

## VESSELS ANCHORING IN SAMISH BAY

11/18/09



A number of people have asked me about the ships that anchor in Samish Bay. Four types of ships (two types are technically tugs and barges) anchor locally.

Crude oil tankers tend to use the anchorages close to Vendovi Island. Oil refineries at Cherry Point and Ferndale, like the two refineries at Anacortes, have limited docking space for ships and limited storage tankage for crude oil brought in by the ships (each has dock space for only one ship at a time). At times, American-flag tankers full of Alaskan crude from Valdez anchor a day or so, awaiting space at the Cherry Point and Ferndale refinery docks. They use the Vendovi anchorages north of Samish Island because the waters closer to Cherry Point and Ferndale are too deep for good anchoring and are not well sheltered. Alaska crude oil by itself cannot be refined very efficiently, so the refineries import crude oils from foreign sources to blend with the Alaska oil. Foreign-flag ships with foreign-national crews usually are employed in the foreign trades. Often, the refinery storage tanks for blending oils are completely filled by a tanker unloading only part of its load, so the ship may have to anchor for several days until the refinery can take the balance of its load. So you see American tankers with Alaska North Slope Crude anchoring for a day or so, and foreign tankers with foreign crude anchoring for sometime several days at a time.

Less frequently, bulk carriers anchor closer to Bellingham, either awaiting dock space to load or unload, or, occasionally, after unloading their cargoes, to wait for another assignment. Bulk carriers carry bulk cargoes that fill the entire ship, such as grains, ores, fertilizers, wood chips, and other dry bulk commodities. They usually are smaller than oil tankers and can be identified by their cranes on deck to load and unload their cargoes. Bulk carriers usually are foreign-flag, with foreign-national crewmembers.

The past couple of years, “articulated tug and barge” and “integrated tug and barge” combinations have been coming near Samish Island for shelter. They also often anchor off the East side of Guemes Islands, but sometimes choose Samish Bay because Samish Bay has better protection from most fall and winter storms. These ATBs and ITBs are large barges with ship-shaped bows. They have notches on their sterns in which tugs specially designed and built for each barge fit into and are locked in place with hydraulic rams. Effectively, they are a unit, but the tugs can be disconnected relatively easily for drydocking and repairs. With ITBs, the tug is locked

rigidly to the barge. With ATBs, the connection is hinged to allow flexing in larger waves. The ATBs/ITBs carry refined products (gasoline, diesel, stove oil, jet fuel, and industrial fuels and oils, ship fuels) between the four north-sound refineries and middle and south-sound (and sometimes Columbia River and coastal) terminals. ATBs and ITBs are used rather than small tankships primarily because Coast Guard crew requirements for tugs involve fewer crewmembers than tankships. Ships usually have three watches, with crewmembers working 4 hours on duty and 8 hours off duty. Tugs usually have two crews, working 6 hours on, 6 off. The ATBs and ITBs carry refined products such as jet fuel, stove oil, and gasoline between the refineries and depots in Southern Puget Sound. They have not been kept completely busy the past few months due to reduced demands for petroleum (most of the product from the four north Puget Sound refineries moves by pipeline), so have anchored with full crews for days or even weeks awaiting assignment. One anchored off Chuckanut drive for several weeks earlier this fall.

The fourth type of vessel that we see in Samish Bay, sometimes fairly close in, are traditional tank barges with separate tugs. These also often “anchor” off Guemes Island, waiting dock space to load refined oil cargoes. The tugs are attached to the barges with standard towing chains and towing wires, but tie up alongside the barges when they come in to Samish Bay. They come into Samish Bay when storms with southerly winds are forecast, as there is better shelter here than off Guemes. These tugs do not use their anchors when here – their towing chains lay on the bottom when strain is removed and hold the tugs and barges in place effectively, but the tugs are ready to get under power within a few minutes notice if winds or currents move the vessels towards land. The crews of the tugs usually rotate every two weeks. Sometimes you will see a second tug come alongside a barge either the transfer crew and supplies or to replace the first tug.

Occasionally, you may see an orange-red launch go alongside the tank ships, bulk carriers and ATBs/ITBs. The launches deliver pilots, replacement crewmembers, supplies and parts.

The tankships and bulk carriers are staffed by their regular crews of 20 to 30 crewmembers. When tankships, bulk carriers, and ATB’s/ITBs are underway in Puget Sound waters they all take pilots specially trained and licensed for Puget Sound waters. The pilots are heavily regulated by Washington statutes and the Washington Board of Pilotage Commissioners. The tugs have crews of five to seven or eight. The ATBs/ITBs also take pilots when underway. The crews of all of these ships staff their bridges with a licensed officer all times when at anchor.

Tankships when they are underway with cargo oil on board are required to have one large-power escort tug specially designed to be able to maneuver and stop large tankers, two for single-hull tankers.

All of these vessels have had near perfect safety records so far as oil spills in Puget Sound for a number of years (the exception being a few smaller spills when ships have loaded their own fuels or transferred their fuels between tanks), but the vessels and their crews remain closely regulated and monitored by a combination of international ship safety conventions, the Coast Guard, the State of Washington (including the Department of Ecology and the Board of Pilotage Commissioners), and oil/shipping industry voluntary safety groups.

Some photos and other information are available at:

typical Alaska Pipeline tanker: <http://maritime.homestead.com/files/polar.html>

typical bulk carrier: [http://www.ships-info.info/pictures/Bulk\\_Carrier.jpg](http://www.ships-info.info/pictures/Bulk_Carrier.jpg)

ATB:

<http://www.colrip.com/pages/Ships.aspx>

Standard tug and barge:

see above photo

Escort tug:

<http://www.foss.com/images/photos/aboutus/high/03.jpg>

Chuck Davis