The Oil Drum: Campfire

Discussions about Energy and Our Future

Sailing into the Future

Posted by <u>Debbie Cook</u> on February 25, 2010 - 10:19am in <u>The Oil Drum: Campfire</u> Topic: <u>Environment/Sustainability</u> Tags: <u>cargo</u>, <u>nautical</u>, <u>sailing</u>, <u>sustainability</u>, <u>transportation</u> [list all tags]

This is a guest post by Captain Michael Kellick. Captain Kellick has been serving in tall ships for fifteen years, sailing all along the west coast of North America, to Hawaii and across the Caribbean. He is presently working with the Los Angeles Maritime Institute and studies Art as Moral Action with American opera director Peter Sellars at UCLA. He attended the 2009 ASPO conference in Denver last October.



Photo Credit: Lady Washington at Sunset by venicewow on Flickr

We cannot think of a time that is oceanless Or of an ocean not littered with wastage Or of a future that is not liable Like the past, to have no destination.

T.S. Elliot--The Dry Salvages

Hull. Masts. Rigging. Sails. Rudder. Ready...

From time to time sailing ships get mentioned as one technology that will serve in post petroleum scenarios but some readers may not know that there are already hundreds in service worldwide, maintaining a tradition of moving goods and people across water that goes back 400 centuries. By contrast, our recent epoch of fossil fueled ships stands out as a brief and brilliant blip in a continuum of what may turn out to be humankind's most enduring form of transport.

Seen mostly as majestic relics of a bygone era today's tall ships are nevertheless essential transitional platforms for change as we begin the move toward sustainable transportation over water. Since most Americans still happen to live near major water transportation routes it is

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likely that we will continue to use boats of some sort to move goods and people around. Building and sailing ships to meet our future needs will most likely involve examining our long unbroken maritime traditions which are alive and well around the world in today's modern tall ships.

Worldwide, there are about three hundred sailing ships serving Europe, the Americas, Australia and Asia, many in the form of large academy ships training navies and future bridge officers of the world's cruise ships, oil tankers and container ships. In North America there are 124 sailing vessels belonging to the <u>American Sail Training Association</u>, an umbrella organization which promotes sail training for youth, professional maritime advancement and international cooperation. Although character building is the avowed goal of ASTA, its 181 member vessels themselves make their livings conducting a wide range of activities: history and science education, Christian ministry, social services, ecotourism, booze cruises and battle sails, to name a few. Counting clockwise around the continent we have 18 in the Great Lakes fleet, 75 in the Atlantic, 5 in the Gulf and 29 in the Pacific.



Additionally, several of our most impressive ships are maintained by maritime museums although they sail much less frequently, if at all. Owing to their ages and fragility they are kept in service as static public attractions meanwhile serving as valuable training venues and great repositories of nautical knowledge. Many readers may be familiar with U.S.S. Constitution or <u>Old Ironsides</u> in Boston Harbor. The oldest commissioned warship in the world, she was launched in 1797. She can be sailed but is taken out annually with a tugboat. <u>Star of India</u>, on the other hand, can and does sail a few days each year from San Diego. This legacy ship of the clipper era is made of iron and was launched the same week that Abraham Lincoln spoke at Gettysburg.

Modern sailing ships defy easy taxonomy since their styles and construction methods span centuries of innovation. Wood, steel, iron, Ferro cement and new composite materials are variously used in their <u>construction</u>, as are fiberglass and laminates and many, many petrochemical paints, solvents and adhesives. What they all have in common, however, is the ability to move people and their stuff without an engine, albeit slowly. With proper maintenance and safe operation they can last decades if not centuries as long as the supply of lumber, steel, polyester and other essential materials continues.



Know the Ropes

All but a very few tall ships nowadays have diesel engines. The extent to which these engines get used varies from vessel to vessel but it is worth noting that engines greatly increase safety. They also make maneuvering in narrow modern harbors – all designed for power boats - much easier. Additionally, they help ensure that our wind driven ship can keep her modern up-to-the-minute schedule. Two hundred years ago sailors kept their calendars to the nearest month, and then with steam that was refined to within a day or two and now we can be sure to arrive Wednesday at 2 pm if needed. Over the course of an entire season a modern sailing vessel is under engine power about 30% of the time, depending on the number of scheduled arrivals.

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I suspect that throughout time there have always been a few who, by their nature, distrusted change and others' notions of progress. Some of us, I believe, have also accepted technological complexity with a healthy dose of skepticism. Whether because of these or romantic sentimentalism - or perhaps some of each – the modern replicas of historical sailing ships were designed, funded and built starting in the late 1930's even as commercial sailing vessels were still in use. While the great clippers themselves had been eclipsed by coal fired steamers which were, in turn, made obsolete by the diesel driven behemoths we see today, sailing never went away altogether. Some of those academy ships mentioned above as being used to train naval and merchant officers were built in the 20's and 30's and operated without engines for over fifty years.

To be clear, our operational sailing ships can do little to alleviate the passenger and freight loads of a post petroleum future. If every tall ship in North America were put to use in San Francisco Bay it would take about a week to ferry all the commuters to work who now make that trek daily in cars. And since they were built mostly to carry people there are considerable changes in construction and certification necessary to convert them to cargo carriers. Their strength is not in what these ships could do if converted but rather in what they are already doing. As tradition bearers they are helping people keep valuable design, maintenance, rigging and sailing skills alive which will be needed later. Additionally, they provide excellent models of ecological and communal living.

Those with an interest in learning how to sail on board a traditionally rigged historical or modern sailing ship may be pleased to know that there is ample opportunity to do so. Because the majority of the sail training ships in North America are owned and operated by non-profit educational institutions they are always in search of assistance, both financially and in the form of volunteer labor. Many offer formal training programs for a nominal fee while others welcome folks who complete their training gradually and at no cost. Either way it's a great way to join another community and develop valuable skills, both past and future, while enjoying the ocean environment. There are things in nature that only sailors know.

Post Script:

The transition to cargo under sail is already underway, as evidenced by the excellent efforts of Jan Lundberg and the Sail Transport Network. Dimitry Orlov has also written at length on this subject and whose essay can be found <u>here</u>. Another great source of info is Low-tech Magazine, a website familiar to many.



Captain Kellick on board the Exy Johnson

American Sail Training Association – ASTA <u>http://www.sailtraining.org/</u>

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