

Canadian Fleet Newsletter

Summer 2022

Editor: George Egerton

Canadian Fleet to Host 2023 AGM / Change of Watch

David Peebles, Commodore, Canadian Fleet, CYA

A committee of Canadian Fleet members are actively working at planning for hosting the International AGM and Change of Watch. The AGM / Change of Watch will be held in Vancouver the weekend of January 13 - 15, 2023. The committee is currently in the process of





negotiating with several hotels in the downtown core as well as several of the finest restaurants in Vancouver. The committee is planning a number of exciting events for that weekend and look forward to welcoming CYA members from across North America. Mark

this date on your calendar as you do not want to miss this event.

A Boat of One's Own

Shirley Howdle (with edits by George Egerton)

When a classic yacht is purchased, there is usually a lot of history that comes along with it. Researching this history, and recording it, typically involves many discoveries, unearthing of archival sources, sometimes from the boat's logs, or from sales records deposited in governmental holdings. Most pleasurably, are the memories relayed from previous owners and their families. Past owners can, in a way, become treasured nautical ancestors.



The boat I purchased in 2008 had a good beginning, being built by W. F. Grandy, of the Grandy Boat Company, one of the premium Lake Union. Seattle. builders of the early 20th century, and who worked closely on many boats with another famous naval designer, Ed Monk Sr. But there was a

Figure 2 As presently Moored at Heritage harbour, Vancouver. Shirley Howdle

mystery regarding the date of building and launching of this boat. An article of January 2005 in *Pacific Yachting* describes the boat's origins in the following terms:

Adelante began life as one of the very earliest examples of what are known as Lake Union Dreamboats. Designed specifically for the northwest with the single steering station enclosed in the large saloon, most references to this style of boat place their origins in the early '20s. However, according to U.S. Department of Transportation records, Adelante began life as Zimie II, a 34' gas-powered cruiser, built on Lake Union in 1912. This would make her one of the very earliest examples of the style and one of the fewer still that were built at the small Lake Union yard, which gave the boat its name.

Few, if any, of this very successful design have survived in the exact form in which they were originally constructed, and Adelante is no exception. She reappears in later records four feet longer, re-powered with a Gray Marine and as having been built at Grandy Boatyard in 1929.

So, what was the date of manufacture, 1912 or 1929 -- a question of some historical import, as well as personal interest? The answer finally came in the form of The Master Carpenter's Certificate which I obtained from Archives in Seattle in 2014, which states that my vessel was built in 1929. Originally named *Zimie 11*, the first owners were Allen and Margaret Brown of Seattle. She was built of wood, classified as a gas yacht, one deck, one mast, 34.3 ft. in length,

9.75 ft in breadth, 4.8 ft. in depth, of 15 gross and 14 net tons. The value of vessel was listed as \$4,500.00 (\$79,844 in contemporary \$US). The Certificate, dated 2nd April 1930, was signed by W. F. Grandy.

Obtaining archival sources like this was definitive in clarifying the record: 1929, not 1912. But most of my history of Adelante comes from previous owners and restorers. The richest source has been from a couple who purchased and restored the boat in the 1980s. Sarama and Lyonoor Lardein first met while Sarama was travelling in Buenos Aires, Argentina. According to Sarama, he saw the hulk of the boat in a pasture near Peachland, off Okanogan Lake, British Columbia, in 1980. He wrote to Lyonoor and asked if she would like to live on a boat and work together to make it habitable. Faced with this interesting proposal, she said yes. Their letters crossed in the mail. Sarama's letter suggested the name "Adelante" for the boat, out of a Spanish/English dictionary. Separately, Lyonoor also chose the name "Adelante," from a poem she knew as a child. "Adelante" in Spanish, means "forward, keep moving, do not give up." So, there was some magic and romance in the naming of Adelante.

But there was also a longer

P'S CERTIFICAT TER CARPENT ARTMENT QN 229 724 Scottle, Washi [PLACE] March 26 carpenter do certify that will by Grandy Boat Can Seattle state of Which to Wood Allen Brown, Murgaret Brow that said Gas Yacht Zimie 11 has One one decks. mast, is feet in length. Value of Sworn to before me this ... day of this certificate until he k (OVER)

Figure 3 Master Carpenter's Certificate

history before these partners took on a major restoration project. From their sources, I learned the boat was still named *Zimie 11* in 1942. The owner then, was Lloyd Lofthus, Bremerton, Washington. More detail on wartime service comes from a discussion Sarama had with Lloyd Lofthus in February 1985. Lloyd was a contractor in Seattle. He bought *Zimie 11* in 1941 for \$2,700. After the attack on Pearl Harbor in December 1941 brought the US into World War II,

the boat was taken over by the US Armed Forces, and stationed at Ballard Docks, Seattle. It operated in near-by Elliott Bay on "anti-sabotage patrol." The crew were armed with sidearms, rifles and Thompson sub-machine guns. As classic yacht owners know, evidence of wartime service adds much to the providence of their boats, rivalled only by linkage to 1920s evidence of rum running during American prohibition.

The boat was brought into the Yukon in 1942 by the American Army Engineers, still named *Zimie II*, but soon to be renamed *MV Turtle*, perhaps in ironic contrast to larger and faster war boat neighbors. Government records from1943 show vessel ownership as U.S. Public Roads Administration, Hoge Building, Seattle. After the war, sources show the boat was used as a



"bridge tug" in the 1940s and 50s, deployed in building and servicing bridges along the new Alaska Highway. In 1964, the boat was transferred

Figure 4 M V Turtle in 1957.

to the Canadian Army along with the Alaska Highway turnover. This was followed, according to sales records, by peripatetic owners cruising her in the Yukon. (Much of this history was obtained from 'Hunter' Cameron; he spent some of his teenage years on the boat, when his father owned it.)

The next move occurred when MV Turtle was transported on the White Pass Yukon Railway to Skagway; then placed on the deck of the 'Jolly Roger' steamship owned by the same Railway Company and taken to Vancouver. From Vancouver, it was trucked to the Vernon Marina, on Okanagan Lake. We next learn the boat was put in dry dock there, in 1974, leaking and very much in danger of demise.

This brings us to the rescue operation begun by Sarama and Lyonoor in 1980. They rebuilt the boat, serving as their own shipwrights and working on a spartan budget. They must have been born with nautical skills or were quick learners. They did their own milling, planking, ribbing, steaming, machining, and bronze casting. More controversially, they applied fiber glassing over the newly replaced planking on the boat's exterior. They report spending some 7,000 hours and \$40,000.00 in the restoration. After this lengthy and loving renovation, the boat was relaunched in May 1988 at Shelter Bay Marina, Okanagan Lake, retaining the name Adelante from its romantic origins. And the fiber glassing still looks new today.

Sarama and Lyonoor lived aboard Adelante on Okanagan Lake until they trucked the boat to Mission Creek in North Vancouver in the 1990s. Lyonoor attended the University of British Columbia and became a teacher. Then they moved to Gibsons, B.C., where Sarama built them a beautiful home. Adelante was sold to Rio Deleen and Nick Faragher, who moved the boat to False Creek, Vancouver, where they lived aboard.

When I purchased Adelante in 2008, she was in fine structural condition, but was due for an extensive cosmetic upgrade. With a career in medicine as a general practitioner, while living in a False Creek townhouse I had become increasingly attracted to boating and life on the water.



Figure 5 Adelante Cruising. Shirley Howdle

Perhaps the greatest interest in boating and sea life came from reading Wylie Blanchet's wonderfully seductive narrative of exploring the west coast of British Columbia on a motor launch with her five children. (The Curve of Time, 1961) When life in my False Creek townhouse became a bit boring, it was easy to choose to make Adelante my home, indeed, "a Boat of One's Own." (with a nod to Virginia Woolf's A Room of One's Own).

Adelante continues to be wonderful home at Spruce Harbour Marina, a live aboard cooperative in False Creek. False Creek is not False, and not a Creek, but rather an inlet in costal Vancouver which includes Granville Island Market, one of the most visually interesting and commercially successful tourist attractions of recent Canadian history. To locate there, and live on Adelante, with changing tides, weather, seasons, views of mountains, seas, harbours, boats, and Vancouver skylines, plus all the enticements of Granville Island Market and its many arts offerings, was and remains, irresistible.

Adelante has cruised the Gulf Islands, Princess Louisa Inlet and Desolation Sound over the last few years. I have served in the Canadian Fleet of the Classic Yacht Association, becoming Commodore for 2015, as we took on organizing and hosting of the CYA Annual International General Meeting and Change of Watch held in January 2016. My hope is that Adelante will continue to be my home and cruising vessel for many years to come.

Walronda's Modifications Over the Years

Jim McDonald

1886 marked the debut of petrol-powered boats, although there were much earlier steam powdered vessels that were primarily built for commerce or military use. As time went by



yachts were developed. Walronda, launched in 1912, was built early in the development of petrol-powered yachts and as you would expect there was plenty of room for improvement. She has evolved over the years to better serve her crew. Hanging on

Figure 6 Walronda soon after her launch in 1913

to a wheel on the roof of the cabin while a big sea heaved you around, with just a thigh high pipe rail for protection, must have been exhilarating. The helmsmen of a sailboat stood outside at a tiller or steering wheel, so why not on a power yacht! It is not surprising that the modifications in the first year included Bimini's over the helm and the two aft deck areas, along with replacing the helm pipe railing with a higher wooden fence or bulwark. Walronda looked much the same through the mid 1920's.

The original deckhouse was low, less than shoulder height from the deck. A notch in the engine room bulkhead suggests that the floor in the small deck-house was recessed below the sheer to give headroom in the deck-house.



By 1927 the small low deck-house was replaced with a longer and higher cabin. The helm was moved down from the roof into a short forward section of the deck-house while the aft section became a captain's cabin. The next significant modification was raising the roof of the

Figure 8 Walronda about 1927 at the Tano Glacier

deck-house about 6 inches, supposedly for a taller crew. The exhaust that had been out the side of the hull amidship was moved to near the stern.



Figure 9 Walronda About 1975

Sometime after the mid 1970's the deck cabin aft was extended about 9 feet. The owner at the time, Len Lakberg, commented that he was astonished at the improvement when the aft wall of the small wheelhouse was cut out on one side to connect the two cabin areas and make the present long saloon/helm. Radar and gum-wood railings were installed, as was a new mast and boom arrangement.

The current owner purchased Walronda in 1985 and continued the improvements including widening the deck-house eave, blocking in the aft deck to continue the sheer back to the aft stem,



install a new engine room hatch, install aft deck seats, install a live bait tank-fish cleaning station, install a new mast arrangement, the addition of large galley windows in the hull, and modifying the cabin combing. Some of the work made no

Figure 10 Walronda 1985

significant changes to the look of Walronda such as replacing the deteriorated bulwarks, replacing the rotted members of the guard and toe cap, coating the toe cap and a portion of the hull with epoxy and cloth.

There are very few pictures and no layouts that record the many interior configuration changes over the years prior to 1985. The interior changes after 1985 include extending the engine room by removing a collision bulkhead which was useless as it wasn't water tight, gutting and rebuilding the galley, head and aft cabin, and rewiring the vessel.



Figure 11 Walronda Today

You are probably realizing that there is very little apart from the hull that is near to as originally built. She is on her 4th set of engines, 3rd generator, at least the 3rd model of depth sounder, 2nd anchor windlass, 4th heating system, at least 4 mast arrangements, drag chain changed to hydraulic steering, the nth tender arrangement, and numerous deck house combings. Even her hull paint scheme has changed from white to black to several different two-tone colours, back to white and now two-tone blue-grey. Sanding the head walls revealed dozens of layers of paint colours.

About the only items apart from the hull that are original are the steering wheel and the 6 smaller cabin windows. Future projects may include returning to bright finished vertical vee-joint on the exterior lower section of the deck-house walls.

No doubt Walronda will continue to evolve to suit the needs of the future owners.

Nautical Dreams:

Electric Motors for Classic Yachts

George Egerton

In 2009, when I was young and nautically naïve and receiving instructions about starting up the engine on the classic yacht with which I had just fallen in love and bought (Mysterion, 1927), I was told it needed to warm up for about half an hour. This was important for powering up the engine and all its juices, lubricants, cooling systems, and other arcane matters. No problem here, as I had no great desire to make a quick exit from the safety of the dock, especially for the first time. The half hour would allow time for checking many safety features and instruments, and prayers for those at sea, or soon to be. The engine warm-up would also help reduce the grey,

black, and blue smoke which poured out of the stack upon startup, threatening to asphyxiate all nearby creatures, including friends. Word had it that Buda Marine 6-844 Diesel engines all smoked upon starting, but after a half hour cleared up. This was true, but not the whole truth, after some 75 years of engine use, maintenance, and neglect.



Figure 12 Smokey Mysterion having to leave dock before warming up one-half hour. But see Mysterion after warmup at end of this article. Permission Duane Elverum

All of which brings us to nautical dreams. Amid start-ups with too many fumes and asphyxiations, I found myself dreaming of a boat that would be old, classic, quiet, and smokefree upon start-up. It would leave the dock in silent grandeur, making nary a ripple nor a puff, a crossover between a stealth aircraft and an electric Model S Tesla car. Tesla, under the erratic genius of Elon Musk, has served as a herald of the electric motor revolution which is now upon us. With Western cultures immersed in carbon-based guilt, fearful of human-generated climate change and global warming, who wouldn't want pollution-free propulsion. And not only with cars, including Formula E racing cars, but also with trucks, trains, planes, bicycles, and yes, boats. The 20th century witnessed the triumph of the internal combustion engine. Fossil fuels came to power nearly everything that moved, including boats. Technology over time generated vast improvements in efficiency, performance, and eventually environmental protections for combustion engines. But, just as these improvements spread, the switch to clean, renewable energy also gathered steam, so to speak. And we are now in the early stages of a new, transformative electrical revolution where energy will increasingly be based on the capturing of wind, water, solar, geothermal, hydrogen, and (perhaps) nuclear power, the transport of this power over intelligent grids, and the storage of this energy in batteries, which themselves are presently undergoing unprecedented technical innovations.

Let me admit that my nautical dreams were not original. They came after hearing recently that General Motors had bought a controlling stake in Pure Watercraft to become a major actor in allelectric boating. This arrangement claims to combine GM technology with Pure Watercraft propulsion systems to expand all-electric marine transportation. As editor of our Newsletter, and owner of a classic yacht with a carbon-puffing engine, I though this topic was worth pursuing. Based on internet trolling, surveillance of advertisements by major marine engine builders placed in glossy yacht magazines, and interviews with local sales representatives, installers, and yacht owners, I offer a brief report of what I have found, especially for readers with smokey engines who wish to protect friends and families from noisy asphyxiation. Of course, there are more traditional ways to repair, rebuild, or replace an old engine to improve its environmental impact. But that's another story, and the path of electrical conversion is new and gathering momentum, if General Motors and Elon Musk know what they are doing.

So, what's out there for those who would like to convert a classic yacht to electrical propulsion? And what would it cost? First, we look at a full conversion / replacement. Then a few words about the alternative of adding on a hybrid electrical system alongside the old engine.

Increasingly, manufacturers are designing and building electrical boats and engines of all sizes, from kayaks, dinghies, motor launches, sailboats, Catamarans, tugs, ferries, hydrofoils, all the way to container ships. Here, the competition is fierce, and global – as with the prime movers and manufacturers in the automobile sector. In this whole field science and technology rule, research innovation and application are pervasive and costly, risks are high, and investors need to be prophetic, nimble, and patient, with deep pockets. In the nautical sector, new manufacturers are emerging and combining almost on a daily basis. Journals like *Motorboat and Yachting* or *Pacific Yachting* are full of advertisements and reviews of new electric boating products, from Europe, Asia, and America. While we will address some of the drawbacks of electrification later, here we list the advantages and attractions identified by proponents:

- propulsion is silent, vibration-free
- power is environmentally friendly, there are no polluting fumes
- monitoring, communications, and controls can be digitally combined on fixed or portable screens, where all electric onboard systems can be integrated
- gearing, torque, and steering are instant and readily adapted to automatic pilot
- refueling of battery power through recharging is cheap, compared to combustion fuels, and renewable power from wind turbines or solar panels can be harnessed onboard.
- systems are light and compact compared to the weight and bulk of combustion engines
- with few moving parts, systems need little lubrication, maintenance or servicing, and have longevity

For conversions designed more specifically for older boats or classic yachts, the market is narrower, but growing fast. Leading manufacturers from my scanning of what's available in American and Canadian markets would include: Electric Yacht, Oceanvolt, Torqueedo, Greenline, and Hybrid Marine. All have accessible websites describing their products. Perhaps foremost in what's available readily in and around Vancouver, British Columbia, would be US manufacturer Elco Motor Yachts, who have been making electric boat motors since 1893. Flourishing through the 20th century, especially in wartime, Elco now is a leading American and global producer of electric propelled boats and outboard and inboard electric engines designed for installation in vessels of any age or design. Although this is not an endorsement, the local Elco dealership helpfully supplied materials from their website and other information, which can serve to indicate what's available, and the scale of costs involved. Here is a clip of several engines from their website to indicate design, function, horsepower requirements according to boat size and operating speeds, with pricing in US\$.

EP-40 Electric Inboard

\$13,995

Voltage: 108 Volts Comparable HP: 40HP



Suggested Battery (Ah): 165Ah -225Ah

EP-70 Electric Inboard

\$15,995.00

Voltage: 108 Volts Comparable HP: 70HP



Suggested Battery (Ah): 220=275 Ah

EP-100 Electric Inboard

\$20,995.00

Voltage: 144 Volts Comparable HP: 100HP



Suggested Battery (Ah): 220-300Ah

EP-200 Electric Inboard

\$59,995.00

Voltage:144 Volts Comparable HP:150-250HP



Suggested Battery (Ah): 590Ah

What's immediately clear is that conversion to electrical propulsion is not cheap, even if increasing competition and mass production should reduce pricing. And beyond the cost of the

engine, the expense of batteries, an onboard generator, instrumentation and operating controls, shipping, and installation, all magnify the cumulative costs.

I discussed with the local Elco dealership what an electric conversion of my classic yacht, Mysterion, would entail. My boat is 50 feet in length, 12 feet beam, c. 23 tons net weight, and cruises at about 8 knots. Here's how it added up, in rough estimates:

- Motor to replace my 1945 Buda 844 6 DCMR, 104 HP: EP-100 Electric Inboard, Comparable HP: 100HP: US\$20,995
- Motor Mount Set (4x) US\$275
- Female Coupler for motor: US\$268
- Male Coupler for prop shaft: US\$268
- Batteries: EP-12 Victron AGM Deep Cycle, 12v/220 ah (12x), or Lithionics Lithium-Ion: US\$7,000
- Battery Charger: Elco UHF3300 (1x) US\$895
- Engine Installation: c. 16 hours: US\$3200
- Generator: Polar Power Diesel DC Generator 144VDC, model #8220VP-30: US\$28,000
- Factory installation of Generator: US\$4000
- Instrumentation, Controls, and System Management: included with price of engine
- Shipping and Taxes: US\$2000
- Total Estimate: US\$66,901

Again, this figure represents a ballpark projection, without an exact survey and official estimate. Converted to Canadian currency it would be about \$84,770. That's a lot in any currency, probably worth more than the boat. And there would be other costs, like disassembling and removing the old engine. (Anyone want a free Buda 844? I have been offered three free Budas over the years, but on my wife's advice, declined them all.) As well, integrating the electric system with solar panels or wind power would add further costs. Of course, one could say to one's wife that after a total conversion the boat would be much more valuable and would be making its contribution to environmental protection. One could also claim that after several years of reduced fuel and maintenance costs, the savings would more than pay for electrification. One could also try these arguments on oneself, perhaps with more success.

So electrical conversion for a classic yacht is expensive, even as rapidly expanded production and competition is driving prices downward. There are also several other drawbacks and challenges, apart from cost. Amongst these, range limitation due to rapid exhaustion of battery power is foremost. Battery research, innovation and mass production is at the heart of the current electrical revolution, and enormous improvements in efficiency and durability have been realized, especially with light, compact, solid lithium-based batteries. The search for cheaper, safer, solid storage materials is intense, driven by global competition and demand, and likely to see dramatic breakthroughs. But the present generation of nautical batteries have heat and safety problems, and their limited range requires recharging by onboard generators using combustion fuels, or often unreliable solar or wind power, to extend range. Charging stations are now expanding dramatically for electric vehicles on land. However, it is much more difficult and expensive to provide fast-charging stations over remote water routes and moorage. For longerrange sea travels by larger vessels, expensive generator and charging systems still seem necessary.

So, if a full conversion seems a bit over the money mountain, what about DIY Kit? Are not



classic yacht owners natural-born do it yourselfers, or soon driven by necessity to learn all known nautical skills? Would it not be possible to find room to add a smaller electrical engine to the existing diesel system, wire it into the existing battery grids and alternators, and use this electric system when you want to move quietly and smokelessly going in and out of ports, leaving the faithful diesel to provide propulsion for longer excursions? And also retaining the waterline. Here is a ballpark estimate for DIY installation of a "hybrid"

diesel- electrical system:

- Engine: EP-70 Electric Inboard, Compatible HP 70 (see left), US\$15,995
- Battery: Use existing 12 / 24-volt systems
- Charging: Use engine alternators, plus any solar or wind power on board
- Controls: Included with Elco DIY Kit
- Shipping and Taxes: US\$1000
- Total estimate: US\$16,995

Now, realistically, unless you are an electrical wizard, or have free psychiatric services at hand, you will need a skilled marine electrician to design and align this system. So, bring on another thousand, at least. Then, it's more like US\$17,995, or CDN\$23,070. A lot better than CDN\$84,770. And you still have your old faithful diesel.

What can we conclude from this brief attempt to survey how the present global electrical revolution is impacting the particular and special domain of classic yachts. To me, the following themes are salient. This is truly a revolutionary era for propulsion systems. Not just the move away from the industrial revolution's dependence on fossil fuels, but also the radical choices which energy alternatives present in the politically charged world of environmentalism and its skeptics. It's not just new forms of generating, storing, and managing electrical energy; other sources of energy also present powerful appeals, with hydrogen cell technology and small, portable nuclear plants as leading competitors. And nuclear fusion, as on the sun, might transform all present paradigms of thinking, if ever realized.

It's unlikely that classic yachts will see many nuclear conversions, but maybe there's a future here for conversion to green hydrogen fuel cells for electric propulsion? Japan is heavily invested in this direction. Given what's happening in the auto industry, my prediction is that the market will be dominated within a decade by electric, battery-powered propulsion systems. I find the technological, economic, and environmental arguments for this direction compelling. But for classic yachts, the future for electric conversions is not quite here yet for everyone. The costs are high and, equally important, the technology is changing so fast that choices can sometimes lead to rapid obsolescence. Nevertheless, for those who can afford it, and are brave, why not turn nautical dreams into reality, or at least try out a hybrid? The future is arriving faster than any of us predicted.



Figure 13 Mysterion After Warmup. Smoke almost invisible. George Egerton

(Thanks to Elco for their information and to Graham Smart, for advice on electrical details.)