NOAA's Hydrographic Services Review Panel

Fall 2020 Virtual Meeting

Arctic Update

Captain Ed Page

Marine Exchange of Alaska

History Replay On

Arctic Traffic
Summer 2020

TORM LAURA
MMSI/IMO: 220603000 / 9375616
MMSI Type: Ship
Country: Denmark
Lat.: 71°34.285'N(71.571411)
Lng.: 158°16.944'W(-158.282410)
Type: Tanker
Nav.Stat.: Under way using engine
Speed/Course: 11.9knt / 242.1°
Dest.: USOME
ETA: 9/15/2020 23:00
UTC: 9/14/2020 06:53:32
Local: 9/13/2020 22:53:32
Received: 7 days 15 hr 29 min ago

Barrow
Elson Lagoon
Dease Inlet
Inaru River
Peard Bay

Not for Navigational Use

Shell returns to Arctic Alaska with new offshore oil drilling plans

This time the company is eyeing leases much closer to shore.

Future Plans

Qilak LNG

Home FAQs News Contact

OUR FIRST PROJECT

Qilak LNG's North Slope Project

The Qilak LNG 1 Project will capitalize on recent developments in Arctic LNG technology allowing natural gas to be directly exported from the North Slope of Alaska. This will significantly reduce the capital cost compared to projects that require a long-distance pipeline and a large minimum LNG order. Phase 1 of the Qilak LNG 1 Project will have an export capacity of 4 MTPA, with additional capacity planned to come online in future phases as determined by gas supply and global demand.

WHAT ABOUT SUBSISTENCE ACTIVITIES?

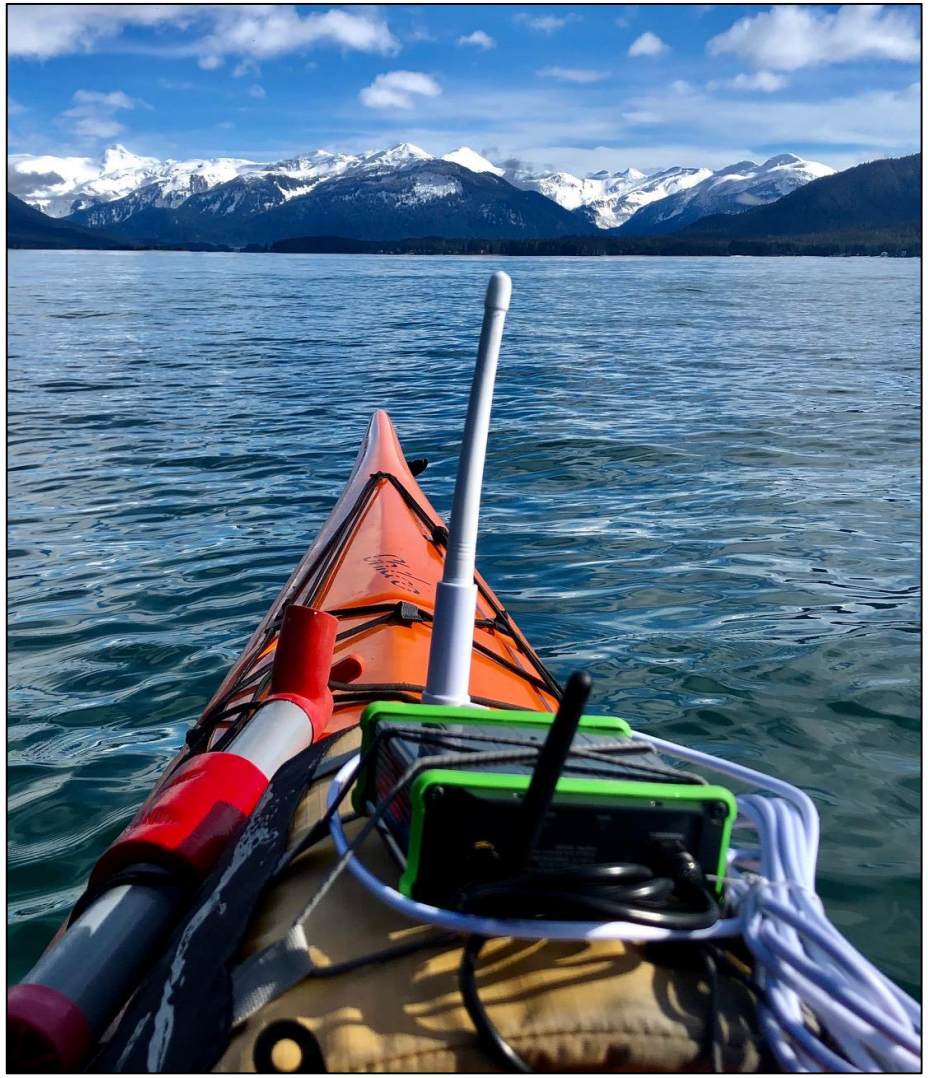
Qilak will work closely with the North Slope Borough, local communities, the Alaska Eskimo Whaling Commission (AEWC), the Marine Mammal Commission, and marine mammal co-management groups to ensure that the Qilak LNG 1 development is done in an environmentally sensitive and safe manner that also minimizes disruption to marine mammals and subsistence activities. Qilak will select an offshore location for the gas liquefaction facilities and also plot the shipping routes of the LNG carriers to avoid interference with subsistence activities. It is likely that the LNG carriers, after they load up, will travel north away from Pt Thomson before turning west keeping them well away from the Northern coast of Alaska. Ship tracks and speeds will be carefully chosen to avoid interference with seasonal migration and hunting in the Bering Straits.

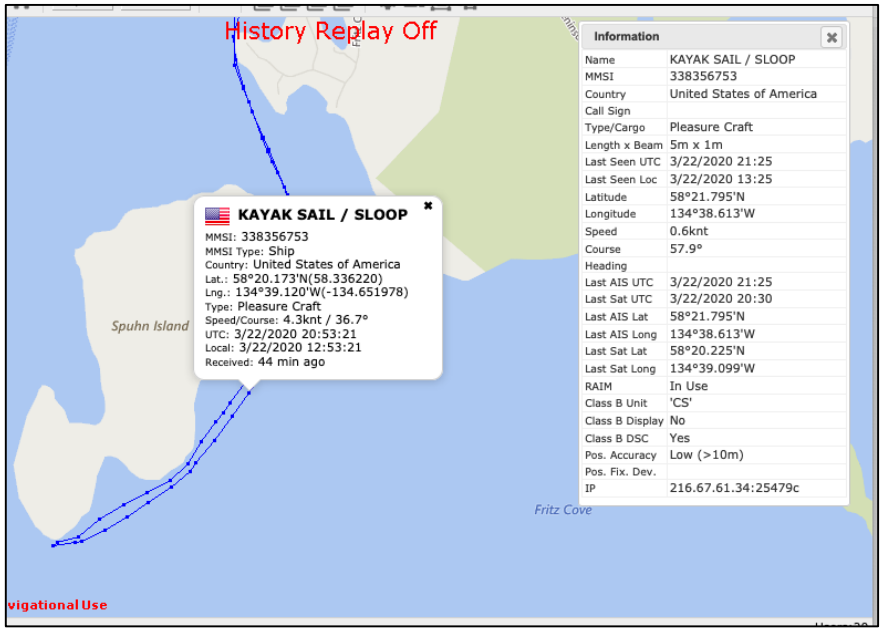
ARE THERE ANY AREAS THAT WILL BE AVOIDED ALONG THE SHIPPING ROUTE?

There are currently no restricted areas along the route from the North Slope to Asia that we know of. However, Qilak will fully comply with any future restrictions that may be designated, for example, the IMO may designate "Particularly Sensitive Sea Areas"(PSSA), which place limits on vessel traffic; and the USCG may identify Areas to be Avoided (ATBAs) in order to reduce ship strikes with marine wildlife.

Alaska Eskimo Whaling Commission

Alaska Eskimo Whaling Commission



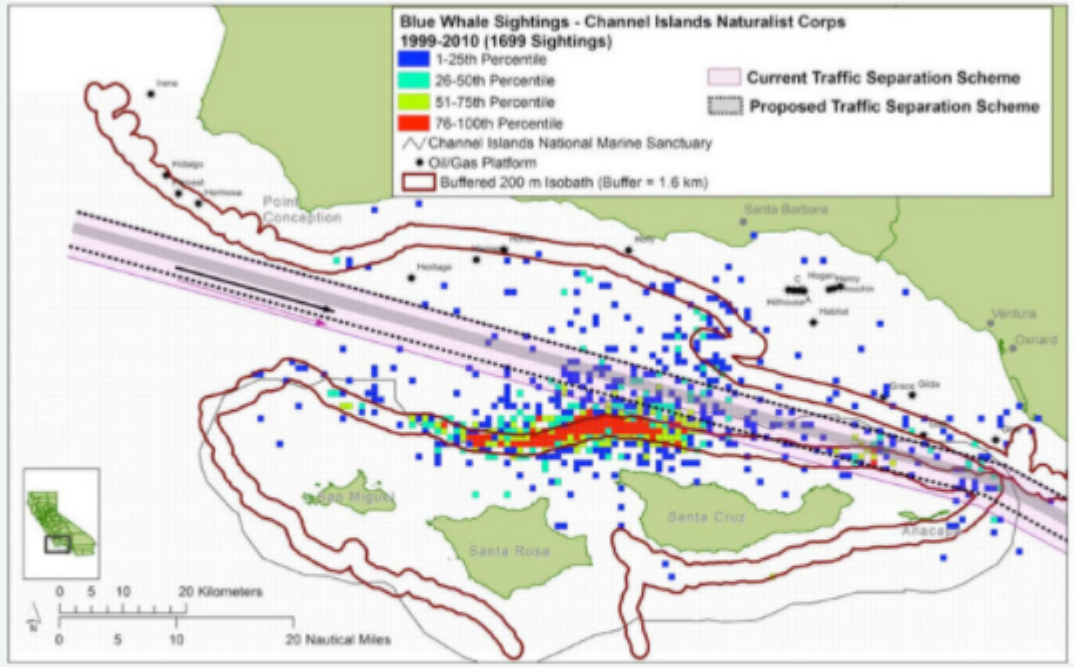


Arctic
Port Access Route Study

Arctic
Port Access Route Study

Routes recommend a safe path of travel in areas with difficult or dangerous navigation.

- **Traffic Separation Schemes** create buffers between lanes of traffic and may include additional navigational guidelines, similar to a divided highway.
- **Two-Way Routes** establish a traveling corridor to provide mariners with an efficient path of travel, minimize turns and junctions, maximize distance from shore, and avoid important subsistence and ecological areas.
- **Recommended routes** are of undefined width, for the convenience of ships in transit, which is often marked by centerline buoys.
- **Recommended tracks** are routes which have been specially examined to ensure so far as possible that it is free of dangers and along which vessels are advised to navigate.
- **Deep-water routes** are within defined limits which have been accurately surveyed for clearance of sea bottom and submerged obstacles have been indicated on the chart.



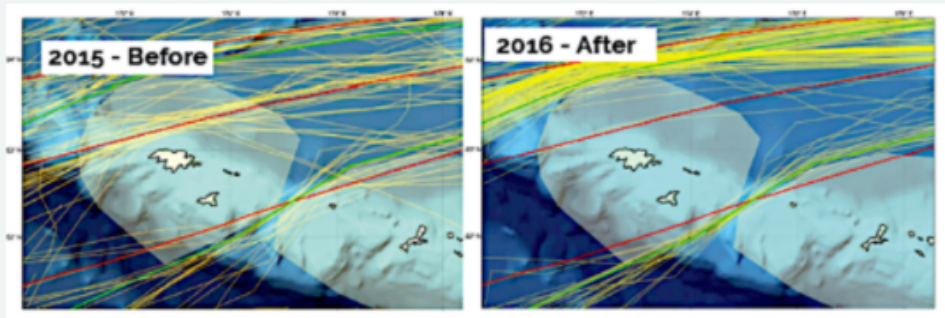
A Traffic Separation Scheme north of the Channel Islands of the California coast. *Map via NOAA*

- **Mandatory routing systems** are adopted by the International Maritime Organization (IMO) and mandatory for by all ships, certain categories of ships, or ships carrying certain cargoes.

Regulated Navigation Areas have established regulations to control vessel traffic within areas determined to have hazardous conditions.

- May specify times when vessels can enter, move within, or depart from regulated waters.
- May establish limits on size, speed, draft of vessels, or on operating conditions.
- May restrict operations to vessels with particular capabilities in hazardous areas or conditions.
- Primarily regulate the operation of vessels permitted inside the area, but also may establish control of access to an area if necessary.

Areas to Be Avoided (ATBAs) are areas within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships, or by certain classes of ships.



Areas to be Avoided in the Aleutian Islands showing high compliance from vessels after their implementation. *Image via Aleutian Islands Waterways Safety Committee*

- Minimize risk of vessels becoming grounded, thereby reducing risk of oil spills.
- Facilitate emergency response.
- Alert mariners to shoal waters.
- Prevents disruption of subsistence activities.
- May be mandatory or recommendatory in nature.
- In general, ships show high compliance with IMO-designated ATBAs even when they are recommendatory.

Precautionary Areas are areas within defined limits where ships must navigate with particular caution and within which the direction of traffic flow may be recommended.

- Often used for turns and junctions in routing systems.

Other measures include:

- Electronic navigation aids can relay a vessel's position and conditions of the weather and sea.
- Speed limits can be implemented for safety and security, such as reducing impacts to marine mammals.
- A mandatory reporting system is used in the northeast Atlantic to reduce ships strikes on right whales.

News - July 2020

New depth map over the Arctic Ocean

Release of version 4 of the IBCAO

London, 16 July 2020 – Details of a new depth map of the Arctic Ocean have been published in the Nature Journal Scientific Data. The new portrayal of the Arctic Ocean floor is in the form of a digital gridded database and comprises Version 4.0 of the International Bathymetric Chart of the Arctic Ocean (IBCAO).

The new IBCAO Ver. 4.0 has increased the area mapped of the Arctic Ocean from 6.7 percent in the previous release of Ver. 3.0 in 2012 to 19.6 percent.


LOONEY TUNES
"That's all Folks!"