigators. We departed from our home base on the first leg of a sovereignty patrol, which lasted up to 14 hours then landed at forward operating base near or in the Arctic. From there we flew two or three more sovereignty patrols before returning home. The aim was simply to demonstrate a Canadian presence in the Arctic by circling low over various isolated communities and bantering with the local RCMP or Transport Canada radio operators. The presence of a large four-engine aircraft circling overhead was often the highlight of the day and the radio operators would spread the latest word from the south among the local residents. Just as importantly, these flights gave the crews experience flying in the Arctic which is quite different than flying at southern latitudes.

The most obvious difference is that during the summer months there is continuous daylight with the sun barely dipping below the horizon at midnight. During the winter there is continual darkness with just a glimmer of daylight at noon as the sun tries to peek over the horizon. During a sovereignty patrol in February, a period between total daylight and total darkness, our crew experienced the unique Arctic phenomenon of witnessing two sunrises and two sunsets in a single day. We took off from Yellowknife at day break and as we flew northward it became night because the sun hadn't yet risen at the more northern latitudes; later in the morning the sun did eventually come up and we saw our second sunrise of the day. At the end of the patrol shortly after sunset we headed south from the high Arctic for the return flight to Yellowknife; as we flew farther south it became daylight because the sun had yet to set at the southern latitudes. Then, shortly after landing at Yellowknife we witnessed our second sunset of the day.

During the late summer and fall the Arctic islands and waterways provide good topographical features for visual navigation. But in the winter the waterways are frozen over and the blowing snow makes map reading difficult. Ice formation along the shorelines, inlets and bays greatly distorts the geographical features making visual and radar navigation quite challenging. Also, in the winter the senior ground crew members have the opportunity to show the junior technicians the tricks of servicing the aircraft in blowing snow and bone-chilling temperatures and preparing the aircraft for launch the next morning after having cold soaked in drifting snow overnight.

The most significant difference is that proximity of the North Magnetic Pole, located about 400 nautical miles north of Resolute, makes the aircraft's magnetic compasses virtually useless. The magnetic standby or "wet" compass, which can get most aviators home at temperate latitudes when all else fails, just wanders aimlessly. In the Arctic the navigator determines aircraft heading by using the sun and stars to align the aircraft's gyros to "Grid North" which parallels "True North" at zero degrees longitude also known as the Greenwich meridian. Even the high-tech gyros in the long retired Argus patrol aircraft had their imperfections which caused the gyros to drift off heading. Consequently, the navigator devoted a significant portion of his time taking celestial observations to keep the gyros properly aligned to Grid North; lest he become one of the notorious legends of the lost in the Arctic.

In 1967, my Argus crew combined our centennial project with a sovereignty patrol. The first leg of the patrol was from Greenwood to Thule, Greenland; followed the next day by the second patrol from Thule to Yellowknife via the North Pole. After departing Thule the plan was to fly to the North Pole, drop a time capsule containing current newspapers, Playboy magazines and other centennial year artifacts; then head south to Yellowknife to host a cocktail party for invited dignitaries to celebrate Yellowknife's inauguration as the capital of the Northwest Territories. Upon reaching the North Pole we dropped our time capsule and commenced a slow orbit around the Pole. Although, we were at the North Pole for only 10 - 15 minutes we were technically there on three consecutive days because we were at one of only two places in the world where you can fly around the world and cross the international dateline every few minutes. We arrived at the North Pole about 2355 hours September 8. As we circled in a clockwise direction we crossed the international dateline (180 degrees longitude) and gained a day; so now it was now 2355 hours September 9. As we continued to circle back towards the western hemisphere we flew back into September 8. Five minutes later the time had advanced to 0000 hours September 9 on the western hemisphere side of the dateline. Continuing to circle, we again crossed the dateline into the eastern hemisphere where we gained a day and it was now 0000 hours September 10. So, during the 10 – 15 minutes we spent at the North Pole we were actually there on three calendar days, September 8, 9 and 10.

Now, the unique navigation feature at the North Pole is that there is no True North, East or West; all directions from the Pole point "True South". So "True South" is any way you like it because every destination from the North Pole is "True South". The trick is to select the right "South" because the wrong "South" could very easily have you wind up in the opposite hemisphere from your intended destination. Fortunately, with the aircraft's gyros aligned to "Grid North" the "South – any way you like it" problem goes away because, unlike True North, "Grid

North" doesn't reverse direction as you fly over the North Pole; therefore, Grid East, Grid West and Grid South retain their orthogonal orientation to Grid North. Because Grid North is aligned with True North at Zero degrees longitude and the Greenwich meridian is the point from which all longitude is measured, the Grid heading to any destination from the Pole is simply the required True Heading plus longitude of the destination. So, our heading to Yellowknife from the North Pole was due South or 180 degrees True (which was the course to anywhere in the world you like). However, the ambiguity is resolved by calculating the Grid course of 294 degrees Grid (180°T+ Yellowknife longitude, 114° W= 294°G) which put Yellowknife on the nose 1,700 miles away.

All this Grid heading stuff saved our crew from becoming a statistic while I was on exchange with the U.S. Navy at the Naval Air Development Center in Warminster, PA from 1972-75. I was a project officer on the P-3C Orion Update program and one of our update projects was integrating the new Omega world-wide fixing aid with the twin inertial navigation systems on the P-3C. After months of flight testing at temperate latitudes we finally got all of the Omega bugs resolved and we were ready for the toughest navigation test of all; if Omega performed well at the North Pole it would work anywhere in the world. While planning our flight to the North Pole I agreed to let the primary inertial navigation system align itself to True North as it normally would, but I insisted on aligning the second inertial system to Grid North because I did not trust the inertial aligned to True North to keep pace with the rapid change of longitude at the North Pole. My U.S. Navy colleagues believed that the most advanced computerized navigation system in the world would have no problems at the North Pole and using Grid was unheard of and unnecessary. But, as the only navigator who had polar experience I won my point.

On the flight from Thule, Greenland to the North Pole the Omega and both inertial systems performed flawlessly. The latitude and longitude calculated by the three systems agreed well within limits as we overflew the North Pole. But as we started to circle, the rapid change of longitude caused the True North inertial to topple as I suspected; we lost all navigation information from this inertial including the pilots' attitude instruments; the Omega position drifted out of the ballpark because it relied on heading and ground speed from the toppled inertial to calculate position. So, there I was on top of the world with a broken navigation system, no fixing aids, no sun (overcast) and no where to go except "South", all 360 of them! But, only one "South" headed to our intended destination Bodo, Norway. The second inertial aligned to Grid North saved the day! The pilots regained their attitude instruments and the inertial provided guidance to the only "South" that led to Bodo 1,400 nautical miles away on a course of 166° Grid (180°T - Bodo longitude, 14°E= 166° G).

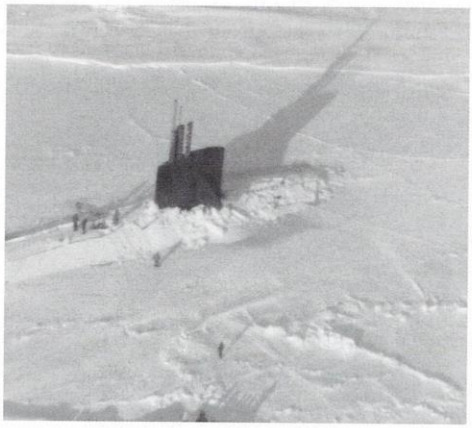
Since its introduction in 1980 the Aurora had proved to be one of the best deep ocean anti-submarine (ASW) aircraft in the world. However, the Soviet navy had established an under-ice polar route to transfer their nuclear submarines between the Pacific Fleet at Vladivostok and Northern Fleet at Severodvinsk on the White Sea in the Arctic. The Soviets now had the capability to sail under the ice from the Arctic Ocean through some of the channels in the Canadian Arctic archipelago and slip undetected into the North Atlantic. Clearly, an under-ice ASW capability was needed to guard Canada's Arctic frontier and NATO's northern flank. Therefore, in the early 1990's Canada and the U.S. established a series of ICEX exercises to develop an under-ice ASW capability. Fortuitously, sovereignty patrols had taught CP-140 Aurora crews the vagaries of the Arctic and prepared them for the exciting challenges of flying ASW patrols over the ice-covered Arctic Ocean. Canadian Auroras and U.S. Navy P-3C's were based in

USN P-3C flies over two Sturgeon Class submarines during OP ICEX (Photo taken from Canadian Aurora)

Thule, Greenland to be close to the ICEX exercise areas north of the Canadian archipelago and Greenland. The U.S. Navy provided two Sturgeon Class nuclear submarines for the exercises which were sometimes augmented by Royal Navy Trafalgar class nuclear submarines. Some of the missions consisted of simply finding and tracking the submarines under the polar icecap while others were designed to refine sub-air

cooperation procedures to track a second submarine under the ice. The polar icecap is pocked with polynyas (small stretches of open water) even in the middle of winter.

Crews from two Sturgeon Class submarines meet for Bar-B-Q during OP ICEX



USN Sturgeon Class submarine surfaced through ice during OP ICEX

The pilots became particularly adept at descending to 200 feet and dropping sonobuoys into the small polynyas to detect the target submarine. Detection ranges were considerably greater than in the open ocean because the Arctic Ocean is very quiet with no ambient shipping or wave action noises to mask the submarine. Some sonobuoys had their hydrophones replaced by long metal spikes bolted to their bottom base plates. The modified sonobuoys, called geobuoys, were developed by U.S. Navy for use in Vietnam where the spikes embedded in the forest floor detected the clandestine movements of the Vietcong insurgents at night. Similarly, when the geobuoy was dropped over the Arctic icepack the spike imbedded in the ice. The icecap acted like a large hydrophone; the sounds from the submarine radiated into the ice were detected by the geobuoy and transmitted to the aircraft.

ICEX was quite successful but revealed several aspects of under-ice ASW that had yet to be resolved. However, the Cold War came to an end in 1993 and the ICEX exercises fell victim to reduced funding. In fact, the budget reductions were so restrictive during the following decade of darkness that Aurora sovereignty patrols were terminated. Not only did Canada lose its ability to exert sovereignty over its Arctic archipelago, but also its air force lost a generation of air and ground crews with any knowledge or experience in protecting their Arctic frontier.

However, the threat of global warming has revitalized interest in the Arctic and maritime patrol aircraft are again being called upon to protect Canada's Arctic sovereignty. With the prospect of Arctic seabed resources becoming commercially viable, claims of sovereign jurisdiction over various regions the Arctic basin are receiving renewed attention. One of the agreed criteria is that Arctic rim nations should have jurisdiction over their continental shelves and any ridges emanating from the shelf. Two of the ridges in question are the Alpha Ridge and Lomonosov Ridge both of which project north from Ellesmere Island. The Alpha Ridge projects 150 km north into the Arctic basin, whereas the Russians claim the Lomonosov Ridge extends 1,800 km from their New Siberian Islands. Several years ago, Canada began conducting geological surveys to prove that the mineral rich Alpha Ridge is geologically an extension of Canada's Arctic continental shelf and therefore falls under Canadian sovereign jurisdiction.

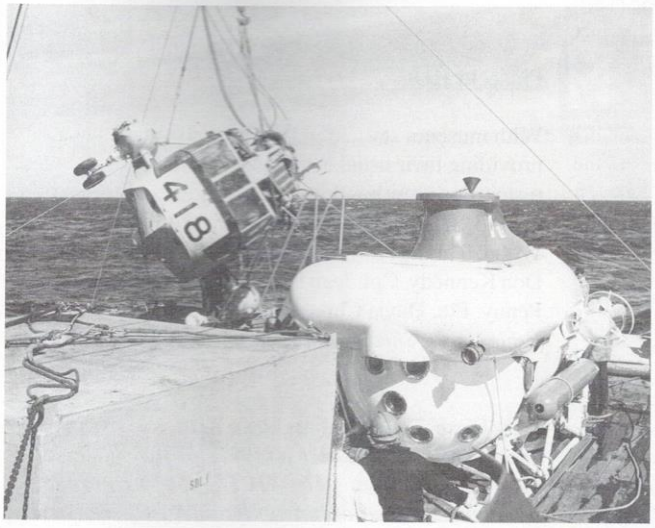
In previous years, a helicopter was used for the surveys, but proved to be very slow and time consuming and more survey work remained. However, in April 2008, Defence Research and Development Canada (DRDC) recalled the Aurora's ability to detect sound through the polar ice during the ICEX exercises and enlisted the services of an Aurora to drop geobuoys to complete the seismic survey of Alpha Ridge to substantiate Canada's jurisdiction. This was the first time that military technology had been used to map the Arctic seabed and prompted DRDC to look for other scientific uses for the Aurora in the Arctic. It will be ironic if the ICEX geobuoys intended to counter Russian submarines in the Arctic during the Cold War will be used to counter Russian claims to the Lomonosov Ridge in the battle for Arctic seabed resources.

RECOVERY OF SEA KING 418

To the Recovery Team. Sea King Helicopter was recovered on 2 Oct 73 from the depth of 525 feet in the approaches to Halifax Harbour in a position approximately 21 ½ miles south of Chebucto Head where it had crashed and sunk on 26 Apr 73. The helicopter had been on the bottom for over five months and prior to its successful recovery by the submersible SDL-1, two previous recovery attempts had proven unsuccessful.

Although the Department of the Environment submersible PISCES IV had been successful in attaching recovery slings and a lift line to these slings, unfortunately she was withdrawn from the operation after the second attempt had failed to recover the helicopter. As a result, salvage operations were discontinued until Canadian Forces submersible SDL-1 became available following its refit and sea trials.

The recovery team will remember the disappointment we all felt when the first two attempts to recover the helicopter failed. On the first attempt, and in the final stages of recovery, a metal thimble in the end of the lift line came under such extreme pressure that the thimble buckled and collapsed, producing a sharp cutting edge which severed the lift line. On the second attempt, and again in the final stages of recovery, bolts holding the transmission the airframe had become weakened due to salt water corrosion, thus allowing the airframe to separate from her transmission, rotor head, rotors and port engine which were recovered. As a result of its original crash and the two subsequent recovery efforts, the battered condition of the Sea King made the task of recovery more challenging than originally expected. Previous attempts had removed known lifting points and the main landing gear was the only strengthened member now available for recovery. With the helicopter upside down on a soft mud bottom, with visibility less than 5 feet and a bottom current to contend with, it was possible only to attach a lifting sling to the tie-down shackle on the starboard wheel strut. Fortunately this shackle withstood the lifting tension applied and the Sea King was retrieved to within 90 feet of the surface. At this depth, and as an added precaution prior to a salvage net being placed underneath the helicopter, the helicopter was re-slung by divers with a two-legged sling on both wheel sponsons for final hoisting. This precaution reduced the tension on the single tie-down point by distributing the weight between the wheel sponsons and the tie-down point. Moreover, it facilitated a slow continuous lift while the net was spread underneath the helicopter and the recovery strop was attached as the helicopter proceeded toward the surface. The salvage net was placed beneath the Sea King to prevent it from returning to the bottom before the final lift commenced. However, the helicopter remained intact throughout the hoisting to the great satisfaction of all concerned, and was placed aboard YMF 253 without incident.



Many people share in the success of this operation. To begin with, a large measure of the success of this operation can be attributed to a group of Oceanographers from the Bedford Institute of Oceanography, under the supervision of Dr. D. McKeown. Utilizing a portable side scanning sonar from the CNAV Sackville, this group initially located the Sea King on the sea bed and confirmed that the helicopter was intact. This valuable assistance, and the further assistance provided by Mr. Paul D'Entremont during the third recovery attempt, played a key role in the successful outcome.

Throughout the entire recovery operation, including the two previous unsuccessful attempts, the services of CNAV St Charles, YMF 253 and YMT 12 were impressive in their continuous support under adverse weather conditions including riding out one of the worst storms to hit the area in years. Perhaps no better example of dedication and teamwork can be cited than that shown during the final and successful recovery attempt: over a period of 5 days, 32 people lived and worked together happily and

successfully aboard YMF 253, the floating crane, a vessel neither specifically designed nor intended to accommodate personnel or operate for any extended period outside of the confines of the harbour.

A significant feature of this recovery was the capability of the SDL-1 to operate in reduced visibility and attach recovery lines in a single working dive. This feat was accomplished by utilizing a positive locking device to secure a lift line to the helicopter and a reel to deliver the lift line from the bottom to the surface. It is noted with much satisfaction that this particular positive locking device was invented by MWO J. McIntosh, whose interest in improving the capability of SDL- has continued even though posted from the unit to one of HMC Ships. The successful application of these devices not only displays the importance of selecting and employing the proper tool for the task at hand but it also clearly demonstrates the foresight, ingenuity, and practical know-how as well as a great deal of pride, effort and skill on the part of all concerned in the SDL-1 detachment.

Throughout this prolonged and eventful operation, I have been impressed with the obvious mutual respect and confidence that developed and grew between the civilian and service members of the team. I feel certain that every civilian who took part in this operation will hold the "service" in the highest possible regard as a result of the SDL-1 detachment. As a serviceman, I consider it to have been my privilege to have been associated with this elite group of servicemen, and if I admit that the "service" has their "first eleven" on the job, we acknowledge the fact that civilian side of the team could not have been better represented.

From start to finish, Petty Officer Galley has been on the scene and has photographed various highlights of the operation. It is with my sincere thanks to him that I have a few photographs to help remind you of your important part in this difficult but successful operation.

In thanking you for your loyal and cheerful support, I would like to associate myself with the following message made by the Maritime Commander: "It was most gratifying to observe your team efforts result in the successful salvage of the Sea King. This shows what can be accomplished by professionals given an important job to do, despite trying circumstances. To all involved: QHM and Staff, Fleet Diving Unit, St Charles, Bedford Institute of Oceanography, Sackville, Shearwater, SDL-1, YMF 253 and YMT 12: WELL DONE."

H.W. Vondette, Commander,
Queen's Harbour Master
(submitted to SAMF by Mrs Vondette)

SAM Foundation Charity Golf Tournament
to be held Wednesday 3 Sep 08
at the Hartlen Point Forces Golf Club
Tee Off time - 10AM

Check out the Air Show Website for more info:
www.nsairshow.ca/business/golf/index.asp

Contact:
Chuck Coffen (902) 434-2170 Or
SAMF (902)461-0062 or
Toll Free 1-888-497-7779

Piasecki HUP

With museum staff John Webber and Duncan Mason providing their usual excellent support, the volunteer restoration crew has done a superb job in restoring our HUP-3. The crew consisted of: Ron Kay, Lorne Wood, Thomas Simmons, MCpl. Kirk Clifford, Cpl. Don Kennedy, Cpl. Jean Francois Turcotte, Cpl. Keith Penny, Pte. Davis Chretien and Rob LePine.
Ernie Cable, Shearwater Aviation Museum Historian.

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The Piasecki HUP-3, as seen here on our inside back cover is the latest addition to the museum's aircraft collection. The HUP-3 was acquired in February 2003 and during the past year has been restored as "NAVY 245" the first HUP-3 to arrive at Shearwater in 1954. *(Ernie Cable)*


50