

ARGONAUTA

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ARGONAUTA

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In This Issue

Editorial	1
President's Corner	2
CNRS Conference 2010	3
Argonauta Regulars: Michael Clark and Tavis Harris	5
Canadian History Conference	8
Eric Ruff ~ The Barque <i>Sarah</i>	9
Fraser M McKee ~ Merchant Ships as Freight Carriers in WW2	17
Tom McCulloch ~ Charting of BC Waters from 1953 - 1967	23
Letter – a very happy Conference participant	27
Gallery – A selection of 2009 CNRS participants	28

Editorial

There are many authors seeking an entry into the field of maritime history. Giving them an opportunity to publish is an important part of our CNRS mandate. In our two tier system, The *Northern Mariner* has a rigorous academic publishing standard – *Argonauta* less so. And that is what is important about *Argonauta* – giving others the opportunity to publish new work in the field of maritime history and by doing so, helping “reach a larger audience”. (See President's Corner).

Welcome back Tom McCullough who speaks in the authentic voice of a sailor who has spent many years at sea and to Eric Ruff the Curator Emeritus of the Yarmouth County Museum in Nova Scotia. Eric shares with us, his in-depth knowledge of the museum's ship portrait collection. Fraser McKee continues his detailed documentation of the Canadian Navy and the merchant marine, work that will serve the test of time.

Our regular *Argonauta* contributors, Michael Clark continues his contemporary assessment of issues in the marine industry while Tavis Harris reviews current literature. Our photographic feature was provided by Barry Gough. A special thank you to Marilyn Gough for her help. The 2009 Vancouver Conference Team – an enthusiastic group, still it seems, on a bit of a “high” over their sterling CNRS event.

Maurice D. Smith
Editor, *Argonauta*

President's Corner

I am normally prone to criticizing early appearances of holly and mistletoe as being reincarnations of Montgomery Ward's 1939 commercial introduction of a hugely successful caribou with a rubicund proboscis; jingling bells are more suited to a glass of port after roast goose than to advertizing washing machines and paper towels. Yet this issue of Argonauta is the last for 2009, so I will take this opportunity of wishing you all my very best season's greetings and a happy Christmas.

Despite "global warming," the first hard frosts have already arrived at my home on the North shore of Lake Ontario, the first snow flakes arrived several weeks ago, and while living within Robert Louis Stevenson's depiction of a sailor's life:

The sheets were frozen hard, and they cut
the naked hand;
The decks were like a slide, where a seaman
scarce could stand;
The wind was a nor'wester, blowing squally
off the sea,
And cliffs and spouting breakers were the
only things a-lee.

is certainly not the norm for most of us, the year's end is always a time of goodwill, of thinking of the less privileged amongst us and of reflecting on how we can best share some of the more precious things in our own lives with others.

The Canadian Nautical Research Society / Société canadienne pour la recherche nautique provides an number of elements – awards, conferences and publications – that are precious to all of us, but it is easy to argue that the "us" represents too small a segment of the population. Might I suggest that while our membership has remained fairly constant over the years, we are still statistically insignificant to our national number cruncher, StatsCan? Our much appreciated collaboration with NASOH has extended the reach of *The Northern Mariner* and we are actively looking for similar opportunities.

A closer look at the distribution of our publications, at the attendance at our conferences and at the distribution of our awards shows a demographic ageing, a trend that we should all be

trying to rebalance. At our recent Victoria conference and Annual General Meeting this was discussed in positive terms; at our 2010 conference, 15 to 19 June, in partnership with the Centre for Foreign Policy Studies at Dalhousie University (see <http://centreforforeignpolicystudies.dal.ca/pdf/msc2010/MS2010_Poster1.pdf>) I look forward to finalizing and putting into effect the results of these ongoing discussions.

Canada, together with the United States and other Northern hemisphere countries, represent not only a geographically important part of the world as we know it, but also a preponderant part of our historical perspective, let alone heritage. We are proud of our austral membership who tend to confirm our relevance. Why then are we so short of representatives of the younger generations? It is impossible to admit that the interactions between our oceans and landmasses, our seafarers and our politicians, our traditions and modern technology are not relevant in the twenty-first century.

We can debate the reasons for the demographics; whether it be the educational system, perhaps confirmed by the paucity of M.A. theses on maritime subjects submitted for our Matthews prize; or whether it be the free internet takeover of academic content in the publishing domain illustrated by the subscription costs demanded by various republishers; or even an intrinsic lethargy towards a reasoned approach to world affairs.

The fact remains that what we consider precious, in the invaluable sense, is not reaching a larger audience. Might I ask you all therefore, to look around you at your friends and acquaintances, at your colleagues and students and persuade them to become members? In this season of goodwill you might even offer them a membership – student prices at a level that even an economic downturn makes undaunting – and let us see if we cannot turn the demographics around.

Again, my season's greetings.

Paul Adamthwaite,
Picton, October 2009.

**CNRS 2009 Conference and AGM / Dalhousie University CFPS
Maritime Conference, Halifax, NS, 16-19 June 2010**

***The Canadian Navy Yesterday, Today and Tomorrow – The ships, the
sailors, their equipment and what they did***

The Society is pleased to hold its 2010 Conference and Annual General Meeting at the famous Pier 21 on the Halifax waterfront, in association with the Centre for Foreign Policy Studies (CFPS) of Dalhousie University.

This conference has been integrated into the Canadian Navy's centennial celebration events and also coincides with the 70th anniversary of the Canadian naval Research & Development community; as a result, that community is a major contributor to the conference. The conference also commemorates Dalhousie's long association with the Navy, especially the Centre for Foreign Policy's direct, 40-year relationship with the Navy. The Canadian Nautical Research Society (CNRS) will hold its annual general meeting in Halifax at the same time and an additional day will be given over to other topics of more general interest to Society members.

This conference complements the naval policy conference being organized by the Naval Staff in Ottawa for 05-07 May 2010 (see separate notice). Hence the Halifax conference will not include papers on naval strategy, policy, or doctrine.

The CFPS conference has two main aims:

- (1) look back over 100 years of Canadian naval evolution at select activities, operational and training concepts, conditions of service, ship types, and operational equipment (including aircraft) that have influenced the evolution of the Navy; and
- (2) examine new and emerging technologies and concepts that are likely to influence future naval evolution in Canada.

There will be three, one-day sessions Wednesday-Friday 16-18 June inclusive covering:

- (1) ships and people;
- (2) equipment (systems), and operations (including training); and
- (3) future challenges and possible technological responses.

A fourth one-day session will be set aside on Saturday 19 June for Society business and papers on other topics of interest to CNRS members.

There will be an evening reception at the Maritime Museum of the Atlantic on Wednesday 16 June and a conference dinner in the evening of Thursday 17 June. A tour to the Fisheries Museum of the Atlantic in Lunenburg (<http://museum.gov.ns.ca/fma/>) is being considered for Friday 18 June for Society members in lieu of the future challenges session but at extra cost to be determined.

Paper proposals are invited for submission to the conference organizers, Peter Haydon (navalconference@eastlink.ca) and/or Richard Gimblett (richard.gimblett@forces.gc.ca) no later than 31 March 2010. Applications for the Gerry Panting New Scholar's Award can be similarly directed. Accepted papers will be considered for publication with first right of refusal by CNRS-CFPS.

A block of rooms is reserved at the conveniently co-located Westin Hotel at a preferential conference rate of \$175/night; other accommodation options can be investigated at: <http://visitors.halifax.ca/accommodations.shtml>.

Further information about the conference can be obtained from the Centre for Foreign Policy Studies' website (<http://centreforforeignpolicystudies.dal.ca/index.php>) or by direct e-mail enquiry to the organizer, Peter Haydon, at navalconference@eastlink.ca. An on-line registration form, with a direct link to the conference hotel, The WESTIN, will be available on the Centre website in November 2009.

Contributors to Argonauta 2009.4 include

Paul Adamthwaite, Barry Gough, Roger Sarty,
Michael Clark, Tavis Harris, Eric Ruff, Faye Kert,
Tom McCulloch, William Glover, Fraser M. McKee, Richard Gimblett,
Ambjorn L. Adomeit, Marilyn Gough, June Slee

The Recycling and Lay-up Debate

Michael Clark

The nineteenth century economist Jevons defined a market in the context of supply and demand. This still applies in today's freight market and in the fifty-year period following the Second World War there were seven dry cargo freight market cycles averaging 6.7 years each. The present global recession has meant that during the first half of 2009 there has been a sharp decline in demand for container ships, car carriers and bulk carriers. Traditionally, shipowners have restored the balance between supply and demand by reducing any surplus tonnage through slow-steaming or short-term lay-up of older units. Although scrapping a vessel usually occurs only when the shipping industry's reserves of cash and optimism have been run down, faced with few available places to lay-up, owners have already sold the largest number of vessels for demolition since 2001. Yet the freedom to balance supply and demand through scrapping may no longer be available to shipowners if two UK-based institutions - the Environment Agency and the International Chamber of Commerce - cannot agree on which legislation covering the recycling of ships is appropriate.

Many of these vessels for scrapping will have gone to Bangladesh which currently has the world's largest ship breaking industry. More than 25,000 workers are employed in about 25 yards and numerous tidal beaches and it is estimated that 500,000 people are indirectly employed in downstream sectors. Over 95 per cent of a ship can be recycled, the majority of which is high quality steel, and scrapping provides Bangladesh with 80 per cent of its steel requirements. However, the workers and the environment are at risk of contamination by toxic waste such as

asbestos, heavy metals, hydrocarbons, ozone-depleting substances and PCBs in the ships they are dismantling.

The case of the Environment Agency

In August 2009, the Norwegian-built 35-year-old *Margaret Hill*, a 72,000 gross tons Marshall Islands registered Liquid Natural Gas carrier was held at Southampton by the Agency after it was suspected of being bound for what the Agency calls 'recycling a waste ship' in a non-Organisation for Economic Cooperation and Development country. The Agency acted on the basis of its interpretation of the Basel Convention that under international law anyone intending to send a ship from England and Wales for dismantling abroad must first obtain permission from the Agency and its equivalent regulators in the destination country. Since it had neither received nor approved any application to export the *Margaret Hill* the Agency's head of waste and resource management announced:

'Prompt investigation carried out by Agency officers, using the intelligence provided by the Maritime and Coastguard Agency, has ensured that this ship does not leave the UK until we are clear about what is happening to it. There are rules in place to ensure that waste ships containing hazardous materials can only be dismantled at the properly authorised dismantling facilities in either the European Union or an OECD country [and] cannot be sent to dismantling facilities in developing countries and cause damage to people and the environment outside [...] such as India or Bangladesh.'

In other words, the Agency claims that, to prevent any potential contravention of the

rules on waste exports, it has the power to put a temporary stop in the UK on any vessel of any state if it suspected it was about to be scrapped. For example, an Indian flagged or owned ship could be detained in a UK port to stop it being broken up in India since the beneficial ownership of a 'waste ship' was irrelevant.

The response of the International Chamber of Shipping

While declining to comment specifically on the *Margaret Hill* case, the Chamber has disagreed with the Environment Agency. Firstly, the Chamber does not recognise the interpretation that ships can be 'waste'. Secondly, it believes that the Basel Convention was designed to restrict the export of hazardous waste for dumping in non-OECD countries and does not apply to ships. It argues instead that it is the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, adopted by delegates from 63 countries in May 2009, which governs demolishing vessels. This Convention has tried to address all the issues around scrapping, including concerns raised about working and environmental conditions at recycling locations. The text was developed over three years with input from member governments of the International Maritime Organisation and in co-operation with the International Labour Organisation as well as leading parties to the Basel Convention. The IMO has issued a statement:

'We would like to see countries moving quickly to ratify this convention and applying it in their national laws [...]. This would avoid [...] ships being detained on the basis of a convention not designed to regulate the recycling of ships.'

The new Hong Kong convention ensures that after reaching the end of their operational lives ships do not pose an

unnecessary risk to human health and safety or to the environment. To facilitate environmentally sound recycling it regulates the design, construction, operation and preparation of ships without compromising their safety and operational efficiency. It will be open from September 2009 for signature by any government and will come into force 24 months after the date on which 15 States representing 40 percent of world merchant shipping by gross tonnage have signed it without reservation as to ratification.

The sensitivity of freight rates depends on the laws of the perfect market, unhindered supply and demand. One ship with the choice of two cargoes will lead the market up, two ships chasing one cargo will take it down. It is therefore no exaggeration that if the current oversupply of tonnage cannot be reduced by one element of the market – scrapping – the global recession in bulk shipping will not only be unnecessarily prolonged but international efforts to stimulate world trade may be put at risk.

* * *

Literature Review

By Tavis Harris

With the year drawing to an end, a number of articles should keep Maritime historians interested during the Winter Months. Hiraku Yabuki analyses an early 20th century arms race in his article "Britain and the Resale of Argentine Cruisers to Japan before the Russo-Japanese War." (*War in History*, 16 (4): 425 – 446). Yabuki, a doctoral student at King's College London focusing on Royal Navy policy in the Pacific uses ample archival resources from England and Japan arguing that contrary to previous works on British arms exchanges, the Royal Navy did not favour Japan in this instance but was the result of strategic concerns

regarding Russian intervention in the period leading up to the Russo – Japanese War.

William P. Leeman, a Special Lecturer in History at Providence College offers an interesting examination of partisan politics and its impact on Naval education in "Scientific Warfare vs. Partisan Politics: Thomas Jefferson and American Naval Education." (*International Journal of Naval History*, August 2009). Leeman discusses how Thomas Jefferson's anti-Federalist ideals shaped his attitude towards military/naval education. While Jefferson was ostensibly opposed to standing armed forces, he also recognised that comprehensive training and education was required to defend the fledgling republic.

The same issue also offers C. Thomas Long's investigation of a seldom-examined component of naval operations during the American Revolution. Long is a Lecturer in History at George Washington University whose studies focus primarily on legal and military relations between the United States and Great Britain during the late 18th and early 19th centuries. His paper, Britain's Green Water Navy in the Revolutionary Chesapeake: Long-Range Asymmetric Warfare in the Littoral" looks at the Chesapeake theatre's important role. Long contends "the demographic, geographic, economic, social, and political attributes of the area made it a strategic focus from beginning to end." Ultimately the author argues that operations in the Chesapeake provide a useful basis for current amphibious tactics.

Graeme J. Milne, a research editor at the University of Liverpool's history department provides an interesting new take on long-running theme in Maritime

would not lend 120 per cent of its cost, as it would for a ship in a rising market.

Uncertainty over Government legislation has given rise to instability in the shipping industry. Perhaps it could take a lead from the capital markets which view the maritime sector positively...when the market is high. With its key issues of capacity, return on equity and risk exposure, ship finance has been a relatively well behaved sector of banking. However, the jury is still out on whether Governmental support and a healthy banking sector alone will increase growth in ocean transportation.

Conference Notice

Canadian Navy Centennial / Ninth Maritime Command (MARCOM) History Conference
Canadian War Museum, Ottawa, CANADA
05-07 May 2010

The Canadian Navy and the Commonwealth Experience, 1910-2010: From Empire to Independence

This conference, presented by the Canadian Navy in proud association with the Canadian War Museum, aims to situate Canadian naval development over the past century within the broader comparative context of other Commonwealth navies, exploring the national, regional and chronological “drivers” – the factors that have determined the different paths along which we have evolved after gaining independence from Britain. The program has been developed to include major historians from Australia, Britain, Canada and the United States presenting the majority of papers, with contributions also from other Commonwealth countries and serving naval professionals (the USN is considered one of the fundamental drivers that have shaped each of us, but again in different ways).

The sessions will be divided into two broad categories: (1) survey approaches to the histories of various navies; and (2) naval developments regionally within the Western Hemisphere (to focus on the changing CAN-US relationship over the century), the North Atlantic (Britain and the shifting European dynamic over the 20th century, including the world wars and NATO), and Indo-Pacific (again the two world wars and the Cold War, as well as current and future dynamics). Finally, the end session is anticipated to be the unveiling of the new strategy now under study for the Canadian Navy to take it into the 21st century. It is anticipated time shall be devoted as follows:

Day 1 / Wednesday 05 May

All-day – keynote & the national survey histories

Evening reception

Day 2 / Thursday 06 May

Forenoon – general-themed papers

Afternoon – Western Hemisphere and Indo-Pacific

Evening banquet

Day 3 / Friday 07 May

Forenoon – North Atlantic and NATO

Afternoon – strategy and doctrine development & CMS concluding remarks

A conference website is under development, which will provide a full list of committed papers. It is anticipated that no registration fee will need to be levied, although participants will be requested to register so as to account for numbers. A block of rooms will be booked at a downtown Ottawa hotel at a competitive rate for payment by individual registrants. The conference organizer is Dr Richard Gimblett, CD, Navy Command Historian and Past President of the Canadian Nautical Research Society, (819) 997-3720, richard.gimblett@forces.gc.ca.

The Barque *Sarah*

By Eric Ruff

Barque *Sarah* (S 38, S 88)



Painting Details

Title:	Barque <i>Sarah</i>
Catalogue No.:	S 38
Accession No.:	72.850
Caption:	"SARAH OF YARMOUTH N.S. B.GULLISON MASTER"
Artist:	attributed to Aristidius De Clerck
Signature:	unsigned
Medium:	watercolour
Dimensions:	18" x 24" (46cm x 61cm)
Exhibitions:	"The Maritime Folk Art of A. DeClerck" (Art Gallery of Nova Scotia &

	Yarmouth County Museum, 1994-1995)
Donor:	Purchased by museum prior to 1972.
Provenance:	Unknown

The Painting

For a relatively simple painting there is a lot to learn from this unsigned watercolour attributed to the Belgian artist Aristidius De Clerck of Antwerp. The stylized waves along with the Belgian flag on the pilot cutter and the Belgian national colours of the caption leave no doubt as to the attribution of this painting.

The caption "Sarah of Yarmouth N.S. B. Gullison Master" tells all but the date and location – the Belgian flag of the cutter and the knowledge of the artist provide the location while an investigation into the vessel's career makes the date at least within a two year period as Capt. Gullison took the *Sarah* to Antwerp in August 1871 and again in February 1872.

The flags flying from *Sarah* are an interesting aspect of this picture. From the foremast flies the Pilot Jack indicating the master's wish for a pilot to come onboard – and, as mentioned already, the cutter (No. 1) is running down to the *Sarah* with her mainsail boomed out to port and the jib and fore staysail drawing nicely. On the barque's mainmast is a distinctive name pennant. This style, with the national flag in the canton, seemed to be popular in the early 1800's according to other ship portraits and may have been more of a European style rather than British, Canadian or American. It's debatable whether De Clerck painted it from *Sarah*'s actual name pennant or from his imagination. The *Sarah*'s Commercial Code 'numbers' are at the mizzen truck – they read KMFN (these are also shown in the De Simone painting of the *Sarah* but at incorrectly shown in the reverse order.) From the spanker gaff streams the Red Ensign, indicative of a British ship (Canadian vessels were deemed to be British in those days). The

De Clerck was extremely accurate in his rigging and sails even to the extent of portraying the standing rigging on both port and starboard sides – sometimes ship portrait artists left out those on the far side of the vessel. If one looks at the rigging below the bowsprit and jibboom he will see that some of it is painted in red and some in black. The red indicates chain (the outer and inner martingale stays, the martingale guys, the bowsprit shrouds and the bobstay) while the black lines are rope (those which lead from the jibboom to dolphin striker and to the hull are the fore royal stay and the outer jib stay while those below the jibboom are footropes). By studying this arrangement of chain and rope lines one can understand the forces and strength required to keep the jibboom and upper fore masts in place. From the term "martingale" we can see where farming and seafaring terms were related since, to a farmer, the martingale is a strap which leads from the back of the noseband, between the horse's front legs and attaches to the girth and whose function is to keep the horse from tossing its head; similarly the nautical martingale serves to keep the jibboom in position.

All plain sails are set; the only noteworthy item is that a bonnet has been attached to the foot of the main topmast staysail to increase its drawing power. De Clerck has shown no studding sail yards or booms. This might possibly an error since the De Simone painting shows them and, while the latter painting is dated in early 1873, it seems unlikely that studdingsail gear was fitted after the *Sarah* was built.

De Clerck painted the anchor at the cathead, ready for release with the anchor chain leading from the hawsepipe and attached to the anchor ring. He shows a ventilator leading into the house on the main deck which would provide some fresh air to the "forecastle" or crew's quarters. Atop this house is a black painted workboat. Two other ship's boats rest on a skid and the quarterdeck rail further aft. The poop

deck is depicted extending further forward than is usual while the raised cabin extends all the way to the ship's sides giving more headroom in the small side cabins but forsaking the light which would normal come from cabin side windows (perhaps they were fitted with deck lights which would, of course, not show in the painting.) The main cabin and officers' dining room would get light from the two skylights which are evident in the painting. The charthouse shown at the fore part of the cabin would possibly provide, in addition to access to the cabin and a chart table, an additional bunk for the captain. The wheel provides a very folksy aspect to this painting as it is in the wrong perspective as well as being unattached to any mechanism to control the rudder.

The crew is depicted in normal De Clerck fashion – little men, somewhat better than 'stick men' with, mostly, no arms. Only the helmsman is shown with an arm extending to the wheel and the captain who is pointing his telescope at the pilot cutter. Note that Capt. Gullison has no elbows – simply curved arms – but at least he is holding his telescope which is sometimes missing in other De Clerck paintings (see the *George Peabody*, S 25).

The background to this painting poses a dilemma – where is it? The various 'sailing directions' for the coast near the mouth to the River Scheldt (which leads inland to Antwerp) indicate that sand hills extend to the east of Ostend with at least seven churches with square (or 'bluff') steeples between there and the Scheldt entrance. Also, to the northeast, is West Cappell, on the island of Walcheren, whose church has a bluff steeple with a short projection and a light or lantern on top. What makes the identification of the exact location difficult is the fact that De Clerck, in his earlier paintings, painted the ship proceeding from left to right. This painting *might* even be in reverse, as determined by the name pennant, thereby adding further uncertainty as to the whereabouts of the depicted church.

While the painting does leave several questions unanswered it does have a tremendous lot going for it – the fact that questions arise puts it into a delightful category and leads one to further study and speculation. One has to smile at this painting.

An interesting after note is that while under Norwegian ownership after 1878 the *Sarah* was once more painted by Aristidius De Clerck. This painting is currently owned by the Vest-Agder-museet in Mandal, Norway.



Painting Details

Title:	Barque <i>Sarah</i>
Catalogue No.:	S 88
Accession No.:	82.2
Caption:	"Barque Sarah Commanded by Capt. John A. Tilley"
Artist:	Attributed to Tomaso De Simone
Signature:	"DE SIMONE J--- 1873" LRC
Medium:	oil on canvas
Dimensions:	19 ½" x 30 ½" (50cm x 78cm)
Donor:	Mrs. H.M. Francis, Victoria, BC
Provenance:	Tilley family – the donor was the granddaughter of Capt. John A. Tilley.

The Painting

This painting is signed and dated in the bottom right hand corner "De Simone J--- 1873". The missing or indistinguishable letters probably indicate June, or possibly July, as the *Sarah*, under the command of Capt. John Tilley, arrived in Naples June 15th, 1873 and sailed on July 8th for Leghorn. Or the "J" could be a "T" which would represent Tomaso.

The artist was Tomaso De Simone, father of Antonio De Simone who was well-known for his watercolours of the steam yachts owned by the rich and famous. Tomaso painted mainly in oils and was

better known for his warship portraits usually depicted in the Bay of Naples. Although the *Sarah* painting is only signed with his last name it is evident by comparing this and other paintings that the colours and general feeling indicate the work to be that Tomaso De Simone.

It is difficult to discuss this painting without comparing it with the earlier De Clerck portrait of the *Sarah*. This one was painted only two or three years later yet there are differences in details of the vessel. One of the variations is the treatment of the chain and rope rigging below the bowsprit and jibboom – there is much less chain in this painting. (One source of information on this artist, the Fine Arts Emporium website, says “Although the overall impression is usually rather nice it was not his strength to depict each detail of the vessels.” And perhaps this is the case here.)

On the other hand, though, this portrait shows studding sail yards in position on the fore and main upper topsail yards and the booms below the foreyard (but not the mainyard). Another difference, which makes for a pleasant addition, is the fact that one of the ship’s boats has been taken off the skids and hung at the davits alongside the charthouse. A gap in the rail indicates that this is the location where a Jacob’s ladder might be lowered down to either allow for boarding the boat or for the pilot to come aboard – the Pilot Jack, requesting a pilot, is shown in its proper place at the fore truck. The charthouse doesn’t seem connected with the cabin and the cabin isn’t extended as far forward as in the De Clerck painting. Probably the latter’s work is correct in this instance.

Also correct was De Clerck’s depiction of the *Sarah*’s code flags. In De Simone’s portrait the flags are correct but the order is wrong – they should be reversed to read NFMK which was *Sarah*’s ‘number’ in the Commercial Code. His name pennant is fairly plain with “Sarah” in red on a white background trimmed at the top and bottom in red.

The smart looking vessels in the background with the high lateen-rigged mainsails are typical of the Mediterranean fishing and coasting vessels and are possibly bilancellas which originated in Naples and could be found all along the west coast of Italy. 1.

Of course, Mount Vesuvius in the left background indicates that the *Sarah* is about to enter the port of Naples. All in all, a very nice picture.

Notes:

1. De Kerchove, Rene *International Maritime Dictionary*. New York, 1961 p 61.
They might also be feluccas or tartans which, from far off, were similar in appearance.

Vessel Details:

Name:	<i>Sarah</i>
Rig:	Barque
Official No:	61803
Signal Code:	NFMK
Built:	Beaver River, N.S., 1870.
Builders:	B. Raymond
Materials:	Mixed hard and soft woods, iron and copper fastenings
Tonnage:	753 Reg’d tons
Dimensions:	160’ x 33.3’ x 20’
Owners:	A.C. Robbins & others

Port of Registry Yarmouth, N.S.

Masters: Capt. Benjamin Gullison (December, 1870 - April, 1873)
Capt. John A. Tilley (May, 1873 – January, 1877)
Capt George Daniel Fraser (January, 1877 – March, 1877)
Fate: Wrecked near Workington, England, 12th March, 1877. Rebuilt, owned in England and Norway, and eventually abandoned in Atlantic in February, 1883.

The Vessel

From the Yarmouth Shipping Registers we learn, besides the dimensions, that the *Sarah* had two decks (in the cargo hold), an oval stern typical of Yarmouth vessels and a billet head or carved piece just below the bowsprit instead of the more expensive figurehead. The barque was listed as being built at Brookville, now Beaver River, Nova Scotia. We also learn that Abel Cutler Robbins held fifty-six shares, the builder, Benjamin R. Raymond of Brookville, held four shares and the first master, Capt. Benjamin Gullison, also of Brookville, owned the remaining four shares. On September 12th, 1874 Robbins sold four shares to his son, John Y. Robbins, only to buy them back in October, 1876. When the vessel stranded and was taken off the Yarmouth registry on May 17th, 1877 the shareholders were exactly the same as at the *Sarah's* launch.

Sarah was likely named for A.C. Robbins' wife, Sarah Jane Porter (daughter of Ebenezer Porter 2nd). Capt. Benjamin Gullison's wife was also a Sarah, as was their daughter.

Immediately after her launch on November 6th, 1870 the barque was towed to Yarmouth by the steam tug *G.W. Johnson* to be rigged and fitted out for sea. Just over three weeks later, on Nov. 29th, Capt. Gullison cleared Yarmouth for New York.

For the next six years the *Sarah* crossed and re-crossed the Atlantic using New York as her main North American port but also calling at Philadelphia two or three times, Darien, Georgia as well as New Orleans and Boston. She also visited Havana in 1876.

Given these ports, and her frequent visits to Antwerp as well as Rotterdam and Bremerhaven it might be assumed that her main trade to those ports was the kerosene or 'barrel oil' business. Cargoes from New Orleans and Darien were likely cotton and pine, respectively. Sugar was almost certainly shipped from Havana. We do know, from an existing insurance certificate that the *Sarah's* cargo from New York to Alicante and Valencia, Spain, in 1874 was tobacco, valued at \$4,000.

After leaving Spain on the last mentioned passage the *Sarah* called at Leghorn (now Livorno), Italy. She had also called there, as well as Naples in 1873 (where her portrait was painted), and would do so again in 1875. A good guess is that her Italian cargo back was marble for the United States.

Capt. Benjamin Gullison was *Sarah's* master for the first two and a half years – he received a mention in the *Yarmouth Herald* of 1874 from his Bremerhaven agent, Fr. Roters who, along with Von Riegen & Stindt, placed advertisements in the *Yarmouth Herald* in 1874 adding that they had references from a number of Yarmouth masters (Gullison included) who had recently called at Bremerhaven. The ads also mentioned that "letters for vessels bound to Bremen will be promptly delivered on arrival."

There is also a reference in the March 28th, 1872 issue of the *Yarmouth Herald* that on March 5th the *Sarah* was off Deal on her voyage from Hartlepool, England for New York having replaced anchor and chain lost at the Goodwin Sands (see barque *A.W. Singleton*).

The port of Middlesboro, not far from Hartlepool, was the departure point for the Yarmouth barque *E.H. Duval* and ship *Eliza Everitt*, as well as the *Sarah* in February, 1873 – all were bound for New York. The *Sarah* “experienced a hurricane, during which lost main spencer, main staysail and split topsail.” 1.

Following that voyage Capt. John A. Tilley took over command and remained with the *Sarah* until early in 1877 when his mate George Daniel Fraser of St. John, NB became master. His voyage from New York to Silloth, north west coast of England, with a grain cargo was never completed as the vessel was stranded near Workington while under command of a pilot. The wreck was condemned and sold.

However, *Sarah*’s story did not end here: returning to the Yarmouth Shipping Registers, a useful source of information, we can read the following regarding the *Sarah*:

“Stranded on the Coast of Cumberland, England 11th Mch 1877. Condemned and sold for benefit of underwriters. Certificate returned and cancelled May 17th 1877.
a/c Closed St W. H. Repr.”

There is also a letter from the Assistant Registrar at Liverpool, England requesting particulars of the *Sarah*’s registry and stating that the *Sarah* was purchased and that the new owners intended to repair and reregister her.

She was reregistered at Liverpool, still under the name of *Sarah*, by John Williams. In 1878 she was sold to Simons Simonsen and / or J. Fredriksen of Mandal, Norway where she was again reregistered. In February, 1883 she was abandoned in the North Atlantic while carrying a cargo of petroleum from New York to Hamburg. The steamer *Yorkshire*, of London, rescued her crew. She was still under her original name.2.

Notes:

1. *Yarmouth Herald* 17 & 24 April, 1873

2. Correspondence with Knut Lindseth, Director, Mandal Bymuseum, Mandal, Norway, Oct. 1986 and with Thor Gunnar Hansen, Regional Curator, Vest-Adger-museet, Mandal, Norway, Oct. 2009.

Launch:

Yarmouth Herald, 10 November, 1870:

“On the 6th inst., from the shipyard of Messrs. B. Raymond, Sons & Co., the Barque *Sarah*, of 773 tons register, owned by the builders and others. She will class 8 years at Bureau Veritas. ... These vessels* were all towed by the *G.W. Johnson* to this port, where they will be rigged and equipped for sea.”

*the ships *Eliza Everett* from St. Mary’s Bay and *Edith* from Tusket were also mentioned in this launch notice.

Loss:

Yarmouth Herald, 15 March, 1877:

"Barque Sarah, Fraser master, from New York (via Cork) for Silloth, west coast of England, with a cargo of grain, is reported by cable ashore, keel gone, bilged, and full of water, near her port of destination, and will doubtless be a total loss. Crew saved. The Sarah was in charge of a pilot when she ran ashore. She was launched in 1870, was 759 tons register, and was owned by Messrs. A.C. Robbins, B. Gullison, John Y. Robbins, and B.R. Raymond. The S. was insured in Yarmouth offices as follows: Commercial \$9,000; Pacific \$5,000; Atlantic \$5,000."

Appendix to the Record of the Shipping of Yarmouth, N.S. pp 76-77:

"Barque SARAH, 750 tons, George Fraser master, from New York (via Cork) for Silloth, west coast of England, with a cargo of grain, ran ashore, whilst in charge of a pilot, near Workington, on the 12th March [1877] and became a total wreck. Crew saved. Owned by A.C. Robbins, B. Gullison, John Y. Robbins, and B.R. Raymond. Insured \$9,000 in "Commercial," \$5,000 in "Pacific," and \$5,000 in the "Atlantic" officers. Cargo was fully insured in the office of the United States Lloyds of New York."

Actual Loss:

On a voyage from New York to Hamburg with a cargo of petroleum the *Sarah* was abandoned in the North Atlantic on February 17th 1883. Her crew was rescued by the steamer *Yorkshire* of London."

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MERCHANT SHIPS USED AS FIGHTER CARRIERS IN WW 2

By Fraser M. McKee

PROLOGUE

Early in World War 2 it was of much concern to the Admiralty when ships began to be sunk in significant numbers by aircraft of the German *Luftwaffe*, not only around the U.K. but especially by KG-40 "Condor" long range patrol and bomber aircraft well out into the Atlantic. While anti-aircraft guns were promptly provided for most ships (largely manned by DEMS gunners from the RN, a few Royal Marines, the Army's Royal Artillery Maritime Regiments and even a few hundred infantry AA gunners), this proved insufficient defence. The only aircraft carriers in the Fleet were large, few and required for naval fleet operations, not for convoy defence.

Thus was born two temporary and emergency measures in early 1941: merchant ships fitted with a single fighter aircraft on a catapult all but one right forward in the bows. While it could be fired off via its rocket-propelled cradle, there was no provision to recover the aircraft. If within reach of land after driving off any enemy aircraft, the pilot could aim for some local field. But if beyond reach, either the plane was ditched in the ocean or the pilot bailed out and hoped to land close to an escort who would pick him up. A small dinghy was provided with his parachute pack.

Of the first five trial ships, one HMS PEGASUS was already in hand as an aircraft transporter, the other four were taken into the Navy also as HMS. These five were referred to as Fighter Catapult Ships and the four merchantmen carried no cargoes. They had naval ships' and air crews and Lieutenant or Sub Lieutenant pilots, at first flying Fulmar two-seater fighters, but these proved too slow to catch the ex-airliner Condors and were replaced by Hurricanes, Marks 1 and 1A, referred to as "Hurricats" or "Catafighters." These Hurricanes, with a large engine air scoop under the mid-body, did not ditch well, so most that had to be abandoned were left to crash into the ocean while the pilot parachuted down.

Although two of these FCS were sunk and successes modest, failing other options and against RAF objections the concept seemed worth pursuing. That model of Hurricane was being superseded by later models and the Spitfire in front line service. The protection was vital, so aircraft were available and a Merchant Ship Fighter Unit (MSFU) was established at Speke. Near thirty-five CAM's – Catapult Aircraft Merchantmen - were taken in hand and the catapults installed. The ships remained as merchant ships, carried cargoes, and the Master was the final arbiter as to when a plane should be launched to drive off any shadower. The first ship in the group, MICHAEL E, was still manned by a Naval Fleet Air Arm air crew. All subsequent ships' flying parties were RAF. All but two of the 35 were new construction, and 27 owned by the Ministry of War Transport as "EMPIRE" ships, the oldest being David MacBrayne's 1922 ex-Lochgail which became EMPIRE ROWAN.

Both these FCS and CAM's were later replaced by the MAC ships - Merchant Aircraft Carriers. These were bulk freighters – grain ships or tankers – carried their almost full cargoes, but fitted with small full flight decks and miniature combined bridges and “islands,” They carried usually Swordfish anti-submarine aircraft, not fighters, as by that time – 1943/44 - the Condor danger was largely passed or only used for distant shadowing

ASSESSMENT

The value of these temporary air defence measures was more in what they prevented than in what was achieved. The FCS and CAM ships would seem to have caused a significant reduction in ship sinkings by aircraft when they were present in convoys. The Condors, Heinkles and other attackers were considerably more chary of low level attacks, made their passes more quickly - and less accurately - when they noted the presence of a FCS or CAM ship within a convoy. Only 7 German aircraft were shot down, at the cost of over 25 Hurricanes in total. But the merchantmen *not* sunk is immeasurable.

With the MAC ships in convoy the “Black gap” in air cover in mid-Atlantic was closed in 1943, and almost no ships were sunk in convoys that had MAC protection, barring those that straggled away from MAC protection. Again, it is a case of what was prevented by their Swordfish driving down shadowing and attacking U-boats rather than actual sinkings of those attackers.

TABLES

This reference list has been prepared to record all the merchant ships that were fitted to carry aircraft, including two dummy CAMs. Determining the names has proved very difficult, from a myriad of sources, not all agreeing, and in some cases confusing one class of ship with another.

FCS, CAM SHIPS, MAC SHIPS & OTHER CATAPULT MERCHANT SHIPS

(Included: ship detail - when built, gross registered tonnage; some a/c pilot names; successes & losses. ‘Success’ = German a/c destroyed by FCS or CAM a/c. Details of losses of ships. d = died in sinking. a/c = German aircraft)

1. FIGHTER CATAPULT SHIPS: 5 ships

- a. Four ex-banana Boats; H.M.S., with Naval crews & flying parties for a/c and guns, FAA pilots. Usually carried Fulmar's, then Sea Hurricanes.

ARIGUANI: (Ex-Elder Fyffes Ltd., 1926, 6,746 grt.) S/Lt. Harvey, S/Lt Birrell. Damaged by torp. off SW Portugal 26/10/41 by U-83; towed into Gibraltar. Decommissioned, returned to general merchant service in 1944.

MAPLIN: (1922, 5,355 grt.) With Hurricanes. 1 success with OG-70 to Gib: LT Everett, 18/7/'41; again near Convoy SL- 81 on 3/8/'41. P/O Walker with HG 72)

PATIA: (1922, 5,355 grt. CDR D M B Baker, RNR (d).) Sunk by a/c on 28/4/'41 during 1st trials

off Mersey/Liverpool

SPRINGBANK (Ex-Bank Lines Ltd., 1926, 5,155 grt. CAPT C H Godwin, RN)) With midships catapult, like a cruiser's. P.O. Shaw. Sunk 27/9/'41 by U-201 supporting HG-73 from Gibraltar, SW of Ireland.

b. Built in 1914 as a collier, but bought by Admiralty as the HMS "Ark Royal." Re-named 1934 as HMS "PEGASUS" for carrying and moving aircraft. Fitted with a catapult like the 1st 3 above, not as far forward.

PEGASUS. (1914, 7,020 t.) Carried Fulmars. P.O. Shaw, S/Lt Cox, Lt Parke {killed}. With Hg 75. Later used for training, then accommodation ship

2. DUMMY FIGHTER CATAPULT OR CAM SHIPS: 2 ships

(Included in convoys, but dummy catapults & fighters; with cargoes)

CAPE CLEAR (Lyle Shipping Co., 1939, 5,085 grt.) Catapult added during repair after being mined 27/2/'41 in the Irish Sea off Liverpool.

CITY OF JOHANNESBURG (Ellerman/Hall Lines, 1920, 5,669 grt.) Sunk 23/10/'42 by U-504 off East London, So. Africa.

3. CAM SHIPS - CATAPULT AIRCRAFT MERCHANTMEN: 35 ships

Assigned 50 a/c – Sea Hurricane I's & 1A's, from MSFU. All ships with cargoes. All RAF flying crew except 1st trial ship, MICHAEL E. Ships were all with Merchant Navy crews. Any sunk after mid-1943 is after CAM service ended. MWT = owner as Ministry of War Transport; all assigned to various existing shipping companies as "Managers."

MICHAEL E. (1st trial CAM; RN FAA crew. Bury Hill Shipping Co., 1941, 7,628 grt.) On initial trials 28/5/41, but with OB-327, Atlantic convoy; S/Lt Birrell. Sunk 2/6/'41 by U-108 in mid-Atlantic.

DAGHESTAN (Hindustan Steam Shipping Co., 1941, 7,250 grt. Grainer {2nd of name – 1st was sunk 25/3/40 by U-57} P/O Lumsden

DALTON HALL (West Hartlepool Stm. Navig'n Co., 1941, 7,250 grt.) Sunk 24/9/'41 by mine, Bristol Channel.

EASTERN CITY (Leeds Shipping Co., 1941, 5,185 grt.) P/O Turley-George, P/O Spurdle)

EMPIRE BURTON (MWT, 1941, 6,966 grt.) Sunk with Convoy SC-44 20/9/41 by U-74 SE of Greenland

EMPIRE CLIVE (MWT, 1941, 7,069 grt.)

EMPIRE DARWIN (MWT, 1941, 6,710 grt.) With SL-133, Sierra Leone convoy; success by F/O Stewart on 26/7/43

EMPIRE DAY (MWT, 1941, 7,250 grt.) Sunk 7/8/44 by U-198 N. End Mozambique Channel, Indian Ocean

EMPIRE DELL (MWT, 1941, 7,065 grt.) P/O Watson. Sunk 11/5/42 by U-124 with Convoy ON-92 in mid-Atlantic

EMPIRE EVE (MWT, 1941, 5,970 grt.) Sunk 18/5/43 by U-414 in Med., off Oran.

EMPIRE FAITH (MWT, 1941, 7,061 grt.)

EMPIRE FLAME (MWT, 1941, 7,069 grt.)

EMPIRE FOAM (MWT, 1941, 7,047 grt. With HX-156; F/O Varley)

EMPIRE FRANKLIN {FRANKLYN in some records} (MWT, 1941, 7,292 grt.) P/O Fenwick)

EMPIRE GALE (MWT, 1941, 7,089 grt. P/O Varley)

EMPIRE HEATH (MWT, 1941, 6,643 grt.) Sailed with HG-91 from Gib; success by F/O Taylor on 1/11/'42. Sunk 11/5/44 by U-129 in SW Atlantic, off Brazil (not as a CAM))

EMPIRE HUDSON (MWT, 1941, 7,430 grt.) Sunk 10/9/41 by U-82 when with Convoy SC-42 off S. tip of Greenland.

EMPIRE LAWRENCE (MWT, 1941, 7,430 grt.) Gen'l. cargo. Sailed with PQ-16 to Russia; success by P/O Hay on 26/4/'42. Sunk 27/5/42 by a/c N. of North Cape, Norway, Barents Sea.

EMPIRE MOON (MWT, 1941, 7,242 grt.) 2nd RAF CAM ship. Sailed with HG-84 from Gib.; success by P/O Saunders on 14/6/42. Also P/O Campbell, P/O Sabourin)

EMPIRE MORN (MWT, 1941, 7,092 grt.) Sailed 10 Apr.'42 with PQ-15, 1st CAM ship with Russian convoys; then back with QP-12 from Russia; then PQ-18; P/O Lane; success by F/O Kendal (killed) on 26/4/42; P/O Burr & P/O Lane. Returned with QP-15.

EMPIRE OCEAN (MWT, 1941, 6,765 grt.) Went ashore on Newfoundland 4/10, sank in tow after floating off on 5/8/42 SE of Cape Race.

EMPIRE RAINBOW (MWT, 1941, 6,942 grt.) 1st RAF a/c crew. Sailed 31/5/'41, P/O Davidson. Sunk 26/7/42 by U-607 western mid-Atlantic, not as a CAM.

EMPIRE RAY (MWT, 1941, 6,919 grt.)

EMPIRE ROWAN (Ex-LOCHGOIL, 1922, 9,545 grt. David MacBrayne Ltd, MWT) Sunk 27/3/43 by a/c in Med. off Phillipeville, Algeria.

EMPIRE SHACKLETON (MWT, 1941, 7,068 grt.) Damaged but not sunk on 28/12/'42 by U-225; again by U-123 on 29/12/'42; then again & sunk by gunfire of U-217 on 29/12/42

EMPIRE SPRAY (MWT, 1941, 7,242 grt.) Transferred to Dutch flag 1941. P/O Lee

EMPIRE SPRING (MWT, 1941, 6,946 grt.) P/O/ North. Sunk 15/2/42 by U-576 SE of Sable Isld., N.S.

EMPIRE STANLEY (MWT, 1941, 6,921 grt.) Sunk 17/8/43 by U-197 Indian Ocean, SE of Madagascar. Not as a CAM

EMPIRE SUN (MWT, 1941, 6,952 grt.) Sunk 7/2/42 by U-751 off Halifax.

EMPIRE TIDE (MWT, 1941, 6,900 grt.) Sailed with SL 133 to Sierra Leone; success by F/O Flynn on 28/7/43; with PQ-17, Fl/Lt Turley-George; F/O Fenwick

EMPIRE WAVE (MWT, 1941, 7,463 grt.) Sunk 2/10/'41 by U-562 when with Convoy ON-19, mid-Atlantic

HELENCREST (Crest Shipping Co., 1941, 5,200 grt.)

KAFIRISTAN (2nd of name – 1st sunk 17/9/39 Hindustan Seam Shipping Co., 1941, 7,250 grt.)

NOVELIST (T & J Harrison, 1940, 6,133 grt.)

PRIMROSE HILL (Putney Hills S.S. Co., 1941, 7,600 grt.) Sunk 29/10/42 by UD-5 (ex-Dutch S/M) in Convoy ON-139, Atlantic NW of Cape Verde Islds.

4. MAC SHIPS – MERCHANT AIRCRAFT CARRIERS: (19 ships)

All carried bulk cargoes – grain or oil. Grainers had a small a/c elevator aft; oilers did not. Carried usually 4 Swordfish, sometimes Fulmars. Full flying deck, small "island." None were sunk.

a. 6 Grain ships:

EMPIRE MacALPINE: (MWT; 1943, 7,950 grt.)

EMPIRE MacANDREW: (MWT; 1943, 7,950 grt.)

EMPIRE MacCALLUM: (MWT; 1943, 8,250 grt.)

EMPIRE MacDERMOTT: (MWT; 1943, 7,950 grt.)

EMPIRE MacKENDRICK: (MWT; 1943, 7,950 grt.)

EMPIRE MacRAE: (MWT; 1943, 8,250 grt.)

b. 13 tankers:

ACAVUS (Anglo Saxon Petroleum; 1935, 8,010 grt.)

ADULA (Anglo Saxon Petroleum; 1937, 8,040 grt.)

ALEXIA (Anglo Saxon Petroleum; 1935, 8,016 grt. (After being bombed twice, torpedoed once by Kretchmer's U-99, before conversion to MAC ship)

AMASTRA (Anglo Saxon Petroleum, 1935, 8,031 grt.)

ANCYLUS (Anglo Saxon Petroleum, 1935, 8,017 grt.)

EMPIRE MacCABE (British Petroleum, managers for MWT; 1943, 9,249 grt.)

EMPIRE MacCOLL (British Petroleum, managers for MWT; 1943, 9,133 grt.))

EMPIRE MacKAY (British Petroleum, managers for MWT; 1943, 8,908 grt.) Last operational launch of a Swordfish off MAC ships on 27/6/45

EMPIRE MacMAHON (British Petroleum, managers for MWT; 1943, 8,856 grt.)

GADILA (NV Petroleum, Dutch; 1935, 7,999 grt.) Dutch M/S crew & Officers

MACOMA (NV Petroleum, Dutch; 1936, 8,011 grt.) Dutch M/S crew & officers

MIRALDA (Anglo Saxon Petroleum, 1936, 8,013 grt.)

RAPANA (Anglo Saxon Petroleum, 1935, 8,017 grt.)

5. ESCORT CARRIERS, ex-MERCHANT SHIPS: 2 ships

Full flying deck small carriers with islands; HMS, ex-merchantmen. All others were built as carriers in USA, had not been merchantmen.

AUDACITY (Ex-German prize {1940} HANNOVER, 1939, 5,725 grt.) Then EMPIRE AUDACITY as MWT ship. Then HMS. Carried Grumman Martlets. With HG 76. CDR D W

MacKendrick (d). Sunk 21/12/41 by U-751 in Atlantic W. of Finisterre.
PRETORIA CASTLE (Ex-Union Castle Lines, 1939, 17,392 grt.) For training only. Up to 15 a/c

References:

Many partial web sites on Hurricanes, CAMs, MAC ships (none complete).

Most useful: www.warshipsww2.eu/lode.php?language+E&period=2&idtrida=1605
www.Naval-History.net

"Hurricats" by Ralph Barker, Tempus Publishing, Stroud, UK, 2000

"The Giant Killers" by Kenneth Poolman, Wm. Kimber, London, 1960

"Scourge of the Atlantic – Focke-Wulf Condor" by Kenneth Poolman, Macdonald & Janes,
London, 1978

"British Vessels Lost At Sea 1939-45" (Official), Patrick Stephens, Cambridge, reprint, 1976

"Axis Submarine Successes of World War Two" by Jürgen Rohwer, Greenhill Books, London,
reprint 1999

"Lloyd's Register of Merchant Shipping", Lloyds Ltd. London; 1941-42 and 1949-50 editions

"The War At Sea", Vols. I and II, by CAPT S.W. Roskill, HMSO, London, reprint 1957 & 1956

HYDROGRAPHIC SURVEYING AND CHARTING OF BC WATERS FROM 1953 TO 1967 – WITH AN EXTENSION OF CANADIAN HYDROGRAPHIC EFFORT INTO THE CANADIAN WESTERN ARCTIC IN THE LATTER YEARS

BY TOM McCULLOCH - AN ANCIENT MARINER

PRESENTED AT THE VICTORIA CNRS CONFERENCE 2009 ON BOARD BC FERRY "SPIRIT OF VANCOUVER ISLAND

The author joined the Canadian Hydrographic Service on the Pacific Coast in late May 1953, an experienced mariner/navigator but with no real hydrographic skills or knowledge beyond a vague appreciation of importance of COOK and VANCOUVER to the history of BC.

I was transported from Victoria to Prince Rupert courtesy of Canadian Pacific coastal vessels - and boarded the CSS "Wm.J.Stewart" - to be my seagoing home for several years to come. She was a pretty looking vessel painted white with buff funnel and trim - rather like the cable ships that I had sailed upon in the Indian Ocean and Atlantic several years previously. She was built in Collingwood in 1932 and fitted with reciprocating steam that could propel her at a maximum speed of 10 knots. She carried four survey launches equipped with Kelvin Hughes wet paper echo sounders and could sustain a maximum speed of 6 knots. There were no gleaming antenna, indeed not even a range finder in sight. A Gyro compass and an aearly version of radar were her only concessions to modernity. She had been built as an oil burner, but local BC politics had her immediately converted to coal.

She accommodated ten survey staff in a total complement of fifty six souls. Unlike most national hydrographic services where the surveyors doubled as ship's officers with the Captain in overall command - CHS employed a master and mates to run the ship on a day to day basis, leaving the surveyors free to conduct the survey.

Our Hydrographer in Charge was Wilf Lacroix a civil engineer by training. Supporting him were a group of young men mostly with a maritime background - merchant navy or navy - who had all held posts of some responsibility during the war years. The HIC had little sense of humour and tried to run his varied staff with a schoolmaster to pupil approach that brought forth great but subdued hilarity among these veterans.

I quickly learned about other greats of the Pacific coast hydrographic world such as Kellett, Belcher and Richards followed by William J. Stewart and Hank Parizeau of the early Canadian Hydrographic Service.

Our immediate operational area was just south of Prince Rupert - Porcher Island and Kitkatla Inlet. An area open to Hecate Strait in the west and full of shoal strewn passages leading to the relative shelter of Kitkatla Inlet- a fishing fleet rendezvous busy with seiners and trawlers fitting out or selling off their various catches. A complex area to survey - with bad weather inhibiting launch activities in Hecate Strait and a spectacular navigation of the many channels leading to Kitkatla Inlet at spring tides where the tidal effect could be seen most spectacularly in a 28 foot drop at low water springs.

An exciting area to be initiated into the mysteries of hydrographic surveying.

Our next operational area was Knight Inlet and its adjoining channels across Johnstone Strait from Vancouver Island. Mostly deep water with occasional shoal patches. Logging the main preoccupation of the area with fishing prevalent in Johnstone Strait and its auxiliary channels. Alert Bay provided a haven for thirsty surveyors while curious orca followed the launches traversing the strait.

Our next project was a revisory survey of Nanaimo , followed by Sidney where we conducted another revisory survey before sailing reluctantly northward once more. The rest of the season was spent in the Knight Inlet area with one short trip to Union Bay for coal. The fullness of summer gradually gave way to the rains of September and October drenching surveyors and their equipment daily. Sextant mirrors misted over and theodolites had to be protected from the elements. With no electronic gadgets available , we relied on triangulation stations established on shore and horizontal sextant angles between these stations for position fixing . We were very happy when the word arrived to proceed to Victoria for winter lay up.

Mid April 1954 we deployed into Burrard Inlet for a concentrated revisory survey of Vancouver Harbour ,including English Bay, False Creek and Indian Arm. It was a memorable year – with the Empire Games underway in Vancouver itself as Bannister and Landy broke the four minute barrier to the one mile race. After three successful weeks we steamed north toward the Queen Charlotte Islands where we were to spend a large part of each survey season for the following four years.

Our task in 1954 was to survey the waters south from Sandspit to Cumshewa Inlet and Louise Island. I found the east coast of the Queen Charlottes to be quite different in many ways to the other coastal areas of British Columbia. The proud Haida nation still predominated in the area – engaged in logging and particularly fishing where they operated a large fleet of seiners. Flora and fauna were just a little bit different from those prevailing on the mainland coast line. Even a little more prolific - with many varied types of birds such as sandpipers and many varieties of puffins. Tidal pools were everywhere and well stocked with starfish , crab and sea cucumber. Seals and noisy smelly Sea lion surrounded us. On land midget deer roamed the shoreline of the many inlets and bays , but a wary eye had to be kept open as brown bear roamed the inlets searching for food. Large eagles would swoop down just above the water to grab fully grown salmon in their claws as they headed back to their nests. Quite a sight from the bow of a survey launch.

We spent long hours in the launches – often dropping the doryman off on small islets or even groups of highwater rocks – to set a fire and prepare for our short lunch break. Many an overcooked or undercooked meal did we consume under invariably wet and miserable conditions. Our days started early and even after returning to the mother ship had to process our collected data each evening – with our working day ending about nine or ten pm . Once every two weeks the “Willie J ” would run across Hecate Strait for provisions and fresh water. Captain Billard always timed our arrival in Prince Rupert for mid Saturday evening - leaving us just enough time to charge ashore to the nearest liquor outlet . Needless to say we were a noisy inebriated bunch when we came back on board.

The ship returned to the Charlottes before going south for coaling with a short spell in Kingcome Inlet before returning to the Charlottes where my doryman managed to strand us half a mile inland at low water and I fell off a cliff while setting up my theodolite - much bruised and humiliated I had to call down to the coxswain for help.

More surveying in the Charlottes in August and September - Carmichael Passage, Selwyn Inlet etc. The survey season ended as usual in mid October. 1955 was largely a repeat of the previous year with our survey grounds moving further south in the Charlottes and smaller surveys in the Broughton Peninsula.

In 1956 we continued further south down the southeast coast of the Queen Charlottes with however a leap forward into the future. On the Atlantic coast in 1955 hydrographic surveys were conducted using a two range Decca electronic positioning system. It was now our turn to prepare for a major hydrographic survey of Hecate Strait in 1957 utilizing a Decca 6f chain for horizontal positioning.

The sites chosen were on Copper Island in the Charlottes and McKenny Islet off Aristazabal Island on the mainland coast. The sites had to be positioned by extending existing triangulation networks and then cleared to line of sight accuracy. In the case of McKenny the clearing was simple as there was little growth on the islet, but Copper Island was a major problem as the site was overgrown with huge Douglas fir trees. We really needed expert loggers for such a task, but the officers and crew and technical personnel soldiered on as best they could. Meanwhile the launches were busy surveying inshore off Copper and Aristazabal Islands.

In April 1957 we once again departed Victoria, but this time heavily laden with many boxes of electronic equipment and supported by Survey staff from the Decca company in the UK. Copper Island was finally logged off to everyone's satisfaction and equipment was slowly and painfully moved from the ship up on to both sites. With the Decca system calibrated the "Willie J." was ready for our historic move into the electronic age.

Sounding commenced across Hecate Strait while the survey launches continued the inshore work off the Charlottes. A very productive season ended mid October when we returned to Victoria for winter lay-up.

During the winter of 1957/1958 I found myself in changed circumstances where I was hustled off to Ottawa to prepare for a hydrographic survey in the Western Arctic and upon return to Victoria to additionally prepare and organize a survey team for work in Ganges Harbour and approaches. Suddenly I had my own small command. Additionally, we acquired tellurometers - an extremely accurate distance measuring device. In early June we returned from Ganges to prepare for our Arctic venture.

We joined the USCG ice breaker "Storis" in Seattle in late June and sailed for Kodiak, Alaska almost immediately. We were made welcome by all on board, but were obviously looked upon as being of an alien species. Nevertheless we gradually fitted in to the ship routine where space was at a premium.

From Kodiak we made our way north up the Bering Sea toward Point Barrow where we ran into very heavy concentrations of ice along the north shore of Alaska. Heavy ice breaker support was provided by

the USN ice breaker 'Burton Island'. However, by the time we reached the vicinity of Herschel Island in the Beaufort Sea we were able to run in relatively clear water. We were able to assist "Storis" by conducting ice reconnaissance from the helicopters on board and using the helicopter/tellurometer combination to extend horizontal control wherever possible and necessary. Sounding operations were attempted around Cambridge Bay and in Simpson Strait – but the safety rules enforced by the Coast Guard made the task more difficult than it should have been. Nevertheless, a reasonably successful operation was accomplished and we returned Kodiak and eventually Victoria to complete our survey of Ganges Harbour and Approaches. A routine of reporting back in person to Ottawa on Arctic matters was established and each winter I flew to Ottawa. These contacts became very useful to me later on in my career.

In 1959 we commenced the survey of Fulford Harbour and Approaches, followed by another session in the Western Arctic – but with much more difficult ice conditions in Amundsen Gulf and Dolphin & Union Strait. Returning once again in September to the peaceful waters of Fulford Harbour.

1960 Completion of the Fulford Harbour and Vicinity chart. This year we were supported by the Canadian Coastguard Ice Breaker in the Western Arctic – an all Canadian show – very effective year.

1961 Surveys in Active Pass and vicinity followed by a difficult operation out of Cambridge Bay on board the RCMP vessel "Spalding". A most unsatisfactory arrangement.

1962 The sun shines! I took command of CSS "Richardson" – conducted hydrographic revisory surveys around the coast of Vancouver Island. Departed Victoria for the Western Arctic in early July. Reasonable ice conditions along the north shore of Alaska allowed us easy access to the Beaufort Sea. Excellent operating season – wintered vessel – returned home in late September.

1963 Another good year for ice – surveyed up into Prince of Wales Sound and around the south coast of Banks Island.

1964 A terrible year for ice – barely made it eastward as far as Cape Parry – however took the opportunity to survey the eastern approaches to Tuktoyaktuk utilizing radar transponders on shore stations that could be activated by "Richardson's" radar. I was selected for the Senior Surveyors technical training course in Ottawa, transferred my family for a six month period. Highlight – a week in Washington visiting the various military and civilian surveying laboratories.

1965 Returned to Victoria in late May to study new techniques and technology and assisted on various projects. 1966 Similar experience with lots of studying and conducting research.

1967 Once again I found myself in command of "Richardson" and making a return to the Western Arctic after several months spent on revisory surveys around the BC coast. This time we were not so lucky in passing Point Barrow as we had been in 1962. We got stuck in the heavy ice moving north from Point Barrow, indeed for several hours we were riding on top of the ice and operating only on emergency power. We had to be rescued by the combined efforts of the Canadian ice breaker "Camsell" and the

USN icebreaker "North Wind" in line ahead towing little "Richardson" behind. A most uncomfortable and dangerous ride. We were finally able to make our own way from the vicinity of Barter Island into Tuktoyaktuk. There the floating drydock came in handy, and we were able to effect repairs that saw us in action along the Beaufort Sea coast until lay-up time in mid September.

I did not know it at the time – but my Western Arctic indeed my Pacific Coast sojourn was at an end. In the spring of 1968 I was appointed Regional Director Hydrgraphy for Central Region and became a permanent "desk wallah".

Fifteen years of hard but satisfying hydrographic surveying !

A note from a very happy CNRS 2009 Conference Participant

Sunday, November 15, 2009 2:09 AM

Subject: Hello from a very hot and very humid Darwin

Hello fellow participants. I arrived back about two weeks ago from thirteen weeks of conferences and research. I loved the conference in Victoria - it was the best - truly!!

Anyway in the UK I did a lot of research on my surgeon-superintendent Alexander Nisbet. In London I went to the Caird Library, the National Archives, the Wellcome Institute and the Royal College of Physicians and tried to wrestle with their various archival systems. I also spent time in Glasgow and Edinburgh chasing up Nisbet's early education and family influences.

I now have enough knowledge to get cracking on the book. You were such good role models for me. I always think that writing a book must be an almost insurmountable task, but some of you guys publish all the time it would seem. So I am on to it.

I go home to my farm in the mountains of NZ in two weeks to teach online for the next two months and avoid the heat here. This week a few of 'us girls' are going to Ho Chi Minh City for four days. It is very cheap from here as it is not far away. That in itself is a worry as I remember Chris saying that I live in a dangerous neighbourhood.

Where is next year's conference? I have some very North American information just waiting in the wings.

Once again, thanks for being such a good bunch of people and I do hope that we meet up again.

Warm regards

June Slee



Freeman Tovell



Faye Kert



Andrew Cook



Michael Hadley



Edward Von der Porten



Camilla Turner

CNRS Conference participants

Vancouver 2009



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Robin Inglis



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With special thanks to Marilyn Gough