U.S. Department
of Homeland Security

United States Coast Guard

LOCAL NOTICE TO MARINERS

District: 17 Week: 47/20

-Navigation Information Service (NIS)-
Watchstander, 24 hours a day at (703) 313-5900
~Navcen Internet Address~
https://www.navcen.uscg.gov
-Local Notice to Mariners-
https://www.navcen.uscg.gov/-pageName=lnmMain

Issued by: Commander (DPW) Telephone: (907) 463-2269 (0800-1600)
Seventeenth Coast Guard District After Hours: (907) 463-2000 (1600-0800)
PO Box 25517, Juneau, AK 99802-5517
http://www.uscg.mil/d17/D17%20Divisions/dpw/dpw.asp

Questions, comments, or additional information on this Local Notice to Mariners should be sent to the address above or by E-mail to: D17-PF-D17-LNM@uscg.mil. You can get the U.S. Coast Guard 17th District Local Notice to Mariners via the Internet directly from the U.S. Coast Guard Navigation Center web site at https://www.navcen.uscg.gov/-pageName=lnmDistrict&region=17.

REFERENCES: Light List, Vol. VI, Pacific Coast and Pacific Islands (COMDTPUB P16502.6).
U.S. Coast Pilot 8, Pacific Coast Alaska: Dixon Entrance to Cape Spencer, 42nd Edition.
U.S. Coast Pilot 9, Pacific and Arctic Coasts Alaska: Cape Spencer to Beaufort Sea, 37th Edition.

BROADCAST NOTICE TO MARINERS
Navigation information previously promulgated by CG Sector Juneau Broadcast Notice to Mariners through J122-20 and CG Sector Anchorage Broadcast Notice to Mariners through A130-20 that are still in effect are included in this notice.

Chart Corrections
https://nauticalcharts.noaa.gov/charts/chart-updates.html

Dates of Latest Editions, Nautical Charts, and Miscellaneous Maps
https://nauticalcharts.noaa.gov/charts/list-of-latest-editions.html

Light List/ Summary of Corrections
https://www.navcen.uscg.gov/-pageName=lightListCorrections

NOAA Chart Viewer (Posting of all up to date NOAA charts for viewing on Internet browser to be used for ready reference or planning)
https://nauticalcharts.noaa.gov/

NOAA Booklet Charts
https://nauticalcharts.noaa.gov/charts/noaa-raster-charts.html#booklet-charts

Coast Pilots, along with corrections, are available at:
https://nauticalcharts.noaa.gov/publications/coast-pilot/index.html

NOAA Weather Buoy Sites
http://www.ndbc.noaa.gov/

Tides online
https://tidesandcurrents.noaa.gov/

Tides, Currents, PORTS
https://tidesandcurrents.noaa.gov/noaacurrents/Stations-g=693

Weather
http://www.nws.noaa.gov/om/marine/alaska.htm

Vessel Traffic System Prince William Sound (VTSPWS) Users Manual
https://homeportr.uscg.mil/Lists/Content/DispForm.aspx-ID=2205&Source=https:

ABBREVIATIONS

A through H

ADRIFT - Buoy Adrift

I through O

I - Interrupted

P through Z

PRIV - Private Aid

AICW - Atlantic Intracoastal Waterway
Al - Alternating
B - Buoy
BKW - Breakwater
bl - Blast
BNM - Broadcast Notice to Mariner
bu - Blue
C - Canadian
CHAN - Channel
CGD - Coast Guard District
C/O - Cut Off
CONT - Contour
CRK - Creek
CONST - Construction
DAYMK/Daymk - Daymark
DBN/Dbn - Daybeacon
DBD/DAYBD - Dayboard
DEFAC - Defaced
DEST - Destroyed
DISCON - Discontinued
DMGD/DAMGD - Damaged
ec - eclipse
EST - Established Aid
ev - every
EVAL - Evaluation
EXT - Extinguished
F - Fixed
fl - flash
Fl - Flashing
G - Green
GIWW - Gulf Intracoastal Waterway
HAZ - Hazard to Navigation
HBR - Harbor
HOR - Horizontal Clearance
HT - Height
ICW - Intracoastal Waterway
IMCH - Improper Characteristic
INL - Inlet
INOP - Not Operating
INT - Intensity
ISL - Islet
Iso - Isophase
kHz - Kilohertz
LAT - Latitude
LB - Lighted Buoy
LBB - Lighted Bell Buoy
LHB - Lighted Horn Buoy
LGB - Lighted Gong Buoy
LONG - Longitude
LNM - Local Notice to Mariners
LT - Light
LT CONT - Light Continuous
LTR - Letter
LWB - Lighted Whistle Buoy
LWP - Left Watching Properly
MHz - Megahertz
MISS/MSNG - Missing
Mo - Morse Code
MRASS - Marine Radio Activated Sound Signal
MSLD - Misleading
N/C - Not Charted
NGA - National Geospatial-Intelligence Agency
NO/NUM - Number
NOS - National Ocean Service
NW - Notice Writer
OBSCU - Obscured
OBST - Obstruction
OBSTR - Obstruction
Oc - Occulting
ODAS - Anchored Oceanographic Data Buoy
Q - Quick
R - Red
RACON - Radar Transponder Beacon
Ra ref - Radar reflector
RBN - Radio Beacon
REBUILT - Aid Rebuilt
RECOVERED - Aid Recovered
RED - Red Buoy
REFL - Reflective
RRL - Range Rear Light
RELIGHTED - Aid Relit
RELOC - Relocated
RESET ON STATION - Aid Reset on Station
RFL - Range Front Light
RIV - River
RRASS - Remote Radio Activated Sound Signal
s - seconds
SEC - Section
SHL - Shoaling
si - silent
SIG - Signal
SND - Sound
SPM - Single Point Mooring Buoy
SS - Sound Signal
STA - Station
STRUCT - Structure
St M - Statute Mile
TEMP - Temporary Aid Change
TMK - Topmark
TRLB - Temporarily Replaced by Lighted Buoy
TRLT - Temporarily Replaced by Light
TRUB - Temporarily Replaced by Unlighted Buoy
USACE - Army Corps of Engineers
W - White
Y - Yellow

Additional Abbreviations Specific to this LNM Edition: None

SECTION I - SPECIAL NOTICES

This section contains information of special concern to the Mariner.

649 **ALASKA**

The Coast Guard's VHF-FM Remote Fixed Facility (RFF) reception capabilities on the following sites are degraded and calls on VHF-FM Channel 16 may not be received by the responsible Coast Guard Sector Communication Center within the stated coverage area:
DECEPTION HILLS – The Gulf of Alaska near Cape Fairweather, Lituya Bay, and the Fairweather grounds.
MOUNT MCARTHUR – Cape Decision, Southern Sumner Strait, Cape Omney, and the vicinity of Coronation Island.
YAKUTAT – Gulf of Alaska near Yakutat.
CAPE GULL – Northwestern Afognak Island, Cape Douglas, and Shelikof Strait to Cape Uyak.
MIDDLE CAPE – Southwestern Kodiak and the Southwestern portion of Shelikof Strait from Cape Igvak to Cape Kuliak.
BEDE MOUNTAIN – The area around Homer, the Barren Islands, Chugach Islands, Kachemak Bay, Southern Cook Inlet, and Kennedy Entrance.
RASPBERRY ISLAND – Western Kodiak Island, Shelikof Strait, and Kupreanof Strait.
If unable to reach the Coast Guard on VHF-FM Channel 16, mariners that are equipped with capable radios can contact the Coast Guard through Communications Detachment Kodiak via high frequency (HF) 4125Khz. Mariners can also contact the Coast Guard via cellular or satellite phone by calling JRCC Juneau at 907-463-2000, Sector Juneau Command Center at (907) 463-2980 or Sector Anchorage Command Center at (907) 428-4100. Mariners are reminded that Western and Northern Alaskan have no VHF-FM coverage. Contact in areas without VHF/FM coverage to the Coast Guard is via Communications Detachment Kodiak on HF or JRCC Juneau by phone. Mariners are requested to relay any unanswered calls for assistance to the Coast Guard.

LNM: 47/20

650 **ALASKA**

The Governor of Alaska has directed that all people arriving in Alaska, whether resident, worker or visitor, are required to self-quarantine for 14 days and monitor for illness and/or provide proof of negative COVID-19 test(s). Intrastate travel has also been restricted to some locations. Additional information and updated Alaska State Health Mandates are available at www.alaska.covidsecureapp.com. Contact your local Harbormaster with community-specific questions prior to mooring.

LNM: 47/20

651 **ALASKA – SOUTHCENTRAL – COOK INLET**

The U.S. Coast Guard Captain of the Port (COTP) for Western Alaska has implemented the Operating Guidelines for Ice Conditions for the Upper Cook Inlet, effective November 20, 2020. All vessels arriving in Cook Inlet destined for a port with an active ice condition must file a voyage plan with the COTP by email: Sector.Anchorage@uscg.mil or by fax: (907) 428-4114, no less than 24 hours prior to arrival at or abeam the Kachemak Bay pilot station. The Navigation Advisory containing additional details is included as an enclosure to this LNM. Questions/concerns should be directed to the Sector Anchorage Waterways Management Division during regular business hours at (907) 428-4189. After hours, contact the Sector Anchorage Command Center at (907) 428-4100 or on VHF/FM channel 16.

LNM: 47/20

652 **ALASKA – SOUTHEAST – STEPHENS PASSAGE – HOLKHAM BAY**

Holkham Bay B 1 (LLNR 23631) has been decommissioned for the 2020 season. It will be reestablished by May 1st, 2021. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 47/20

656 **ALASKA – SOUTHCENTRAL – VALDEZ**

The new Valdez South Boat Harbor has been completed. The Coast Guard has established four lights, one light at the end of each breakwater to mark the harbor entrance and two lights on piles marking either side of the entrance channel. Those lights have been established or reconfigured as follows:

25822.2 Valdez South Boat Harbor Entrance Channel LT 1 – On a pile in position 61°07′21.023″N, 146°19′57.351″W
25822.3 Valdez South Boat Harbor Entrance Channel LT 2 – On a pile in position 61°07′20.974″N, 146°19′54.202″W
25822.4 Valdez South Boat Harbor Entrance Channel LT 3 – On end of breakwater in position 61°07′23.699″N, 146°19′56.213″W
25822.6 Valdez South Boat Harbor Entrance Channel LT 4 – On end of breakwater in position 61°07′20.632″N, 146°19′51.688″W

Chart and Light List corrections will be issued once the positions have been verified. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 46/20

657 **ALASKA – GULF OF ALASKA**

Alaska Aerospace Corporation is planning to launch a rocket from the Pacific Spaceport Complex Alaska (PSCA) launch pad LP-3B at Narrow Cape, Kodiak, Alaska between 1900-2230 UTC or 1000-1330 Alaska Standard Time on December 7th through 18th, 2020. Additional information including descriptions and chartlets indicating the hazardous areas are included as an enclosure to this LNM. Questions/concerns should be directed to Robert Green at (907) 743-3539 or by email to Robert.greene@akaerospace.com or Shannon Edwards at (509) 713-4368 or by email to Shannon.edwards@akaerospace.com.

LNM: 45/20

661 **ALASKA**

The Coast Guard will be using AIS Broadcasts to relay some marine information, primarily ATON Discrepancies, VHF/FM Hi-site outages, active subsistence whaling, Gunnery and Pyrotechnics Exercises, and similar Notices directly relating to safe navigation. The Coast Guard's access to AIS transmitters is limited so not all areas might be covered at any given time and the locations of the active transmitters will be determined by the priority of the messages being broadcast from them. All information broadcast by AIS will also be published by the more conventional methods of BNM and LNM. Feedback is desired and should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 43/20

663 **ALASKA – SOUTHCENTRAL – KODIAK**

Hamilton Construction Company will be conducting repair and repainting of the Kodiak Harbor Bridge which spans between Near Island and Kodiak Island in approximate position 57°47.3022′N, 152°23.8332′W, from October 23rd, 2020 through July 15th, 2021. The work will consist of bridge re-painting which requires a temporary containment structure that will hang down from the bridge over the waterway, no more than 15 feet. All equipment will be staged on top of the bridge deck. Questions/concerns should be directed to Austin Dukowitz at (907) 723-0383 or by email to adukowitz@hamil.com.

LNM: 42/20

692 **ALASKA – SOUTHEAST – DIXON ENTRANCE TO KETCHIKAN**

Ketchikan Public Utilities has installed a submarine fiber optic cable from Prince Rupert, Canada to Ketchikan, Alaska. A chartlet indicating it's approximate route and positions indicating the "As Laid" route of the cable are included as an enclosure to this LNM. The positions have been submitted to NOAA and a chart correction will be issued in the near future. Mariners are requested to not anchor near or conduct operations that may impact the cable. Questions/concerns should be directed to Edward Cushing, KPU's Division Manager, at (907) 228-6001 or by email to edc@city.ketchikan.ak.us.

LNM: 38/20

694 **ALASKA – SOUTHCENTAL – COOK INLET NAVIGATION CHANNEL**

The U.S. Army Corps of Engineers (USACE), Alaska District conducted a project condition survey for Cook Inlet Navigation Channel on August 18th, 2020 in which the following controlling depths in feet (FT) mean lower low water (MLLW) were recorded:

Left Outside Quarter 61°12'02.03"N, 150°05'42.26"W, -36.4 FT MLLW
Left Inside Quarter 61°12'00.14"N, 150°05'42.25"W, -39.7 FT MLLW
Right Inside Quarter 61°11'51.14"N, 150°05'56.92W, -40.9 FT MLLW

Right Outside Quarter 61°11'44.04"N, 150°06'15.51"W, -38.1 FT MLLW
A chartlet of the controlling depths as well as survey data are available on the U.S. Army Corps of Engineers (USACE) Navigation Portal website at: http://navigation.usace.army.mil/Survey/Hydro. The Cook Inlet Navigation Channel was dredged during the summer of 2014 to a project depth of -38 FT MLLW. At this time, no maintenance dredging is scheduled for this channel during 2020. The next project condition survey for this channel is tentatively scheduled for May 2021. BE ADVISED: The information depicted on maps, charts, drawings, navigation notices, etc., for the subject project, represents the results of a survey conducted on the date(s) indicated and can only be considered to represent the general condition existing at that time. The survey data was collected under a USACE contract for the purpose of characterizing the condition of the navigation channel, and the area for placement of dredged material for future channel maintenance operations. As such, the information is only valid for its intended use. This information can be used to supplement existing published navigation charts. The user is responsible for the results of any application of the survey data for other than its intended purpose and should consider the contents, timeframe of data collection, and accuracy specifications for survey data collection/processing. Additionally, bathymetry in Cook Inlet is subject to drastic and continuing change. Prudent mariners should not rely solely upon this information. Questions/concerns should be directed to Donna West with the USACE Anchorage office at (907) 753-2761 or by email to Donna.L.West@usace.army.mil.

LNM: 37/20

740 **ALASKA – SOUTHCENTRAL – COOK INLET – PORT OF ANCHORAGE**

Pacific Pile and Marine will be conducting construction on the Petroleum and Cement Terminal in the Port of Anchorage, Sunday-Monday, 0630-1900, from May 24th through November 30th, 2020. This work will be conducted by the tug MARTIN RAY and the barge 450. Vessels engaged in work on this project will be working on VHF/FM channel 20A and will be monitoring VHF/FM channels 16 and 13. Anchors are deployed in the following positions:
1. 61°13.986′N, 149°54.078′W - anchor buoy attached
2. 61°13.962′N, 149°53.772′W
3. 61°14.166′N, 149°53.760′W - anchor buoy attached
4. 61°14.100′N, 149°53.514′W
Mariners are requested to transit the area with caution and minimize their vessels wake when passing the project. Questions/concerns should be directed to Anthony Baurle at (206) 475-0685 or by email to anthonyb@pacificpile.com.

LNM: 22/20

751 **ALASKA – SOUTHCENTRAL – PRINCE WILLIAM SOUND – BARRY ARM**

The State of Alaska has issued a press release indicating that a potential landslide caused tsunami may occur in Barry Arm in Northwestern Prince William Sound. It is uncertain if and when this might occur and until additional testing and analysis is conducted a more accurate timetable cannot be developed. The geologic makeup of the area is similar to Alaskan locations where two previous landslide caused tsunamis occurred, in Lituya Bay (1958) and Icy Bay (2015), both causing extremely large but localized tsunamis. Mariners should maintain vigilance when in the vicinity of Barry Arm or nearby waters and be prepared to depart the area if any unusual geologic activity is observed. Additional information is available at the following website:
https://www.adfg.alaska.gov/sf/EONR/index.cfm?ADFG=region.NR&Year=2020&NRID=2935

LNM: 20/20

782 **ALASKA – SOUTHEAST – DIXON ENTRANCE**

Tree Point LT (LLNR 21840) has been relocated to a new steel structure approximately 100 yards Southeast of the existing lighthouse structure. The approximate position for the new light is 54°48′10″N, 130°56′04″W. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 11/20

784 **ALASKA**

The outbreak of respiratory illness caused by the COVID-19 virus may affect mariners and maritime commerce transiting to or near Alaska. Additional interim guidance for ships on managing suspected coronavirus disease concerns is available at https://www.cdc.gov/quarantine/maritime/recommendations-for-ships.html. Two enclosures to this LNM include additional information as well as a number of links to websites where additional information regarding this illness can be obtained. Mariners with questions/concerns while transiting to or near Alaska should contact the Coast Guard Sector Anchorage Command Center at (907) 428-4100 or the Coast Guard Sector Juneau Command Center at (907) 463-2980.

LNM: 11/20

807 **ALASKA – SOUTHWESTERN – BRISTOL BAY – PORT MOLLER**

The Coast Guard has decommissioned the Port Moller Harbor Spit DBN (LLNR 27850). Chart and Light List corrections will be issued in a subsequent LNM. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 04/20

809 **ALASKA AND NATIONWIDE**

On November 15, 2019, NOAA formerly announced in the Federal Register (Docket #2019-24807) that they would begin a 5-year process of discontinuing their traditional paper, or raster, charts by 2025. NOAA intends to gradually 'sunset' raster chart products and is introducing an option to create custom ENC data based charts that can be printed as a paper copy locally or commercially, via one of their certified third party printers. More detailed information regarding this transition is available from https://nauticalcharts.noaa.gov/publications/docs/raster-sunset.pdf . Comments/questions on the Federal Register Notice and the NOAA Custom Chart application should be submitted at

https://www.nauticalcharts.noaa.gov/customer-service/assist/ . Other concerns may be directed to your local NOAA Navigation Manager, https://nauticalcharts.noaa.gov/customer-service/regional-managers/index.html . In order to identify and overcome the regulatory challenges associated with this transition including but not limited to updating commercial vessel carriage requirements and maritime safety information processes, NOAA will continue to work directly with its Agency charting partners. A prototype version of the NOAA Custom Chart Tool is available at https://devgis.charttools.noaa.gov/pod/

LNM: 03/20

832 **ALASKA – SOUTHWESTERN – ALEUTIAN PENINSULA AND ISLANDS**

The Captain of the Port (COTP), Western Alaska, through consultation with marine pilot associations, vessel operators, and port authorities, developed operating procedures for vessels in port or at anchor in the Aleutian or Pribilof Islands, with an emphasis on Dutch Harbor, Alaska. Those procedures were developed to address the frequent and severe storms that impact both the Aleutian and Pribilof Islands and have been published as a Navigation Advisory and is available online at https://ba5d8e27-22a6-4c7e-bfd1-86a9416f28e1.filesusr.com/ugd/cd25fe_5daa0bb144324e6b9abe6e5c5305492c.pdf. Questions/concerns should be directed to LT Mateusz Lemanski at (907) 463-4189 or by email to Mateusz.j.lemanski@uscg.mil or the Coast Guard Sector Anchorage Command Center at (907) 428-4100.

LNM: 48/19

836 **ALASKA – SOUTHEAST – TONGASS NARROWS**

OBSTRUCTION TO NAVIGATION: A 24' Bayliner has sunk in 22 feet of water in approximate position 55°20.79'N, 131°40.36W, approximately 50 yards offshore from Bar Harbor. The vessel is marked by an orange float. Mariners are requested to use caution when transiting the area. Questions/concerns should be directed to the Coast Guard Sector Juneau Command Center at (907) 463-2980 or on VHF/FM channel 16.

LNM: 48/19

916 **ALASKA – GULF OF ALASKA**

NOAA DLB 46001 (LLNR 984) has been replaced with a 3-meter buoy and relocated to 56°13'56.000"N, 147°56'57.000"W. Chart and Light List corrections were issued in LNM 32/19 but gave an incorrect position for NOAA DLB 46001 (LLNR 984). The chart and Light List corrections have been reissued in this LNM. The previous 6-meter buoy was not recovered, has been temporarily renamed 46X01, and remains in position 56°18'16.000"N, 147°55'13.000"W. Mariners are requested to transit the area with caution until the previous buoy is recovered. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 35/19

918 **ALASKA – GULF OF ALASKA**

NOAA DLB 46085 (LLNR 984.15) has been replaced with a 3-meter buoy and relocated to 55°53'18.000"N, 142°50'48.000"W. Chart and Light List corrections have been issued. The previous 6-meter buoy was not recovered and remains in position 55°52'05.000"N, 142°33'31.000"W. Mariners are requested to transit the area with caution until the previous buoy is recovered. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 33/19

930 **ALASKA – SOUTHCENTRAL – SHELIKOF STRAIT – KINAK BAY**

An uncharted rock has been reported in Kinak Bay in position 58°03.8'N, 154°25.3'W at a depth of approximately 3 fathoms. Mariners are advised to transit the area with extreme caution. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 28/19

937 **ALASKA – SOUTHCENTRAL – PRINCE WILLIAM SOUND – UNAKWIK INLET**

An uncharted and dangerous rock has been reported in Unakwik Inlet in approximate position 61°08.045'N, 147°32.665'W. Mariners should transit the area with caution. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 25/19

939 **ALASKA – SOUTHEAST – WRANGELL NARROWS**

OSTRUCTION TO NAVIGATION: The P/C HEATHER ANN has sunk in Wrangell Narrows on the East side of the channel approximately 330 yards South of Wrangell Narrows Channel LT 16 (LLNR 22955). The most recent reported position was 56°37.25'N, 132°57.64'W. The P/C HEATHER ANN is a 52' wood vessel and may be awash and barely visible at higher tides, exposed at lower tides, or relocated by the extreme current in the area. The vessel was marked with a single orange float. Mariners are requested to transit the area with extreme caution and report any changes in position to the Coast Guard Sector Juneau on VHF/FM channel 16 or by phone to (907) 463-2980.

LNM: 25/19

946 **ALASKA – SOUTHEAST – FRESHWATER BAY**

An uncharted rock shoal has been reported in Cedar Cove centered in approximate position 57°52.405'N, 135°03.694'W with an approximate 75 foot radius. The rocks were approximately 1 foot below a 0' tide. The location of the reported shoal has a charted depth of 12 fathoms. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 24/19

960 **ALASKA – SOUTHEAST – STARRIGAVAN BAY**

Blasting will be conducted for construction of the Katlian Bay road from Starrigavan Bay to Katlian Bay beginning May 15, 2019 through September 1, 2021. Blasting will begin in approximate position 57° 08′ 09″ N, 135°22′12″W and end in approximate position 57°09′43″ N, 135°17′18″ W, with a danger radius of 1,000 feet. Blasting may take place during daylight hours 7 days per week. Blasting will be preceded by a series of long audible signals 5 minutes prior to blasting, a series of short audible signals 1 minute prior to blasting, and one long audible signal when the blast is complete. Mariners are advised to avoid transiting within the danger radius when blasting is taking place. Blasting near the coastline will be announced on VHF/FM channel 16 one hour prior to blasting, and blasting personnel will maintain lookouts for watercraft within the danger radius before the blast is initiated. Questions/concerns should be directed to Ken Kirschenman at (916) 218-2729 or by email to superiorblasting@yahoo.com.

LNM: 18/19

964 **ALASKA – SOUTHEAST – FARRAGUT BAY – FRANCIS ANCHORAGE**

Uncharted shoaling was observed in Francis Anchorage on February 14th, 2019 in position 57°08.95′N, 133°10.03′W. The charted depth for this location is 15 fathoms and the observed depths rapidly shallowed from 120 feet and ranged from 8 to 10 feet. The navigational charts for Francis Anchorage are based on pre-1900 Partial Bottom Coverage Surveys and in 1976 ‘shoaling to bare’ was reported further into the anchorage. Mariners should transit this area with extreme caution and be aware of areas that may not be adequately charted. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 08/19

970 **ALASKA – SOUTHCENTRAL – PRINCE WILLIAM SOUND – ESTHER ISLAND**

OBSTRUCTION TO NAVIGATION: The 32′ F/V SONG II has been reported sunk in position 60°47.76′N, 148°03.31′W. Mariners are requested to transit the area with caution and report any sightings to the Coast Guard Sector Anchorage Command Center at (907) 428-4100 or on VHF/FM channel 16.

LNM: 34/18

971 **ALASKA - CENTRAL – BETHEL**

OBSTRUCTION: The barge SHANKS ARK has been reported sunken and abandoned in Steamboat Slough on the Kuskokwim River, approximate position 60°47'15"N, 161°41'52"W. A portion of the vessel remains visible above the level of high-tide, but the majority of the vessel remains below the waterline. The vessel is marked by an all-round white light and one ball dayshape when Steamboat Slough is ice free but the markers are removed during freeze up as no hazards exists. The Coast Guard has actively monitored the proper marking of the vessel by the vessel's owner and operator since September 10, 2016. Coast Guard pollution investigators confirmed the vessel does not pose a substantial pollution threat to the environment. Mariners are requested to transit the area with caution and report any discrepancies with the vessel's marking to the Coast Guard. Questions/concerns should be directed to LT David Parker, Sector Anchorage Waterways Management, at (907) 428-4189.

LNM: 11/17

972 **ALASKA – ALEUTIAN ISLANDS – AKUTAN ISLAND – AKUTAN HARBOR**

UNKNOWN MARINE ANOMALY: An unknown marine anomaly was discovered during underwater survey operations in Akutan Harbor in position 54°07.70889′N, 165°46.38298W on the sea floor at a depth of 138 feet. This anomaly has not been positively identified. Mariners are requested to transit the area with caution. Questions/concerns should be directed to LT David Parker with the Coast Guard Sector Anchorage Waterways Management Branch at (907) 428-4189 or by email to david.n.parker@uscg.mil.

LNM: 03/18

974 **ALASKA – SOUTHWESTERN – ALEUTIAN PENINSULA – BECHEVIN BAY**

Shoaling has been reported at the bar along the Northern entrance to Bechevin Bay by a vessel with a draft of 10 feet that reported briefly grounding in seas running 6-8 feet. Mariners should take into account their vessel's draft, charted depth of water, tides and sea state when determining an appropriate under-keel clearance for a safe transit of this waterway. Mariners are requested to report any future groundings or significant variations from charted depth to the Coast Guard Sector Anchorage Command Center at (907) 428-4100 or on VHF/FM channel 16.

LNM: 17/18

976 **ALASKA – WESTERN – YUKON RIVER**

The Yukon River South Entrance LT (LLNR 27860) has been rebuilt but the position has not been verified. Mariners are requested to transit the area with caution. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 37/17

977 **ALASKA – SOUTHEAST – ICY STRAIT – NORTH INIAN PASSAGE**

The currents in North Inian Passage and Glacier Bay have been observed at up to 3 knots above the NOAA published current predictions. Mariners should exercise caution when transiting the area. Questions/concerns should be directed to LT Bart Buesseler at (907) 271-3327 or by email to bart.o.buesseler@noaa.gov.

LNM: 36/17

978 **ALASKA – GULF OF ALASKA**

NOAA DLB 46001 (LLNR 984) has been replaced with a 3-meter buoy and relocated to 56°13′56″N, 147°56′57″W. Chart and Light List corrections have been issued. The previous 6-meter buoy was not recovered due to weather and remains in position 56°19′33.962″N, 147°57′01.382″W.

Mariners are requested to transit the area with caution until the previous buoy is recovered. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 35/17

980 **ALASKA – U.S. COAST GUARD MEDIUM FREQUENCY (MF) DISTRESS WATCHKEEPING**

Mariners are advised that calls to the U.S. Coast Guard on the international radiotelephone distress frequency 2182 kHz or the Digital Selective Calling (DSC) frequency 2187.5 kHz may not be heard or may be severely degraded. Instead of using 2182 kHz for distress calls, mariners should use high frequency (HF) radiotelephone or DSC in the 4, 6, 8, and 12 MHz distress or calling bands. Additional information concerning U.S. Coast Guard HF watchkeeping is posted on the U.S. Coast Guard's Navigation Center website (https://www.navcen.uscg.gov/?pageName=cgcommsCall).

LNM: 08/17

983 **ALASKA – SOUTHEAST**

The U.S. Coast Guard has VHF Digital Selective Calling (DSC) capability with limited coverage in Southeast Alaska. The initial coverage areas are Ketchikan, Juneau and Yakutat. Mariners are reminded to ensure that they have properly connected their GPS units to their DSC equipped marine VHF radios and registered for their Maritime Mobile Service Identity (MMSI) to utilize the DSC distress function. Additional information is available through the Alaska Outdoors Forum at http://forums.outdoorsdirectory.com/showthread.php/142083-Digital-Selective-Calling-(DSC) or by contacting Mike Folkerts with the Coast Guard District 17 Boating Safety Office at (907) 463-2297 or by email to Michael.r.folkerts@uscg.mil.

LNM: 15/15

984 **ALASKA – SOUTHCENTRAL**

The U.S. Coast Guard has VHF Digital Selective Calling (DSC) capability with limited coverage in Southcentral Alaska. The initial coverage areas are Upper Cook Inlet, Kodiak and Valdez Arm. Mariners are reminded to ensure that they have properly connected their GPS units to their DSC equipped marine VHF radios and registered for their Maritime Mobile Service Identity (MMSI) to utilize the DSC distress function. Additional information is available through the Alaska Outdoors Forum at http://forums.outdoorsdirectory.com/showthread.php/142083-Digital-Selective-Calling-(DSC) or by contacting Mike Folkerts with the Coast Guard District 17 Boating Safety Office at (907) 463-2297 or by email to Michael.r.folkerts@uscg.mil.

LNM: 15/15

985 **ALASKA – SOUTHEAST – WESTERN BEHM CANAL**

The U.S. Navy has established a temporary data collection buoy in Western Behm canal approximately 5,000 yards North of Betton Island within 400 yards of position 55°35.684'N, 131°46.503'W. The buoy is described as a 3 foot diameter yellow sphere, with the marking "Wave Buoy", with an attached telemetry whip antenna and a night time warning light that flashes 5 times at 1 second intervals with a period of 20 seconds between each series, Fl(5) Y 25s. Questions/concerns should be directed to Mr. Bill Harney at (907) 247-6289.

LNM: 05/15

986 **ALASKA**

The Alaska Marine Safety Education Association (AMSEA) will be offering AMSEA Marine Safety Instructor Training and AMSEA Drill Conductor Courses in various locations within Alaska. The specific locations, dates, and course information can be found in an enclosure to this LNM. For more information contact AMSEA at (907) 747-3287 or view their website at www.amsea.org.

LNM: 12/14

988 **ALASKA – ALEUTIAN ISLANDS – ADAK – SWEEPER COVE**

The East side of the Pier 5 Dock located in Sweeper Cove is closed to moorage without prior approval from the Adak Harbormaster due to loose and missing pilings. Questions/concerns should be directed to Jim Fleming at (907) 277-7527 or the Port of Adak office at (907) 592-0185. The Adak harbormaster can also be contacted on VHF/FM channel 16.

LNM: 20/13

990 **ALASKA – SUBSURFACE AND SURFACE BUOYS**

Locations of all subsurface and surface oceanographic moorings that have been reported to the U.S. Coast Guard District 17 Waterways Branch are included in an enclosure to the Local Notice to Mariners. The name, type, location, depth, water depth, and a Point of Contact for all data buoys, surface and subsurface, shall be reported as quickly as is practical if they are placed within the navigable waters (within 200 nm) of the United States. Data buoys placed in the Arctic region but outside of 200 nm of the United States may be reported and will be included in this compilation (for informational purposes only). This notification process is for inclusion in the Local Notice to Mariners to provide navigational information to mariners and does not supersede any permission or permitting requirements. Any notifications, corrections, additions, deletions, or comments for the Alaska region (Coast Guard District 17) or the Arctic region should submitted via e-mail to D17-PF-D17-LNM@uscg.mil or to Todd Buck, USCG D17(dpw), at (907) 463-2269 or by email to todd.r.buck@uscg.mil. This compilation is as current as the Local Notice to Mariners (LNM) as included in an enclosure. The referenced LNM may have additional information and indicates the last time an entry was updated.

LNM: 38/11

SECTION II - DISCREPANCIES

This section lists all reported and corrected discrepancies related to Aids to Navigation in this edition. A discrepancy is a change in the status of an aid to navigation that differs from what is published or charted.

DISCREPANCIES (FEDERAL AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
1045	Star Rock Bell Buoy SR	OFF STA	17303	J097-20	37/20	
1150	Seal Rocks Light	LT EXT/DAYMK MISSING	16682	A112-20	41/20	
1260	Cape Greig Light	DAYMK DMGD	16338	A067-20	24/20	
22290	**Vallenar Point Buoy 17**	**MISSING**	**17428**	**J118-20**	**47/20**	
23305.1	Keku Strait Entrance Light	STRUCT DEST	17368	J069-19	38/19	
23305.7	Keku Strait Daybeacon 10	MISSING	17368	J148-13	32/13	
23305.9	Keku Strait Daybeacon 13	STRUCT DEST	17368	J103-15	23/15	
23306.7	Keku Strait Daybeacon 25	STRUCT DEST	17368	J071-20	28/20	
23307	Keku Strait Daybeacon 30	STRUCT DEST	17368	J075-20	29/20	
23307.05	Keku Strait Daybeacon 31	STRUCT DEST	17372	J072-20	28/20	
23355	Portage Pass Daybeacon 11	STRUCT DEST	17368	J077-18	26/18	
24260	Elfin Cove Daybeacon 5	STRUCT DEST	17302	J017-18	36/19	
24790	Dry Pass Daybeacon 3	STRUCT DEST	17387	J072-18	23/18	
24948	Indian River Flats Lighted Buoy 2	LT EXT	17327	J032-20	09/20	
25335	Klag Bay Entrance Daybeacon 1	STRUCT DEST	17322	J047-19	30/19	
25355	Dippy Island Rock Daybeacon 3	DAYMK DMGD	17321	J216-15	51/15	
25615.1	Orca Inlet South Channel Buoy 2	MISSING	16709	A108-20	40/20	
25615.85	Orca Inlet South Channel Buoy 16	MISSING	16709	A100-20	37/20	
25665	Glacier Island Light	LT EXT	16713	A121-20	43/20	
25982	NOAA Data Lighted Buoy 46076	OFF STA	16700	A060-20	23/20	
26330	Nikiski Sector Light	LT EXT	16665	A047-20	19/20	
26435	Point Woronzof Range Front Light	LT EXT	16665	A033-20	14/20	
26485	**Low Island Reef Buoy 7**	**SINKING**	**16594**	**A130-20**	**47/20**	
26550	Kodiak North Entrance Channel Lighted Whistle Buoy 3	LT EXT	16595	A114-20	42/20	
26690	**St. Paul Harbor Entrance Channel Lighted Whistle Buoy 3**	**LT EXT**	**16596**	**A128-20**	**47/20**	
27105	Humboldt Harbor Breakwater Light 2	STRUCT DEST	16553	A026-19	08/19	
27300	Chunak Point Daybeacon 2	STRUCT DEST	16535	A093-20	33/20	
27345	St. Catherine Cove Daybeacon 4	STRUCT DEST	16535	A094-20	33/20	
27505	Bailey Ledge Light	LT EXT/STRUCT DMGD	16529	A122-20	43/20	
27837	Kuskokwim Bay Buoy 4	ADRIFT	16300	A021-20	08/20	

DISCREPANCIES (FEDERAL AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
22955	Wrangell Narrows Channel Light 16	WATCHING PROPERLY	17375	J120-20	46/20	47/20
23390	Calder Rocks Lighted Whistle Buoy 6	WATCHING PROPERLY	17378	J121-20	46/20	47/20
24120	Hanus Reef Light	WATCHING PROPERLY	17316	J098-20	33/20	47/20
24930	Simpson Rock Lighted Bell Buoy 5	WATCHING PROPERLY	17327	J122-20	39/20	47/20

DISCREPANCIES (PRIVATE AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
22201	Bar Harbor Breakwater East Light	STRUCT DEST	17430	J202-15	47/15	
22202	Bar Harbor Breakwater Middle Light	STRUCT DEST	17430	J203-15	47/15	

22203	Bar Harbor Breakwater West Light	STRUCT DEST	17430	J204-15	47/15
23804.5	Auke Bay Speed Limit Lighted Buoy	LT EXT	17315	J051-20	16/20
23908	Port Chilkoot Mooring Dolphin Lights (2)	LT EXT	17317	J175-14	38/14
25822	Port Valdez Servs Dock Lights (2)	OFF STA	16707	A067-19	24/19
25893	Whittier Passenger Dock Lights (2)	LT EXT	16706	A031-10	20/10
26361	Baker Oil Platform Light	REDUCED INT	16662		24/17

DISCREPANCIES (PRIVATE AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End

None

PLATFORM DISCREPANCIES

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

PLATFORM DISCREPANCIES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

SECTION III - TEMPORARY CHANGES and TEMPORARY CHANGES CORRECTED

This section contains temporary changes and corrections to Aids to Navigation for this edition. When charted aids are temporarily relocated for dredging, testing, evaluation, or marking an obstruction, a temporary correction shall be listed in Section IV giving the new position.

TEMPORARY CHANGES

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
23355	Portage Pass Daybeacon 11	TRUB	17368	J093-18	30/18	
23790	Horse Shoal Light 1	DISCONTINUED	17315	J102-19	51/19	
24957	Mitchell Rock Daybeacon	DISCONTINUED	17327	J022-17	04/17	
25025.5	Japonski Island Daybeacon 2	DISCONTINUED	17327	J196-16	49/16	
25647	NOAA Data Lighted Buoy 46081	DISCONTINUED	16705	A126-19	46/19	
25805	Port Valdez Coast Guard Mooring Buoy	DISCONTINUED	16707	A095-18	33/18	

TEMPORARY CHANGES CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End

None

PLATFORM TEMPORARY CHANGES

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

PLATFORM TEMPORARY CHANGES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

SECTION IV - CHART CORRECTIONS

None

OIL RIG MOVEMENT

Drill Rigs/Vessels Removed

Latitude	Longitude	Block	Rigs/Vessel	Chart	Type	Status
None						

Drill Rigs/Vessels Established

Latitude	Longitude	Block	Rigs/Vessel	Chart	Type	Status
60-44-31.000N	151-18-36.000W	-	RANDOLPH YOST		JACKUP	STACKED
60-41-18.600N	151-23-56.040W	-	Spartan Rig 151		JACKUP	UNREPORTED

SECTION V - ADVANCE NOTICES

This section contains advance notice of approved projects, changes to aids to navigation, or upcoming temporary changes such as dredging, etc. Mariners are advised to use caution while transiting these areas.

SUMMARY OF ADVANCED APPROVED PROJECTS

Approved Project(s)	Project Date	Ref. LNM
None		

Advance Notice(s)

690 **ALASKA – SOUTHEAST – SITKA**

The Coast Guard intends to rename and upgrade Japonski Island Buoy 2 (LLNR 25025.51) to Japonski Island Lighted Buoy 2 (LLNR 25025.51) with a red flash every 4 seconds (R 4s). Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 38/20

ALASKA – SOUTHEAST – TONGASS NARROWS – WARD COVE

The Coast Guard will be establishing Bolle Ledge LB 2 (LLNR 22253) in Ward Cove in approximate position 55°24’13.860"N, 131°43’33.540"W in 33 feet of water. Bolle Ledge LB 2 will be a red buoy with a red quick flashing light. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 38/20

SECTION VI - PROPOSED CHANGES

Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids to navigation were established have changed. When changes occur, the feasibility of improving, relocating, replacing, or discontinuing aids are considered. This section contains notice(s) of non-approved, proposed projects open for comment. SPECIAL NOTE: Mariners are requested to respond in writing to the District office unless otherwise noted (see banner page for address).

PROPOSED WATERWAY PROJECTS OPEN FOR PUBLIC COMMENT

Proposed Project(s)	Closing	Docket No.	Ref. LNM
None			

Proposed Change Notice(s)

ALASKA – WESTERN – NORTON SOUND – GOLOVIN BAY

The Coast Guard is proposing adding navigational aids within Golovin Bay. These aids may include Lights, Daybeacons, or buoys. Mariners are requested to provide recommendations on locations that would facilitate safe navigation within Golovin Bay. Questions/concerns should be directed to Todd Buck with the Coast Guard District 17 Waterways Management Office at (907) 463-2269 or by email to todd.r.buck@uscg.mil.

LNM: 26/18

SECTION VII - GENERAL

This section contains information of general concern to the Mariners. Mariners are advised to use caution while transiting these areas.

653 **ALASKA**

A public notice has been issued for bridges over five waterways near Girdwood along the Seward Highway. The public notice can be viewed on the U.S. Coast Guard Navigation Center website through the following link:
https://www.navcen.uscg.gov/pdf/bridges/publicNotices//D17PN03-20_SewardHighwayMilepost75ProjectBridges_AlaskaRivers.pdf
Questions or concerns should be directed to Clint Scott with the Coast Guard District 17 Bridge Program at Clinton.L.Scott@uscg.mil.

LNM: 47/20

767 **ALASKA – SOUTHCENTRAL – COOK INLET – PORT OF ANCHORAGE**

The U.S. Army Corp of Engineers has contracted with Manson Construction Co. to conduct dredging operations on the Cook Inlet Navigation Channel

and the Port of Anchorage. Dredging will start the week of April 13th, 2020 and will continue through the end of November, 2020. Dredging will be conducted by the Dredge WESTPORT with the assistance of the tug GLADYS M. Both vessels will be monitoring VHF/FM channels 08, 13, 16, and 66. A temporary mooring buoy will be established in position 61°13.216'N, 149°56.175'W. Dredged material will be disposed in approximate position 61°14.300'N, 149°56.500'W. Questions/concerns should be directed to Bob Richardson at (206) 953-0211 or Jeremy Cook at (904) 557-4356.

LNM: 15/20

SECTION VIII - LIGHT LIST CORRECTIONS

An Asterisk *, indicates the column in which a correction has been made to new information

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
23809.5	MXAK Auke Mountain ASTA	58-23-30.919N 134-42-52.560W					AIS transceiver. MMSI: 993032047 Private Aid.	47/20
*	*	*	*	*	*	*	*	
23863	MXAK North Berners ASTA	58-51-09.896N 135-04-09.775W					AIS transceiver. MMSI: 993032048 Private Aid.	47/20
*	*	*	*	*	*	*	*	
24145	MXAK Hoonah ASTA	58-07-41.851N 135-25-59.729W					AIS transceiver. MMSI: 993032046 Private Aid.	47/20
*	*	*	*	*	*	*	*	
25827	MXAK Naked Island ASTA	60-38-44.998N 147-20-34.018W					AIS transceiver. MMSI: 993032050 Private Aid.	47/20
*	*	*	*	*	*	*	*	
25877	MXAK Point Pigot ASTA	60-49-04.188N 148-22-44.601W					AIS transceiver. MMSI: 993032052 Private Aid.	47/20
*	*	*	*	*	*	*	*	
25981	MXAK Latouche Mountain ASTA	59-59-00.834N 147-54-32.637W					AIS transceiver. MMSI: 993032051 Private Aid.	47/20
*	*	*	*	*	*	*	*	
26143	MXAK Dangerous Cape ASTA	59-23-19.421N 151-50-10.799W					AIS transceiver. MMSI: 993032056 Private Aid.	47/20
*	*	*	*	*	*	*	*	
26744	MXAK Kodiak ASTA	57-47-20.630N 152-26-02.270W					AIS transceiver. MMSI: 993032016 Private Aid.	47/20
*	*	*	*	*	*	*	*	
26858	MXAK McCord ASTA						Remove from list.	47/20
							*	
26858	MXAK McCord ASTA	57-07-35.990N 153-08-15.450W					AIS transceiver. MMSI: 993032057 Private Aid.	47/20
*	*	*	*	*	*	*	*	
26953	MXAK Spiridon Mountain ASTA	57-43-14.588N 153-45-48.082W					AIS transceiver. MMSI: 993032049 Private Aid.	47/20
*	*	*	*	*	*	*	*	
26954	MXAK Karluk ASTA	57-34-20.626N 154-27-20.851W					AIS transceiver. MMSI: 993032038 Private Aid.	47/20
*	*	*	*	*	*	*	*	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
27075	MXAK Sand Point ASTA	55-18-58.356N 160-23-12.084W					AIS transceiver. MMSI: 993032045 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27404	MXAK False Pass ASTA	54-51-17.647N 163-24-52.711W					AIS transceiver. MMSI: 993032058 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27438	MXAK Akun ASTA	54-08-50.399N 165-36-20.581W					AIS transceiver. MMSI: 993032025 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27453	MXAK Dutch Harbor ASTA	53-55-09.156N 166-30-32.778W					AIS transceiver. MMSI: 993032004 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27553	MXAK Nelson Lagoon ASTA	56-00-17.860N 161-10-37.830W					AIS transceiver. MMSI: 993032037 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27820	MXAK ST George 2 ASTA	56-35-58.319N 169-32-29.879W					AIS transceiver. MMSI: 993032055 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27823	MXAK ST George 1 ASTA	56-34-19.225N 168-40-15.586W					AIS transceiver. MMSI: 993032054 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27834.5	MXAK ST Paul ASTA	57-07-24.600N 170-16-14.765W					AIS transceiver. MMSI: 993032053 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27857.9	MXAK Bethel ASTA	60-47-29.231N 161-44-55.162W					AIS transceiver. MMSI: 993032014 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27960	MXAK Nome ASTA	64-33-54.601N 165-26-01.136W					AIS transceiver. MMSI: 993032019 Private Aid.	47/20
*	*	*	*	*	*	*	*	
27993	MXAK Kotzebue ASTA	66-54-03.413N 162-35-22.063W					AIS transceiver. MMSI: 993032029 Private Aid.	47/20
*	*	*	*	*	*	*	*	
28000.5	MXAK Point Hope ASTA	68-20-57.869N 166-44-12.570W					AIS transceiver. MMSI: 993032031 Private Aid.	47/20
*	*	*	*	*	*	*	*	
28000.6	MXAK Point Lay ASTA	69-44-34.735N 163-00-35.622W					AIS transceiver. MMSI: 993032030 Private Aid.	47/20
*	*	*	*	*	*	*	*	
28000.7	MXAK Wainwright ASTA	70-38-10.540N 160-02-01.331W					AIS transceiver. MMSI: 993032028 Private Aid.	47/20
*	*	*	*	*	*	*	*	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
28000.8	MXAK Utqiagvik ASTA	71-18-53.528N 156-43-18.354W					AIS transceiver. MMSI: 993032007 Private Aid.	47/20
*	*	*	*	*	*	*	*	
28003	MXAK Prudhoe ASTA	70-13-19.283N 148-25-10.099W					AIS transceiver. MMSI: 993032006 Private Aid.	47/20
*	*	*	*	*	*	*	*	
28004	MXAK Kaktovik ASTA	70-07-39.234N 143-36-57.344W					AIS transceiver. MMSI: 993032027 Private Aid.	47/20
*	*	*	*	*	*	*	*	

PUBLICATION CORRECTIONS

658 **ALASKA**

NOAA is discontinuing the printed Tide Tables and Tidal Current Tables. Additional information is available in an enclosure included with this LNM. Questions/comments should be directed to NOAA's Center for operational Oceanographic Products and Services at (301) 713-2815 or by email to tide.predictions@noaa.gov.

LNM: 45/20

ENCLOSURES

ALASKA

1120 MSIB-06-20.pdf
Vessel Reporting Requirements for Illness or Death

LNM: 11/20

ALASKA

1120 MSIB-02-20.pdf
Novel Coronavirus – Update (Change 3)

LNM: 11/20

ALASKA

4220Subsurface Buoys.pdf
Compilation of Subsurface and Surface oceanography moorings properly reported to U.S. Coast Guard District 17.

LNM: 42/20

ALASKA

4720 AMSEA.pdf
AMSEA Maritime Training

LNM: 47/20

ALASKA – SOUTHEAST – DIXON ENTRANCE TO KETCHIKAN

3820 KPU Telecom Cable As Laid.pdf
As Laid location of submarine fiber optic cable from Prince Rupert, Canada to Ketchikan, Alaska.

LNM: 38/20

ALASKA

4520 NOAA Tide Tables.pdf
NOAA Tide and Current Table Notice

LNM: 45/20

ALASKA – GULF OF ALASKA

4520 ASTRA P128 Rocket Launch.pdf
ASTRA P-128 Rocket Launch

LNM: 45/20

ALASKA – SOUTHCENTRAL – COOK INLET

4720 Ice Advisory.pdf
USCG COTP Ice Guidelines

LNM: 47/20

ALASKA

2320 MSIB 17-20.pdf
Coast Guard Marine Safety Information Bulletin

LNM: 23/20

SERIS.DAVID.M.1154022062 Digitally signed by SERIS.DAVID.M.1154022062 Date: 2020.11.24 12:54:57 -09'00'

David M. Seris
Waterways Management Branch
Seventeenth Coast Guard District
OPERATIONAL EXCELLENCE THROUGH LEADERSHIP, TEAMWORK, AND INNOVATION.

Marine Safety Information Bulletin

Commandant
U.S. Coast Guard
Inspections and Compliance Directorate
2703 Martin Luther King Jr Ave SE, STOP 7501
Washington, DC 20593-7501

MSIB Number: 06-20
Date: March 13, 2020

E-Mail: OutbreakQuestions@uscg.mil

Vessel Reporting Requirements for Illness or Death

An outbreak of respiratory illness caused by novel coronavirus (COVID-19) is affecting mariners and maritime commerce. This MSIB serves as a reminder that the illness of persons on board a vessel must be reported to both the Coast Guard and the Centers for Disease Control and Prevention (CDC). Reporting delays create significant challenges to protect persons on board vessels and, more broadly, maintain an effective Marine Transportation System. Vessels or masters that do not immediately report illness or death among passengers or crew may face delays and disruption to passenger and cargo operations including a requirement to return to the previous port after sailing. Additionally, vessels and masters are subject to Coast Guard enforcement action, which include civil penalties, vessel detentions, and criminal liability.

Illness of a person onboard a vessel that may adversely affect the safety of a vessel or port is a hazardous condition per 33 CFR 160.216 and the owner, agent, master, operator, or person in charge ***must immediately*** notify the nearest Coast Guard Captain of the Port (COTP). It is critical to report persons who exhibit symptoms consistent with COVID-19 or other illness to the COTP.

42 CFR 71.1 defines an ill person onboard a vessels as one that has:

(A**) Fever (has a measured temperature of 100.4 °F [38 °C] or greater**; or feels warm to the touch; or gives a history of feeling feverish) **accompanied by one or more of the following**:

- skin rash,
- **difficulty breathing** or suspected or confirmed pneumonia,
- **persistent cough** or cough with bloody sputum,
- decreased consciousness or confusion of recent onset,
- new unexplained bruising or bleeding (without previous injury),
- persistent vomiting (other than sea sickness)
- headache with stiff neck;

(B) **Fever that has persisted for more than 48 hours;**

(C) Acute gastroenteritis, which means either:

- diarrhea, defined as three or more episodes of loose stools in a 24-hour period or what is above normal for the individual, or
- vomiting accompanied by one or more of the following: one or more episodes of loose stools in a 24-hour period, abdominal cramps, headache, muscle aches, or fever (temperature of 100.4 °F [38 °C] or greater);

Additionally, as required by 42 CFR 71.21, the master of a ship destined for a U.S. port shall report ***immediately*** to the quarantine station at or nearest the port at which the ship will arrive, the occurrence, on board, of any death or any ill person among passengers or crew (including those who have disembarked or have been removed) during the 15-day period preceding the date of expected arrival or during the period since departure from a U.S. port (whichever period of time is shorter). Guidance and forms to report deaths and illnesses to the CDC can be found at: https://go.usa.gov/xdjmj.

Richard Timme, RDML, U.S. Coast Guard, Assistant Commandant for Prevention Policy sends.

This release has been issued for public information and notification purposes only.

Marine Safety Information Bulletin

Commandant
U.S. Coast Guard
Inspections and Compliance Directorate
2703 Martin Luther King Jr Ave SE, STOP 7501
Washington, DC 20593-7501

MSIB Number: 02-20 (Change 3)
Date: March 16, 2020

E-Mail: OutbreakQuestions@uscg.mil

Novel Coronavirus – Update (Change 3)

An outbreak of respiratory illness caused by a novel coronavirus (COVID-19) may affect mariners and maritime commerce. The Centers for Disease Control and Prevention (CDC) has updated their Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019 (see https://go.usa.gov/xdfyG) and Cruise Ship Travel (see https://go.usa.gov/xdfVP).

Illness of a person onboard any vessel that may adversely affect the safety of a vessel or port facility is a hazardous condition per 33 CFR 160.216 and must be reported ***immediately*** to the U.S. Coast Guard Captain of the Port (COTP). Cases of persons who exhibit symptoms consistent with COVID-19 must be reported to the COTP.

The Coast Guard considers it a hazardous condition under 33 CFR 160.216 if anyone, regardless of where they have been or who they have interacted with, shows symptoms of COVID-19 or other flu like illness. This requires immediate notification to the nearest Coast Guard COTP.

Per 42 CFR 71.21, vessels destined for a U.S. port are required to report to the CDC any sick or deceased crew/passengers during 15 days prior to arrival at the U.S. port. Guidance to vessels to report deaths and illnesses to the CDC can be found at: https://go.usa.gov/xdjmj. U.S. flagged commercial vessels are also advised to report ill crewmembers in accordance with the requirements of each foreign port called upon.

Presidential Proclamations have placed entry restrictions from persons arriving from or through the following countries: Iran, China (excluding Hong Kong and Macau), the European states within the Schengen Area (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland), and beginning at 11:59 p.m. eastern standard daylight savings time on March 16, 2020, United Kingdom and Republic of Ireland.

Vessel owners/operators and local stakeholders should be aware of the following:

1. On March 13, 2020, Cruise Lines International Association (CLIA) announced that member companies were voluntarily suspending cruise ship operations from U.S. ports of call for 30 days. The CDC issued a No Sail Order on March 14, 2020 to all cruise ships that had not voluntarily suspended operations. The Coast Guard will closely coordinate with CDC to facilitate a safe and expeditious return of passengers onboard cruise ships that are underway and bound for U.S. ports.
2. Maritime commerce is vital to the U.S. economy and the Coast Guard has the responsibility to safely enable the uninterrupted flow of maritime cargo.
    - Non-passenger commercial vessels that have been to the countries noted above or embarked crewmembers from the countries noted above within the last 14 days, with no sick crewmembers, will be permitted to enter the U.S. and conduct normal operations, provided that crewmembers remain aboard the vessel except to conduct specific activities directly related to vessel cargo or

provisioning operations. U.S. citizens or any other persons listed in Section 2 of Presidential Proclamation "Suspension of Entry as Immigrants and Nonimmigrants of Certain Additional Persons Who Pose a Risk of Transmitting 2019 Novel Coronavirus", for example crewmembers with a transit and/or crewmember visa, may be permitted to disembark the vessel to conduct vessel operations pier side or for the immediate and continuous transit through the U.S. to another country. When entering the U.S. all persons must be cleared by Customs and Border Protection (CBP) and, if applicable, CDC. Crewmembers without the appropriate visas will generally be required to remain onboard unless otherwise cleared for entry by CBP and, if applicable, CDC.

- Non-passenger commercial vessels that have been to the countries noted above or embarked crewmembers from the countries noted above within the last 14 days, and do have sick crewmembers should expect delays and need to work with local health and port officials prior to entry.

3. All persons that have been in or through a country listed above may be subject to CDC screening prior to disembarkation.

Vessel owners and operators should be aware of the following:

- The Coast Guard will continue to review all "Notice of Arrivals" in accordance with current policies and will communicate any concerns stemming from sick or deceased crew or passengers to their Coast Guard chain of command and the cognizant CDC quarantine station, who will coordinate with local health authorities.
- All commercial vessel operators and mariners are encouraged to exercise due diligence during daily operations and highly encouraged to follow the CDC Interim Guidance for Ships on Managing Suspected Coronavirus Diseases 2019.
- Vessel masters shall inform Coast Guard boarding teams of any ill crewmembers on their vessel prior to embarking the team.
- Local industry stakeholders, in partnership with their Coast Guard COTP, should review and be familiar with section 5310 Procedures for Vessel Quarantine and Isolation, and Section 5320 - Procedures for Security Segregation of Vessels in their Area Maritime Security Plan.
- Local industry stakeholders, in partnership with their Coast Guard COTP, should review and be familiar with their Marine Transportation System Recovery Plan.
- **Maritime facility operators are reminded that they are not permitted to impede the embarkation/ disembarkation of crew members as permitted under Seafarer's access regulations**. This authority resides with CBP, Coast Guard, or the CDC for medical matters. Facility operators should contact their local CBP, Coast Guard, or CDC/health department offices if they have a specific request to restrict a crew member's access.
- The Coast Guard recommends that people review the CDC travel guidance (see https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html) and the U.S. Department of State (DoS) Travel Advisories related to COVID-19 at https://travel.state.gov/content/travel/en/traveladvisories/traveladvisories.html/ .

Richard Timme, RDML, U. S. Coast Guard, Assistant Commandant for Prevention Policy sends

This is the current compilation of all subsurface and surface oceanographic moorings that have been reported to the U.S. Coast Guard District 17 Waterways Branch. The name, type, location, depth, water depth, and a Point of Contact for all data buoys, surface and subsurface, shall be reported as quickly as is practical if they are placed within the navigable waters (within 200 nm) of the United States. Data buoys placed in the Arctic region but outside of 200 nm of the United States may be reported and will be included in this compilation (for informational purposes only). This notification process is for inclusion in the Local Notice to Mariners to provide navigational information to mariners and does not supersede any permission or permitting requirements. Any notifications, corrections, additions, deletions, or comments for the Alaska region (Coast Guard District 17) or the Arctic region should be submitted via e-mail to D17-PF-D17-LNM@uscg.mil or to Todd Buck, USCG D17(dpw), at (907) 463-2269 or by email to todd.r.buck@uscg.mil. This compilation is as current as the Local Notice to Mariners (LNM) included in as an enclosure. The referenced LNM may have additional information and indicates the last time an entry was updated.

ALASKA – ARCTIC OCEAN

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
N/A	72°27.655’N, 157°23.774’W	780 feet	731 feet	39/10	Ethan Roth ehroth@ucsd.edu
N/A	72° 47.939’N, 158°23.941’W	1,066 feet	1,017 feet	39/10	Ethan Roth ehroth@ucsd.edu
N/A	72˚07.275’N, 160”29.698’W	131 feet	115 feet	35/12	Thomas Weingartner (907) 474-7993
N/A	72˚09.747’N, 159˚07.349’W	167 feet	85 feet	35/12	Thomas Weingartner (907) 474-7993
N/A	72˚10.875’N, 159˚33.117’W	184 feet	95 feet	35/12	Thomas Weingartner (907) 474-7993
N/A	72˚41.745’N, 164˚31.935’W	N/A	151 feet	35/12	N/A
N/A	72˚31.517’N, 164˚05.944’W	N/A	164 feet	35/12	N/A
N/A	72˚16.850’N, 163˚32.034’W	N/A	131 feet	35/12	N/A
HARP C2	72° 48.154’N, 158°25.384’W	1,062 feet	979 feet	48/15	Josh Jones (858) 822-1836
HARP D	72° 36.925’N, 158°42.177’W	323 feet	237 feet	48/15	Josh Jones (858) 822-1836
AIM16-1	75˚06.003’N, 168˚00.004’W	535 feet	142 feet	44/16	Dr. Humfrey Melling (250) 363-6552
20CKP9A	72°28.210’N, 156°33.510’W	3,199 feet	1,280 feet	38/20	David Strausz (206) 526-4510
NAP-20t	74°31.370’N, 161°55.880’W	5,528 feet	141 feet	42/20	Motoyo ITOH +81-46-867-9488

CANADA – BEAUFORT SEA

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
ACW16-30	68˚59.173’N, 105˚53.030’W	242 feet	231 feet	44/16	Dr. Humfrey Melling (250) 363-6552
CB12	70˚33.770’N, 127˚41.710’W	125 feet	116 feet	44/16	Dr. Humfrey Melling (250) 363-6552
IBO16-1a	70˚20.031’N, 133˚44.369’W	180 feet	171 feet	44/16	Dr. Humfrey Melling (250) 363-6552
IBO16-1b	70˚20.035’N, 133˚44.452’W	180 feet	171 feet	44/16	Dr. Humfrey Melling (250) 363-6552
IBO16-2	70˚59.359’N, 133˚44.636’W	365 feet	146 feet	44/16	Dr. Humfrey Melling (250) 363-6552
IBO16-9a	70˚03.534’N, 133˚42.918’W	116 feet	106 feet	44/16	Dr. Humfrey Melling (250) 363-6552
IBO16-9b	70˚03.501’N, 133˚42.937’W	116 feet	106 feet	44/16	Dr. Humfrey Melling (250) 363-6552
SIC16-11	69˚46.483’N, 137˚02.757’W	117 feet	107 feet	44/16	Dr. Humfrey Melling (250) 363-6552
HI16	69˚39.284’N, 138˚55.279’W	134 feet	125 feet	44/16	Dr. Humfrey Melling (250) 363-6552

ALASKA – BEAUFORT SEA

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
N/A	71˚35.980’N, 161˚30.3221’W	151 feet	111 feet	48/14	David Leech (907) 224-4319
AON-BS3	71˚23.659’N, 152˚03.046’W	482 feet	115 feet	49/14	Dr. Robert Pickart (508) 289-2858
UPW80	71˚14.670’N, 150˚32.750’W	262 feet	236 feet	49/17	Steve Okkonen (907) 283-3234
UPW120	71˚16.000’N, 150˚41.640’W	354 feet	328 feet	49/17	Steve Okkonen (907) 283-3234
UPE80	71˚11.673’N, 148˚43.424’W	262 feet	236 feet	49/17	Steve Okkonen (907) 283-3234
UPE120	71˚12.338’N, 148˚48.018’W	400 feet	374 feet	49/17	Steve Okkonen (907) 283-3234
WAVE SS-1	70°29’16.8864”N, 147°30’00.3528”W	UNK	Surface	29/18	Jeremy Kasper (907) 371-6510
ODAS-1	70°24.889’N, 147°39.206’W	26 feet	24 feet	30/19	Carmen Lawrence (902) 405-3336
ODAS-2	70°16.663’N, 147°35.493’W	19 feet	17 feet	30/19	Carmen Lawrence (902) 405-3336
BCE-19	71˚40.368’N, 154˚59.923’W	344 feet	131 feet	42/19	Motoyo ITOH +81-46-867-9488
BCC-19	71˚44.049’N, 155˚09.624’W	951 feet	131 feet	42/19	Motoyo ITOH +81-46-867-9488
BCW-19	71˚47.766’N, 155˚20.777’W	554 feet	131 feet	42/19	Motoyo ITOH +81-46-867-9488
AL20-AU-BF2	71°45.220’N, 154°28.070’W	335 feet	308 feet	38/20	Catherine Berchok (206) 526-6331

ALASKA – CHUKCHI SEA

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
E. Barrow Canyon	71˚22.569’N, 156˚53.710’W	236 feet	226 feet	49/14	Steve Okkonen (907) 283-3234
Unnamed	71˚14.459’N, 164˚18.067’W	138 feet	Surface	28/15	Noah Lawrence (206) 526-6209
2015MARU_2	71˚29.792’N, 163˚11.449’W	144 feet	140 feet	40/15	Catherine Berchok (206) 526-6331
CEM1-19	71°35.971’N, 161°30.419’W	154 feet	108 feet	35/19	Peter Shipton (907) 224-4319
CEM2-19	71°35.979’N, 161°31.648’W	154 feet	108 feet	35/19	Peter Shipton (907) 224-4319
19CKP-5A	71°12.212’N, 158°00.722’W	157 feet	131 feet	35/19	David Strausz (206) 525-4510
19CKP-4A	71°02.591’N, 160°29.706’W	171 feet	138 feet	35/19	David Strausz (206) 525-4510
19CKP-3A	71°49.486’N, 166°03.560’W	151 feet	125 feet	35/19	David Strausz (206) 525-4510
AL19-AU-PB1	71°12.346’N, 158°00.660’W	161 feet	131 feet	35/19	Catherine Berchok (206) 526-6331
AL19-AU-WT1	71°02.623’N, 160°30.201’W	171 feet	141 feet	35/19	Catherine Berchok (206) 526-6331
AL19-AU-IC2	71°13.005’N, 164°15.110’W	148 feet	118 feet	35/19	Catherine Berchok (206) 526-6331
AL19-AU-IC3	71°49.728’N, 166°03.993’W	151 feet	121 feet	35/19	Catherine Berchok (206) 526-6331

ALASKA – CHUKCHI SEA (Continued)

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
20CKP-12A	67°54.820’N, 168°11.830’W	195 feet	161 feet	38/20	David Strausz (206) 526-4510
20CKITAER-12A	67°54.290’N, 168°11.510’W	196 feet	115 feet	38/20	David Strausz (206) 526-4510
20CK-1A	70°00.000’N, 163°00.000’W	125 feet	112 feet	38/20	David Strausz (206) 526-4510
20CKP-2A	71°13.180’N, 164.14.830’W	146 feet	128 feet	38/20	David Strausz (206) 526-4510
AL20-AU-CL1	69°18.880’N, 167°36.650’W	167 feet	141 feet	38/20	Catherine Berchok (206) 526-6331
AL20-AU-IC1	70°50.160’N, 163°07.100’W	148 feet	121 feet	38/20	Catherine Berchok (206) 526-6331

ALASKA – KOTZEBUE SOUND

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
OTZ-N	67°6.791'N, 163°46.328'W	37 feet	27 feet	48/14	Dr. Manuel Castellote (206) 526-6866
OTZ-M	67°5.148'N, 163°48.282'W	58 feet	48 feet	48/14	Dr. Manuel Castellote (206) 526-6866
OTZ-S	67°3.365'N, 163°48.699'W	60 feet	50 feet	48/14	Dr. Manuel Castellote (206) 526-6866
OTZ-Ch	66°14.346'N, 166°51.926'W	51 feet	41 feet	48/14	Dr. Manuel Castellote (206) 526-6866

ALASKA – BERING STRAIT

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
AOOS-AXYS	65˚00.700’N, 169˚27.23’W	- - - - - -	Surface	30/15	Darcy Dugan (907) 644-6718
NB-17t	65˚03.884’N, 169˚38.045’W	171 feet	89 feet	29/17	Makoto Sampei +81-138-40-8844
BS-17t	66˚16.075’N, 168˚54.098’W	187 feet	105 feet	29/17	Makoto Sampei +81-138-40-8844
A2-19	65˚46.860’N, 168˚34.070’W	184 feet	26 feet	37/18	Rebecca Woodgate (206) 221-3268
A3-19	66˚19.600’N, 168˚57.050’W	184 feet	49 feet	37/18	Rebecca Woodgate (206) 221-3268
A4-19	65˚44.750’N, 168˚15.770’W	157 feet	49 feet	37/18	Rebecca Woodgate (206) 221-3268
A2-20	65˚46.860’N, 168˚34.600’W	184 feet	148 feet	37/20	Rebecca Woodgate (206) 221-3268
A3-20	66˚19.600’N, 168˚57.600’W	194 feet	138 feet	37/20	Rebecca Woodgate (206) 221-3268
A4-20	65˚44.750’N, 168˚16.310’W	161 feet	118 feet	37/20	Rebecca Woodgate (206) 221-3268

ALASKA – NORTON SOUND

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
Station-241	64°28.365’N, 165°28.525’W	66 feet	Surface	36/20	James Behrens (858) 534-3032

ALASKA – BERING SEA

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
GPS Tide Buoy	58°28.015’N, 162°04.779’W	126 feet	Surface	25/19	NOAAS FAIRWEATHER (401) 378-4022
AL19-AU-BS6	53˚37.775’N, 167˚23.945’W	312 feet	282 feet	28/19	Catherine Berchok (206) 526-6331
19BS-5A	59°54.220’N, 171°41.890’W	233 feet	30 feet	40/19	Geoff Lebon (206) 526-6884
19BSP-5A	59°54.220’N, 171°41.890’W	233 feet	30 feet	40/19	Geoff Lebon (206) 526-6884
19BS-8A	62°12.000’N, 174°40.770’W	243 feet	177 feet	40/19	Geoff Lebon (206) 526-6884
19BS-2C	56°51.884’N, 164°02.601’W	236 feet	203 feet	40/19	Geoff Lebon (206) 526-6884
19BSP-2B	56°51.494’N, 164°02.724’W	236 feet	33 feet	40/19	Geoff Lebon (206) 526-6884
19BSP-8A	61°11.760’N, 174°40.470’W	243 feet	30 feet	40/19	Geoff Lebon (206) 526-6884
19SHP-1A	54°50.970’N, 158°59.890’W	243 feet	207 feet	40/19	Geoff Lebon (206) 526-6884
AL19-AU-BS10	56°09.603’N, 166°34.646’W	390 feet	361 feet	40/19	Catherine Berchok (206) 526-6331
20BSP-4A	57°51.894’N, 168°52.759’W	233 feet	203 feet	38/20	David Strausz (206) 526-4510
20BSP-8A	62°11.540N, 174°40.310’W	241 feet	210 feet	38/20	David Strausz (206) 526-4510
20BSP-14A	64°00.156’N, 167°56.043’W	125 feet	102 feet	38/20	David Strausz (206) 526-4510
20BSIP-14A	63°59.950’N, 167°55.690’W	125 feet	102 feet	38/20	David Strausz (206) 526-4510
AL20-AU-BS11	61°04.714’N, 170°16.565’W	164 feet	138 feet	38/20	Catherine Berchok (206) 526-6331

ALASKA – GULF OF ALASKA – SANAK TROUGH (NORTH OF SANAK ISLAND)

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
TRBM-1	54˚42.606’N, 162˚37.872’W	407 feet	405 feet	48/16	Chris Wilson (206) 526-6435
TRBM-2	54˚37.151’N, 162˚35.695’W	489 feet	487 feet	48/16	Chris Wilson (206) 526-6435

ALASKA – COOK INLET – KAMISHAK BAY

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
ADCP-A	59°16’34.5168”N, 154°07’03.6837”W	16 feet	13 feet	03/18	Jason Crockett (907) 315-6513
ADCP-B	59°15’24.7255”N, 154°02’45.7066”W	43 feet	39 feet	03/18	Jason Crockett (907) 315-6513

ALASKA – GULF OF ALASKA – KODIAK ISLAND – CHINIAK BAY

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
19CB-1A	57°43.223’N, 152°17.531’W	640 feet	587 feet	28/19	David Strausz (206) 526-4510

ALASKA – GULF OF ALASKA

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
UAF GAK4M	59˚24.231’N, 149˚00.731’W	656 feet	328 feet	45/16	Dr. Andrew McDonnell (907) 474-7529
WAVE YB-1	59°27’22.248”N, 139°45’02.088”W	UNK	Surface	29/17	Jeremy Kasper (907) 371-6510

ALASKA – GULF OF ALASKA (Continued)

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
WAVE YB-2	59°26’58.7349”N, 139°47’46.3194”W	UNK	Surface	29/17	Jeremy Kasper (907) 371-6510
GEO1-2019	59°00.850’N, 148°41.410’W	722 feet	Surface	29/19	Seth Danielson (907) 474-7834
GEO2-2019	59°00.917’N, 148°41.604’W	722 feet	72 feet	29/19	Seth Danielson (907) 474-7834
GEO3-2019	59°00.988’N, 148°41.797’W	722 feet	Surface	29/19	Seth Danielson (907) 474-7834
GA20-AU-BT01	57°01.790’N, 152°59.620’W	269 feet	243 feet	40/20	Catherine Berchok (206) 526-6331

ALASKA – GULF OF ALASKA – RESURRECTION BAY

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
GAKOA	59°54’39.55”N, 149°20’57.47”W	171 feet	Surface	13/19	Natalie Monacci (907) 474-7956
GAK1	59°51’11.952”N, 149°30’03.96”W	869 feet	66 feet	13/19	Peter Shipton (907) 224-4319

ALASKA – PRINCE WILLIAM SOUND

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
PST1	60°39.100'N, 146°16.682'W	154 feet	138 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST2	60°39.338'N, 146° 17.353'W	226 feet	210 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST3	60° 39.568'N, 146° 18.040'W	390 feet	374 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST4	60° 39.798'N, 146° 18.726'W	427 feet	410 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST5	60° 40.028'N, 146°19.413'W	420 feet	404 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST6	60°40.257'N, 146°20.100'W	410 feet	394 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST7	60°40.487'N, 146°20.786'W	295 feet	279 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST8	60°40.717'N, 146°21.473'W	233 feet	217 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST9	60°40.947'N, 146°22.160'W	194 feet	177 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
PST10	60°41.176'N, 146°22.846'W	141 feet	125 feet	18/09	Mary Anne Bishop (907) 424-5800 x228
LHRT1	60˚22.6596’N, 147˚51.147’W	225 feet	209 feet	11/14	Mary Anne Bishop (907) 424-5800 x228
LHRT2	60˚22.6482’N, 147˚50.7522’W	364 feet	348 feet	11/14	Mary Anne Bishop (907) 424-5800 x228
LHRT3	60˚22.668’N, 147˚50.5116’W	382 feet	366 feet	11/14	Mary Anne Bishop (907) 424-5800 x228
WTRT1	60˚44.253’N, 147˚59.5596’W	504 feet	488 feet	11/14	Mary Anne Bishop (907) 424-5800 x228
WTRT2	60˚44.0994’N, 147˚59.086’W	504 feet	488 feet	11/14	Mary Anne Bishop (907) 424-5800 x228
WTRT3	60˚43.938’N, 147˚59.448’W	316 feet	300 feet	11/14	Mary Anne Bishop (907) 424-5800 x228
PWSSC-15	60˚36.791’N, 147˚11.996’W	722 feet	197 feet (Surfacing 2X per day)	15/16	R. W. Campbell (907) 424-5800 x241
H01	60°20.550'N, 146°43.824'W	98 feet	66 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
HA	60°20.274'N, 146°43.248'W	591 feet	532 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H02	60°20.400'N, 146°44.520'W	879 feet	791 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
HB	60°20.094'N, 146°43.974'W	830 feet	747 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H03	60°20.250'N, 146°45.246'W	886 feet	797 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H04	60°20.112'N, 146°45.966'W	886 feet	797 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H05	60°19.968'N, 146°46.710'W	886 feet	797 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H06	60°19.812'N, 146°47.418'W	896 feet	806 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H07	60°19.668'N, 146°48.138'W	909 feet	818 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H08	60°19.470'N, 146°48.954'W	935 feet	842 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H09	60°19.320'N, 146°49.782'W	1007 feet	906 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H10	60°19.188'N, 146°50.508'W	1060 feet	954 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H11	60°19.008'N, 146°51.228'W	1135 feet	1022 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H12	60°18.888'N, 146°51.930'W	1194 feet	1075 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H13	60°18.738'N, 146°52.656'W	909 feet	818 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H14	60°18.588'N, 146°53.340'W	522 feet	470 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H15	60°18.468'N, 146°53.994'W	276 feet	244 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
HC	60°18.120'N, 146°53.568'W	449 feet	404 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
H16	60°18.540'N, 146°54.552'W	85 feet	53 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
HD	60°17.982'N, 146°54.336'W	151 feet	119 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M01	59°55.482'N, 147°48.630'W	295 feet	263 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
MA	59°55.146'N, 147°49.092'W	220 feet	188 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M02	59°55.848'N, 147°49.074'W	446 feet	401 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
MB	59°55.512'N, 147°49.512'W	420 feet	378 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M03	59°56.178'N, 147°49.518'W	509 feet	458 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M04	59°56.556'N, 147°49.956'W	577 feet	519 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M05	59°56.886'N, 147°50.382'W	640 feet	576 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M06	59°57.222'N, 147°50.826'W	705 feet	635 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M07	59°57.546'N, 147°51.234'W	741 feet	667 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M08	59°57.864'N, 147°51.636'W	768 feet	691 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M09	59°58.152'N, 147°52.008'W	784 feet	706 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M10	59°58.536'N, 147°52.458'W	778 feet	700 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
MC	59°58.182'N, 147°52.872'W	745 feet	671 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
M11	59°58.842'N, 147°52.866'W	472 feet	425 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
MD	59°58.518'N, 147°53.352'W	614 feet	553 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
LP01	59°58.854'N, 148°01.920'W	112 feet	80 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
LPA	59°58.488'N, 148°02.286'W	98 feet	66 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
EP04	59°59.700'N, 148°06.072'W	276 feet	244 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
EPB	59°59.364'N, 148°06.492'W	246 feet	214 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
POWP05	60°02.778'N, 148°07.470'W	312 feet	280 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
LPB	59°58.758'N, 148°02.676'W	289 feet	257 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
EP03	59°59.472'N, 148°05.802'W	240 feet	208 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
EPA	59°59.064'N, 148°05.952'W	331 feet	299 feet	09/17	Mary Anne Bishop (907) 424-5800 x228

ALASKA – PRINCE WILLIAM SOUND (Continued)

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
PWA	60°02.394'N, 148°07.698'W	289 feet	257 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
LP02	59°59.082'N, 148°02.208'W	148 feet	116 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
POWP06	60°02.796'N, 148°07.902'W	177 feet	145 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
PWB	60°02.418'N, 148°08.208'W	266 feet	234 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
BP07	60°06.906'N, 148°14.118'W	174 feet	142 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
BPA	60°07.128'N, 148°13.458'W	167 feet	135 feet	09/17	Mary Anne Bishop (907) 424-5800 x228
Grav-1	60˚41.370’N, 146˚23.956’W	16 feet	Surface	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-2	60˚41.454’N, 146˚23.496’W	75 feet	55 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-3	60˚40.925’N, 146˚23.018’W	146 feet	126 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-4	60˚40.696’N, 146˚22.561’W	195 feet	176 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-5	60˚41.257’N, 146˚24.580’W	7 feet	Surface	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-6	60˚41.033’N, 146˚24.109’W	53 feet	34 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-7	60˚40.811’N, 146˚23.633’W	128 feet	108 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-8	60˚40.580’N, 146˚23.148’W	158 feet	138 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-9	60˚40.362’N, 146˚22.692’W	212 feet	192 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-10	60˚40.970’N, 146˚23.557’W	106 feet	86 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-RT1	60˚41.053’N, 146˚24.004’W	59 feet	40 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-RT2	60˚41.071’N, 146˚23.896’W	72 feet	53 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
Grav-RT3	60˚41.090’N, 146˚23.765’W	74 feet	55 feet	16/17	Mary Anne Bishop (907) 424-5800 x228
RH1	60°36.987’N, 146°37.412’W	213 feet	203 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
RH2	60°38.175’N, 146°29.837’W	223 feet	223 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
NMS1	60°18.476’N, 147°40.044’W	131 feet	131 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
NMS2	60°18.280’N, 147°25.330’W	154 feet	154 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
NMS3	60°22.657’N, 147°08.341’W	118 feet	118 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
GISL1	60°51.782’N, 147°13.369’W	164 feet	154 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
MR1	59°58.586’N, 147°53.254’W	607 feet	597 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
MR2	59°58.655’N, 147°53.160’W	581 feet	571 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
MR3	59°58.738’N, 147°53.030’W	564 feet	554 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
HRT1	60°18.058’N, 146°54.282’W	112 feet	102 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
HRT2	60°18.135’N, 146°54.227’W	121 feet	111 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
HRT3	60°18.226’N, 146°54.145’W	151 feet	141 feet	28/18	Mary Anne Bishop (907) 424-5800 x228
KIP1	60°18.121’N, 148°00.944’W	344 feet	324 feet	39/18	Mary Anne Bishop (907) 424-5800 x228
KIP2	60°18.050’N, 147°55.640’W	344 feet	324 feet	39/18	Mary Anne Bishop (907) 424-5800 x228
CP1	60°32.465’N, 146°08.652’W	106 feet	81 feet	39/18	Mary Anne Bishop (907) 424-5800 x228
CP2	60°32.733’N, 146°06.749’W	151 feet	126 feet	39/18	Mary Anne Bishop (907) 424-5800 x228
CEDAR1	60°33.568’N, 146°01.978”W	110 feet	85 feet	39/18	Mary Anne Bishop (907) 424-5800 x228
JP1	60°29.366’N, 146°35.524’W	74 feet	71 feet	10/20	Mary Anne Bishop (907) 424-5800 x228
PF1	60°48.720’N, 146°34.464’W	131 feet	128 feet	10/20	Mary Anne Bishop (907) 424-5800 x228

ALASKA – GULF OF ALASKA – YAKUTAT

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
Wave Buoy-1	59°270402’N, 139°44.982’W	Unknown	Surface	41/19	Jeremy Kasper (907) 371-6510
Wave Buoy-2	59°25.998’N, 139°48.366’W	Unknown	Surface	41/19	Jeremy Kasper (907) 371-6510

ALASKA – SOUTHEAST

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
Icy Strait	58° 14.6112’N, 136° 7.28972’W	614 feet	594 feet	35/09	Dave Carlile (907) 465-4216
Icy Strait	58° 14.5037’N, 136° 7.27185’W	541 feet	521 feet	35/09	Dave Carlile (907) 465-4216
Icy Strait	58° 14.3962’N, 136° 7.25398’W	522 feet	502 feet	35/09	Dave Carlile (907) 465-4216
Icy Strait	58° 14.2887’N, 136° 7.23611’W	358 feet	338 feet	35/09	Dave Carlile (907) 465-4216
Icy Strait	58° 14.1812’N, 136° 7.21824’W	266 feet	246 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 9.6115’N, 134° 33.78278’W	1814 feet	1795 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 9.6209’N, 134° 33.97584’W	1820 feet	1800 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 9.6303’N, 134° 34.1689’W	1811 feet	1791 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 9.6397’N, 134° 34.36195’W	1811 feet	1791 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 9.6491’N, 134° 34.55501’W	1798 feet	1778 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 8.6362’N, 134° 25.56783’W	1916 feet	417 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 8.655’N, 134° 25.95379’W	1930 feet	1910 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 8.6644’N, 134° 26.14676’W	1932 feet	1912 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 8.6738’N, 134° 26.3397’W	1936 feet	1916 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 8.6832’N, 134° 26.53272’W	1932 feet	1912 feet	35/09	Dave Carlile (907) 465-4216
Chatham Strait	56° 8.6926’N, 134° 26.7257’W	1932 feet	1912 feet	35/09	Dave Carlile (907) 465-4216
Frederick Sound	57° 3.34’N, 134° 15.64’W	1180 feet	928 feet	35/09	Dave Carlile (907) 465-4216
Frederick Sound	57° 3.1874’N, 134° 15.35938’W	1155 feet	1135 feet	35/09	Dave Carlile (907) 465-4216
Frederick Sound	57° 3.1111’N, 134° 15.21907’W	1155 feet	1135 feet	35/09	Dave Carlile (907) 465-4216
Frederick Sound	57° 3.0348’N, 134° 15.07877’W	1155 feet	1135 feet	35/09	Dave Carlile (907) 465-4216
Frederick Sound	57° 2.9584’N, 134° 14.93847’W	1158 feet	1138 feet	35/09	Dave Carlile (907) 465-4216
Ommaney	56° 5.1769’N, 134° 46.8910’W	1191 feet	1171 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	56° 5.0755’N, 134° 46.8249’W	1200 feet	1180 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	56° 4.9741’N, 134° 46.7587’ W	1200 feet	1180 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	55° 59.6327’ N, 134°57.3717’ W	1214 feet	1194 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	55° 59.5313’N, 134° 57.3057’W	1191 feet	1171 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	55° 59.4298’N, 134° 57.2397’W	1191 feet	1171 feet	33/10	Dave Carlile (907) 465-4216

ALASKA – SOUTHEAST (Continued)

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
Ommaney	55° 59.3284’N, 134° 57.1737’W	1220 feet	1200 feet	33/10	Dave Carlile (907) 465-4216
Frederick Sound	57° 2.8821’N, 134° 14.79818’W	1158 feet	1138 feet	35/09	Dave Carlile (907) 465-4216
Ommaney	56° 5.4812’ N, 134° 47.0895’ W	1181 feet	912 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	56° 5.3798’N, 134° 47.0233’W	1191 feet	1171 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	56° 5.2783’N, 134° 46.9572’W	1191 feet	1171 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	55° 59.2270’N, 134° 57.1077’W	1220 feet	1200 feet	33/10	Dave Carlile (907) 465-4216
Ommaney	55° 59.1256’N, 134° 57.0417’ W	1220 feet	1200 feet	33/10	Dave Carlile (907) 465-4216
20CSP-4A	58°07.363’N, 136°35.604’W	1,099 feet	1,060 feet	06/20	David Strausz (206) 526-4510

ALASKA – NORTH PACIFIC OCEAN

TYPE/NAME:	POSITION:	WATER DEPTH:	TOP FLOAT DEPTH:	Ref. LNM:	POC:
HARP-CB	58˚40.409’N, 148˚00.546’W	2,877 feet	2,779 feet	49/14	Josh Jones (858) 822-1836
HARP-PT	56˚14.635’N, 142˚45.431’W	3,238 feet	3,140 feet	49/14	Josh Jones (858) 822-1836
MFM-A	49˚58.60’N, 144˚14.77’W	13,540 feet	49 feet	24/15	Gabriella Chavez (858) 822-4938
MFM-B	50˚19.82’N, 144˚23.90’W	13,599 feet	49 feet	24/15	Gabriella Chavez (858) 822-4938
GHPM-1	50˚04.79’N, 144˚48.18’W	13, 842 feet	483 feet	24/15	Gabriella Chavez (858) 822-4938

Alaska Marine Safety Education Association
2924 Halibut Point Road, Sitka, Alaska 99835-9668
phone 907-747-3287 / fax 907-747-3259 / www.amsea.org

For Immediate Release

Date Issued: November 23, 2020
Kill Date: December 4, 2020

AMSEA Workshops of Interest to Mariners in District 17

The Alaska Marine Safety Education Association is offering a number of classes in U.S. Coast Guard District 17 that may be of interest to mariners. Many of these workshops are offered at reduced cost to commercial fishermen, thanks to support from the U.S. Coast Guard, the National Institute for Occupational Safety and Health, and the Alaska Department of Commerce, Community and Economic Development. Register online at www.amsea.org or call (907) 747-3287.

Marine Safety Instructor Training

The MSIT is an intensive train-the-trainer course that prepares individuals to effectively teach cold-water survival procedures, use of marine safety equipment, and vessel safety drills. Upon completion of the course, participants will be prepared to teach AMSEA's U.S. Coast Guard accepted Fishing Vessel Drill Conductor training, pending authorization from the Coast Guard. Topics covered during the course include:

- Preparation for emergencies
- Cold-water near drowning
- Hypothermia
- Cold-water survival
- Survival equipment, procedures & onboard drills
- Risk Assessment
- Ergonomics
- Methods of instructions

Start Date	End Date	Location	State
4/19/2021	4/21/2021	Seward	AK

First Aid & CPR

AMSEA's First Aid & CPR workshop is designed to meet the unique needs of commercial fishermen and other mariners. Attendees receive a U.S. Coast Guard accepted two-year

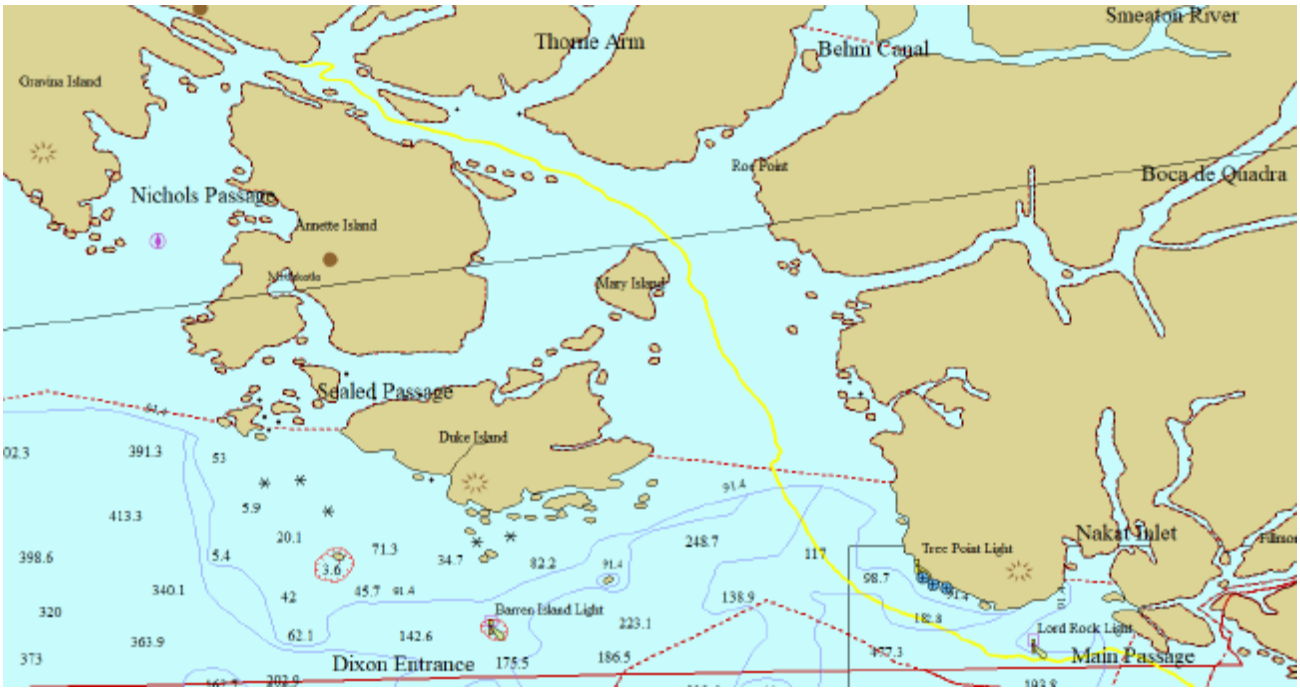
certificate issued by the American Safety & Health Institute. The cost for the workshop is $100.00 including local sales tax. The topics covered include:

- CPR & automatic external defibrillators (AED)
- Treatment of choking
- Medical emergencies
- Trauma
- Environmental hazards
- Patient assessment
- Medical communications
- Drowning & hypothermia
- Common fishing injuries

Start Date	End Date	Location	State
12/12/2020	12/12/2020	Sitka	AK
01/23/2021	01/23/2021	Sitka	AK

Submarine Fiber Optic Cable

Ketchikan Public Utilities has installed a submarine fiber optic cable from Prince Rupert, Canada to Ketchikan, Alaska. It's approximate route are indicated on the following chartlet and positions indicating the "As Laid" route of the cable are also included. The positions have been submitted to NOAA and a chart correction will be issued in the near future. Mariners are requested to not anchor near or conduct operations that may impact the cable. Questions/concerns should be directed to Edward Cushing, KPU's Division Manager, at (907) 228-6001 or by email to edc@city.ketchikan,ak.us.



1: 54.23300987°N, 130.33355572°W
2: 54.23301748°N, 130.33392420°W
3: 54.23299928°N, 130.33418750°W
4: 54.23300408°N, 130.33424136°W
5: 54.23302590°N, 130.33430036°W
6: 54.23305058°N, 130.33434412°W
7: 54.23307438°N, 130.33438631°W
8: 54.23310351°N, 130.33443482°W
9: 54.23312829°N, 130.33446937°W
10: 54.23315398°N, 130.33450395°W
11: 54.23317352°N, 130.33452453°W
12: 54.23323421°N, 130.33456331°W
13: 54.23330733°N, 130.33461630°W
14: 54.23334020°N, 130.33465112°W
15: 54.23337936°N, 130.33468613°W
16: 54.23345602°N, 130.33474384°W
17: 54.23353619°N, 130.33480934°W
18: 54.23359938°N, 130.33486661°W
19: 54.23365183°N, 130.33491893°W
20: 54.23371850°N, 130.33498553°W
21: 54.23376519°N, 130.33507142°W
22: 54.23380016°N, 130.33516000°W
23: 54.23382457°N, 130.33522830°W
24: 54.23387951°N, 130.33562439°W
25: 54.23394777°N, 130.33635846°W
26: 54.23411032°N, 130.33701887°W
27: 54.23434617°N, 130.33787804°W
28: 54.23442111°N, 130.33833310°W
29: 54.23437541°N, 130.33929210°W
30: 54.23427941°N, 130.34016509°W
31: 54.23412770°N, 130.34087517°W
32: 54.23399044°N, 130.34141694°W
33: 54.23372616°N, 130.34190394°W
34: 54.23335490°N, 130.34247186°W
35: 54.23267943°N, 130.34323855°W
36: 54.23223163°N, 130.34373798°W
37: 54.23151052°N, 130.34440495°W
38: 54.23015679°N, 130.34562051°W
39: 54.22912868°N, 130.34665175°W
40: 54.22791723°N, 130.34776135°W
41: 54.22634008°N, 130.34917957°W
42: 54.22476268°N, 130.35061915°W
43: 54.22327626°N, 130.35203859°W
44: 54.22275781°N, 130.35250329°W
45: 54.22154773°N, 130.35340552°W
46: 54.22022449°N, 130.35445891°W
47: 54.21941540°N, 130.35511036°W
48: 54.21868217°N, 130.35581028°W
49: 54.21808412°N, 130.35655755°W
50: 54.21744992°N, 130.35764102°W
51: 54.21665061°N, 130.35901811°W
52: 54.21618086°N, 130.36026182°W
53: 54.21567409°N, 130.36199658°W
54: 54.21532435°N, 130.36335613°W
55: 54.21512382°N, 130.36455495°W
56: 54.21500167°N, 130.36629157°W
57: 54.21495123°N, 130.36796461°W
58: 54.21504027°N, 130.36970054°W
59: 54.21543551°N, 130.37161839°W
60: 54.21619055°N, 130.37414175°W

61: 54.21677218°N, 130.37594626°W
62: 54.21739369°N, 130.37779817°W
63: 54.21796460°N, 130.37951348°W
64: 54.21836404°N, 130.38105133°W
65: 54.21854163°N, 130.38179039°W
66: 54.21889716°N, 130.38323633°W
67: 54.21939756°N, 130.38521476°W
68: 54.21966415°N, 130.38634029°W
69: 54.21990833°N, 130.38722580°W
70: 54.22010200°N, 130.38812650°W
71: 54.22036659°N, 130.38918911°W
72: 54.22068542°N, 130.39077046°W
73: 54.22099256°N, 130.39234990°W
74: 54.22128104°N, 130.39406372°W
75: 54.22139726°N, 130.39481769°W
76: 54.22159123°N, 130.39591941°W
77: 54.22196386°N, 130.39858866°W
78: 54.22217914°N, 130.40032922°W
79: 54.22243411°N, 130.40205582°W
80: 54.22259100°N, 130.40309498°W
81: 54.22267747°N, 130.40493093°W
82: 54.22278167°N, 130.40655428°W
83: 54.22283233°N, 130.40791198°W
84: 54.22296390°N, 130.40911292°W
85: 54.22312398°N, 130.41048816°W
86: 54.22323913°N, 130.41178519°W
87: 54.22330775°N, 130.41290883°W
88: 54.22342210°N, 130.41365823°W
89: 54.22349056°N, 130.41441220°W
90: 54.22339384°N, 130.41537681°W
91: 54.22321570°N, 130.41715007°W
92: 54.22306771°N, 130.41941367°W
93: 54.22301667°N, 130.42061759°W
94: 54.22316236°N, 130.42198318°W
95: 54.22334046°N, 130.42334223°W
96: 54.22352602°N, 130.42422143°W
97: 54.22381804°N, 130.42559823°W
98: 54.22434227°N, 130.42785897°W
99: 54.22440352°N, 130.42815100°W
100: 54.22459873°N, 130.42904745°W
101: 54.22477832°N, 130.42982065°W
102: 54.22515261°N, 130.43130316°W
103: 54.22541637°N, 130.43232934°W
104: 54.22563760°N, 130.43322673°W
105: 54.22597709°N, 130.43445805°W
106: 54.22639587°N, 130.43604957°W
107: 54.22672635°N, 130.43728062°W
108: 54.22726399°N, 130.43915248°W
109: 54.22755065°N, 130.43998626°W
110: 54.22824382°N, 130.44147701°W
111: 54.22864238°N, 130.44227177°W
112: 54.22962615°N, 130.44388780°W
113: 54.23059370°N, 130.44490500°W
114: 54.23146685°N, 130.44569802°W
115: 54.23249645°N, 130.44656252°W
116: 54.23361003°N, 130.44776756°W
117: 54.23388482°N, 130.44831266°W
118: 54.23454171°N, 130.44959690°W
119: 54.23506780°N, 130.45077073°W
120: 54.23572117°N, 130.45242011°W
121: 54.23616282°N, 130.45358644°W
122: 54.23635784°N, 130.45411039°W
123: 54.23676161°N, 130.45513732°W
124: 54.23711180°N, 130.45598592°W
125: 54.23745573°N, 130.45683124°W
126: 54.23803240°N, 130.45827556°W
127: 54.23859370°N, 130.45965186°W
128: 54.23911704°N, 130.46104374°W
129: 54.23972497°N, 130.46264888°W
130: 54.24018673°N, 130.46377931°W
131: 54.24066629°N, 130.46499787°W
132: 54.24119549°N, 130.46634712°W
133: 54.24172017°N, 130.46769625°W
134: 54.24238313°N, 130.46935112°W
135: 54.24311564°N, 130.47119728°W
136: 54.24389239°N, 130.47317247°W
137: 54.24444648°N, 130.47453663°W
138: 54.24533170°N, 130.47675064°W
139: 54.24617882°N, 130.47891733°W
140: 54.24683945°N, 130.48060318°W
141: 54.24748516°N, 130.48225784°W
142: 54.24835476°N, 130.48441483°W
143: 54.24875734°N, 130.48515376°W
144: 54.24911780°N, 130.48566248°W
145: 54.24934542°N, 130.48600988°W
146: 54.24956506°N, 130.48634779°W
147: 54.24977992°N, 130.48671008°W
148: 54.25029158°N, 130.48756657°W
149: 54.25092389°N, 130.48869757°W
150: 54.25153325°N, 130.48979402°W
151: 54.25257481°N, 130.49148173°W
152: 54.25359410°N, 130.49307968°W
153: 54.25500910°N, 130.49523853°W
154: 54.25615615°N, 130.49703934°W
155: 54.25808226°N, 130.49979733°W
156: 54.25941839°N, 130.50149473°W
157: 54.26135195°N, 130.50393560°W
158: 54.26277181°N, 130.50576223°W
159: 54.26382098°N, 130.50711175°W
160: 54.26413239°N, 130.50751005°W
161: 54.26514323°N, 130.50876152°W
162: 54.26672463°N, 130.51074488°W
163: 54.26829198°N, 130.51270024°W
164: 54.26977512°N, 130.51455898°W
165: 54.27131720°N, 130.51651677°W
166: 54.27409908°N, 130.52001928°W
167: 54.27595615°N, 130.52236694°W
168: 54.27835722°N, 130.52540612°W
169: 54.28040575°N, 130.52802862°W
170: 54.28203450°N, 130.52993996°W
171: 54.28308399°N, 130.53039362°W
172: 54.28413820°N, 130.53104258°W
173: 54.28545271°N, 130.53186101°W
174: 54.28672382°N, 130.53262871°W
175: 54.28791701°N, 130.53337360°W
176: 54.28834058°N, 130.53371043°W
177: 54.28875604°N, 130.53411919°W
178: 54.28933232°N, 130.53474596°W
179: 54.29047455°N, 130.53603296°W
180: 54.29136504°N, 130.53704177°W
181: 54.29241059°N, 130.53822543°W
182: 54.29363221°N, 130.53962776°W
183: 54.29593100°N, 130.54226746°W
184: 54.29743561°N, 130.54395877°W
185: 54.29837747°N, 130.54502210°W
186: 54.29956448°N, 130.54638358°W
187: 54.30119828°N, 130.54822912°W
188: 54.30207632°N, 130.54921955°W
189: 54.30291473°N, 130.55021622°W
190: 54.30509822°N, 130.55271753°W
191: 54.30660779°N, 130.55443131°W
192: 54.30760933°N, 130.55559882°W
193: 54.30820910°N, 130.55627779°W
194: 54.30949126°N, 130.55777880°W
195: 54.30980226°N, 130.55819636°W
196: 54.31029360°N, 130.55884825°W
197: 54.31059391°N, 130.55925774°W
198: 54.31127029°N, 130.56019643°W
199: 54.31211278°N, 130.56059264°W
200: 54.31428734°N, 130.55932361°W
201: 54.31537922°N, 130.55843632°W
202: 54.31603327°N, 130.55790450°W
203: 54.31649509°N, 130.55770978°W
204: 54.31724045°N, 130.55762417°W
205: 54.31774256°N, 130.55792911°W
206: 54.31808994°N, 130.55845269°W
207: 54.31846553°N, 130.55915876°W
208: 54.31882549°N, 130.56016869°W
209: 54.31893029°N, 130.56096140°W
210: 54.31889947°N, 130.56202266°W
211: 54.31878155°N, 130.56279925°W
212: 54.31846602°N, 130.56377283°W
213: 54.31765613°N, 130.56550713°W
214: 54.31746478°N, 130.56591498°W
215: 54.31707160°N, 130.56705160°W
216: 54.31690430°N, 130.56789083°W
217: 54.31684999°N, 130.56861137°W
218: 54.31690735°N, 130.56931463°W
219: 54.31704921°N, 130.56994884°W
220: 54.31737650°N, 130.57083766°W
221: 54.31814694°N, 130.57200169°W
222: 54.31897319°N, 130.57246831°W
223: 54.31997206°N, 130.57293232°W
224: 54.32071924°N, 130.57325912°W
225: 54.32141023°N, 130.57355150°W
226: 54.32196560°N, 130.57369878°W
227: 54.32353832°N, 130.57385724°W
228: 54.32548193°N, 130.57362852°W
229: 54.32792809°N, 130.57194415°W
230: 54.32978017°N, 130.57121969°W
231: 54.33159967°N, 130.57071847°W
232: 54.33280196°N, 130.57053975°W
233: 54.33466756°N, 130.57015711°W
234: 54.33631253°N, 130.56987525°W
235: 54.33899590°N, 130.56929913°W
236: 54.34027192°N, 130.56891086°W
237: 54.34204055°N, 130.56817365°W

238: 54.34336738°N, 130.56754110°W
239: 54.34442169°N, 130.56692122°W
240: 54.34543547°N, 130.56616899°W
241: 54.34642257°N, 130.56553264°W
242: 54.34708289°N, 130.56521157°W
243: 54.34808549°N, 130.56483578°W
244: 54.34905226°N, 130.56451863°W
245: 54.34987502°N, 130.56435602°W
246: 54.35076717°N, 130.56445608°W
247: 54.35230355°N, 130.56533769°W
248: 54.35347458°N, 130.56645938°W
249: 54.35397491°N, 130.56703855°W
250: 54.35458683°N, 130.56774509°W
251: 54.35646571°N, 130.56979723°W
252: 54.35826711°N, 130.57123870°W
253: 54.35983641°N, 130.57200503°W
254: 54.36243466°N, 130.57237361°W
255: 54.36390866°N, 130.57224368°W
256: 54.36469042°N, 130.57205497°W
257: 54.36787789°N, 130.57093756°W
258: 54.36886146°N, 130.57057486°W
259: 54.37111702°N, 130.56985581°W
260: 54.37368300°N, 130.57007996°W
261: 54.37508168°N, 130.57041971°W
262: 54.37626558°N, 130.57075590°W
263: 54.37854035°N, 130.57146174°W
264: 54.38158051°N, 130.57226929°W
265: 54.38325936°N, 130.57249054°W
266: 54.38552743°N, 130.57260652°W
267: 54.38812055°N, 130.57240229°W
268: 54.39097961°N, 130.57213889°W
269: 54.39334955°N, 130.57223106°W
270: 54.39555021°N, 130.57248466°W
271: 54.39744301°N, 130.57277273°W
272: 54.39946788°N, 130.57327231°W
273: 54.40264468°N, 130.57386998°W
274: 54.40484645°N, 130.57417617°W
275: 54.40757164°N, 130.57438997°W
276: 54.41016766°N, 130.57410112°W
277: 54.41380521°N, 130.57327733°W
278: 54.41548080°N, 130.57278206°W
279: 54.41737263°N, 130.57217791°W
280: 54.41972141°N, 130.57140931°W
281: 54.42427215°N, 130.57010210°W
282: 54.42571828°N, 130.57004023°W
283: 54.42697353°N, 130.57028092°W
284: 54.42828616°N, 130.57060091°W
285: 54.42914860°N, 130.57084202°W
286: 54.43205396°N, 130.57157759°W
287: 54.43499426°N, 130.57245955°W
288: 54.43731493°N, 130.57315907°W
289: 54.44154318°N, 130.57459801°W
290: 54.44339456°N, 130.57530443°W
291: 54.44698142°N, 130.57664360°W
292: 54.44949565°N, 130.57779986°W
293: 54.45092821°N, 130.57857066°W
294: 54.45393905°N, 130.58023990°W
295: 54.45503612°N, 130.58095783°W
296: 54.45539299°N, 130.58123075°W
297: 54.45651571°N, 130.58191116°W
298: 54.45794524°N, 130.58284257°W
299: 54.46131010°N, 130.58499667°W
300: 54.46341455°N, 130.58607166°W
301: 54.46787210°N, 130.58769616°W
302: 54.47217880°N, 130.58855589°W
303: 54.47552736°N, 130.58879833°W
304: 54.47893494°N, 130.58858468°W
305: 54.48163531°N, 130.58842695°W
306: 54.48362484°N, 130.58825862°W
307: 54.48686534°N, 130.58803688°W
308: 54.48902264°N, 130.58789200°W
309: 54.49178881°N, 130.58758234°W
310: 54.49546894°N, 130.58714748°W
311: 54.49805862°N, 130.58686177°W
312: 54.50056332°N, 130.58654495°W
313: 54.50245212°N, 130.58631234°W
314: 54.50705180°N, 130.58552982°W
315: 54.50961122°N, 130.58508368°W
316: 54.51206602°N, 130.58466433°W
317: 54.51641493°N, 130.58381151°W
318: 54.51994959°N, 130.58301973°W
319: 54.52344008°N, 130.58216893°W
320: 54.52737914°N, 130.58124416°W
321: 54.53164596°N, 130.58013560°W
322: 54.53519841°N, 130.57914916°W
323: 54.54230393°N, 130.57588498°W
324: 54.54688700°N, 130.57250256°W
325: 54.55119154°N, 130.56868811°W
326: 54.55175272°N, 130.56838648°W
327: 54.55294113°N, 130.56747182°W
328: 54.55632500°N, 130.56554175°W
329: 54.55990147°N, 130.56456370°W
330: 54.56462767°N, 130.56440750°W
331: 54.56850006°N, 130.56521942°W
332: 54.56965340°N, 130.56555445°W
333: 54.57057969°N, 130.56586222°W
334: 54.57162520°N, 130.56633392°W
335: 54.57299950°N, 130.56709673°W
336: 54.57641975°N, 130.56915735°W
337: 54.57883245°N, 130.57128321°W
338: 54.58229184°N, 130.57537313°W
339: 54.58490255°N, 130.57864166°W
340: 54.58584284°N, 130.57938990°W
341: 54.58895823°N, 130.58048394°W
342: 54.59129922°N, 130.58086094°W
343: 54.59262885°N, 130.58138917°W
344: 54.59621977°N, 130.58433323°W
345: 54.60174698°N, 130.58862265°W
346: 54.60481918°N, 130.59094550°W
347: 54.60850855°N, 130.59376664°W
348: 54.61218612°N, 130.59659248°W
349: 54.61571967°N, 130.59929239°W
350: 54.62011651°N, 130.60256725°W
351: 54.62473539°N, 130.60603591°W
352: 54.62937571°N, 130.60950777°W
353: 54.63355539°N, 130.61266782°W
354: 54.63883523°N, 130.61669654°W
355: 54.64379183°N, 130.62069021°W
356: 54.64804292°N, 130.62406774°W
357: 54.65099441°N, 130.62696314°W
358: 54.65304456°N, 130.62950666°W
359: 54.65869916°N, 130.63476387°W
360: 54.66300599°N, 130.63738044°W
361: 54.66421348°N, 130.63841517°W
362: 54.66545488°N, 130.63946838°W
363: 54.66662201°N, 130.64056209°W
364: 54.66808900°N, 130.64194553°W
365: 54.66975105°N, 130.64365796°W
366: 54.67187461°N, 130.64580172°W
367: 54.67309607°N, 130.64712596°W
368: 54.67501452°N, 130.64934397°W
369: 54.67657917°N, 130.65120505°W
370: 54.67807182°N, 130.65293926°W
371: 54.67985769°N, 130.65518345°W
372: 54.68113250°N, 130.65687184°W
373: 54.68286409°N, 130.65893887°W
374: 54.68434304°N, 130.66087786°W
375: 54.68568024°N, 130.66292599°W
376: 54.68753088°N, 130.66593702°W
377: 54.68876448°N, 130.66806191°W
378: 54.69002403°N, 130.67006233°W
379: 54.69124308°N, 130.67167331°W
380: 54.69260550°N, 130.67376974°W
381: 54.69428611°N, 130.67618822°W
382: 54.69561645°N, 130.67838917°W
383: 54.69751462°N, 130.68151069°W
384: 54.69904006°N, 130.68421823°W
385: 54.70029042°N, 130.68647225°W
386: 54.70172501°N, 130.68911275°W
387: 54.70282676°N, 130.69125380°W
388: 54.70392244°N, 130.69350491°W
389: 54.70487700°N, 130.69543207°W
390: 54.70551547°N, 130.69669422°W
391: 54.70689046°N, 130.69940279°W
392: 54.70794182°N, 130.70147088°W
393: 54.70873544°N, 130.70313711°W
394: 54.70969214°N, 130.70528524°W
395: 54.71098430°N, 130.70786206°W
396: 54.71230194°N, 130.71066832°W
397: 54.71333612°N, 130.71285736°W
398: 54.71444316°N, 130.71516757°W
399: 54.71522983°N, 130.71686664°W
400: 54.71594677°N, 130.71860165°W
401: 54.71678457°N, 130.72182455°W
402: 54.71797120°N, 130.72642406°W
403: 54.71866986°N, 130.72905291°W
404: 54.71922513°N, 130.73127049°W
405: 54.71978699°N, 130.73296204°W
406: 54.72039756°N, 130.73470231°W
407: 54.72120529°N, 130.73666999°W
408: 54.72169069°N, 130.73798421°W
409: 54.72259163°N, 130.74034267°W
410: 54.72281320°N, 130.74174970°W
411: 54.72293154°N, 130.74264610°W
412: 54.72320206°N, 130.74427266°W
413: 54.72337663°N, 130.74507056°W
414: 54.72357276°N, 130.74593150°W

415: 54.72352651°N, 130.74633480°W
416: 54.72347083°N, 130.74651875°W
417: 54.72340295°N, 130.74661366°W
418: 54.72326193°N, 130.74679394°W
419: 54.72270927°N, 130.74853107°W
420: 54.72251882°N, 130.74908498°W
421: 54.72188674°N, 130.75059347°W
422: 54.72121256°N, 130.75190445°W
423: 54.72079246°N, 130.75267512°W
424: 54.72040347°N, 130.75346886°W
425: 54.71964745°N, 130.75509141°W
426: 54.71893642°N, 130.75701861°W
427: 54.71834789°N, 130.75886410°W
428: 54.71773878°N, 130.76076299°W
429: 54.71730435°N, 130.76226728°W
430: 54.71623753°N, 130.76676849°W
431: 54.71569140°N, 130.76920865°W
432: 54.71543377°N, 130.77047828°W
433: 54.71527888°N, 130.77123693°W
434: 54.71489519°N, 130.77319657°W
435: 54.71442950°N, 130.77578136°W
436: 54.71396461°N, 130.77849187°W
437: 54.71375226°N, 130.77991552°W
438: 54.71351775°N, 130.78174493°W
439: 54.71320169°N, 130.78422744°W
440: 54.71283550°N, 130.78724174°W
441: 54.71234698°N, 130.78885652°W
442: 54.71165365°N, 130.79088759°W
443: 54.71122596°N, 130.79257948°W
444: 54.71106415°N, 130.79628410°W
445: 54.71121243°N, 130.79786168°W
446: 54.71146014°N, 130.79952129°W
447: 54.71170840°N, 130.80078043°W
448: 54.71194546°N, 130.80212602°W
449: 54.71225531°N, 130.80371393°W
450: 54.71260273°N, 130.80549294°W
451: 54.71286317°N, 130.80683497°W
452: 54.71296294°N, 130.80755820°W
453: 54.71322967°N, 130.81094515°W
454: 54.71322486°N, 130.81198820°W
455: 54.71322540°N, 130.81315413°W
456: 54.71308364°N, 130.81451863°W
457: 54.71264633°N, 130.81593047°W
458: 54.71224948°N, 130.81728043°W
459: 54.71201230°N, 130.81865148°W
460: 54.71191861°N, 130.81986284°W
461: 54.71232961°N, 130.82194134°W
462: 54.71294599°N, 130.82333050°W
463: 54.71349623°N, 130.82451490°W
464: 54.71391276°N, 130.82538593°W
465: 54.71476477°N, 130.82765832°W
466: 54.71531271°N, 130.82958797°W
467: 54.71566557°N, 130.83104154°W
468: 54.71588619°N, 130.83232305°W
469: 54.71604328°N, 130.83423827°W
470: 54.71602142°N, 130.83550419°W
471: 54.71591862°N, 130.83694966°W
472: 54.71581756°N, 130.83798377°W
473: 54.71565969°N, 130.83967980°W
474: 54.71551028°N, 130.84099583°W
475: 54.71531354°N, 130.84264505°W
476: 54.71503136°N, 130.84494555°W
477: 54.71494365°N, 130.84604233°W
478: 54.71500446°N, 130.84824506°W
479: 54.71541054°N, 130.85173198°W
480: 54.71568797°N, 130.85351612°W
481: 54.71589321°N, 130.85473029°W
482: 54.71605265°N, 130.85594084°W
483: 54.71621293°N, 130.85785786°W
484: 54.71652033°N, 130.86061229°W
485: 54.71689752°N, 130.86227225°W
486: 54.71726211°N, 130.86322986°W
487: 54.71764623°N, 130.86408592°W
488: 54.71790566°N, 130.86451705°W
489: 54.71853827°N, 130.86552118°W
490: 54.71911878°N, 130.86623104°W
491: 54.71977294°N, 130.86682785°W
492: 54.72027524°N, 130.86718788°W
493: 54.72074391°N, 130.86751378°W
494: 54.72118051°N, 130.86764565°W
495: 54.72190878°N, 130.86798195°W
496: 54.72247865°N, 130.86827369°W
497: 54.72305735°N, 130.86857518°W
498: 54.72394543°N, 130.86927292°W
499: 54.72435979°N, 130.86979824°W
500: 54.72486167°N, 130.87041768°W
501: 54.72531228°N, 130.87115590°W
502: 54.72595997°N, 130.87246074°W
503: 54.72667552°N, 130.87402656°W
504: 54.72731114°N, 130.87576112°W
505: 54.72807300°N, 130.87804826°W
506: 54.72902710°N, 130.88074509°W
507: 54.72970097°N, 130.88244126°W
508: 54.73064430°N, 130.88437985°W
509: 54.73209357°N, 130.88724758°W
510: 54.73314147°N, 130.88921923°W
511: 54.73410333°N, 130.89071167°W
512: 54.73543175°N, 130.89261737°W
513: 54.73627831°N, 130.89395081°W
514: 54.73727536°N, 130.89548862°W
515: 54.73824404°N, 130.89705780°W
516: 54.73874320°N, 130.89801477°W
517: 54.73925660°N, 130.89915264°W
518: 54.73973981°N, 130.90038078°W
519: 54.74016457°N, 130.90178176°W
520: 54.74081810°N, 130.90360985°W
521: 54.74168507°N, 130.90609587°W
522: 54.74213903°N, 130.90735076°W
523: 54.74293152°N, 130.90948231°W
524: 54.74379681°N, 130.91166866°W
525: 54.74534982°N, 130.91526880°W
526: 54.74708690°N, 130.91904574°W
527: 54.74840053°N, 130.92162978°W
528: 54.74962343°N, 130.92426407°W
529: 54.75117370°N, 130.92744864°W
530: 54.75196302°N, 130.92902304°W
531: 54.75279051°N, 130.93090857°W
532: 54.75366130°N, 130.93295165°W
533: 54.75429957°N, 130.93491846°W
534: 54.75479481°N, 130.93694688°W
535: 54.75536839°N, 130.93918890°W
536: 54.75603074°N, 130.94206000°W
537: 54.75651859°N, 130.94386910°W
538: 54.75712240°N, 130.94578794°W
539: 54.75788758°N, 130.94778764°W
540: 54.75849944°N, 130.94925782°W
541: 54.75912211°N, 130.95083736°W
542: 54.75995242°N, 130.95275024°W
543: 54.76072135°N, 130.95456543°W
544: 54.76209289°N, 130.95752581°W
545: 54.76325284°N, 130.96016994°W
546: 54.76394812°N, 130.96169739°W
547: 54.76513770°N, 130.96417221°W
548: 54.76659194°N, 130.96717301°W
549: 54.76803207°N, 130.97009718°W
550: 54.76955083°N, 130.97310156°W
551: 54.77125597°N, 130.97657857°W
552: 54.77315057°N, 130.98039164°W
553: 54.77472675°N, 130.98355199°W
554: 54.77555102°N, 130.98514413°W
555: 54.77736982°N, 130.98852046°W
556: 54.77913054°N, 130.99110428°W
557: 54.78040642°N, 130.99255723°W
558: 54.78245366°N, 130.99372787°W
559: 54.78451313°N, 130.99546535°W
560: 54.78647889°N, 130.99781586°W
561: 54.78793253°N, 130.99965914°W
562: 54.78921267°N, 131.00128400°W
563: 54.79232804°N, 131.00504373°W
564: 54.79483946°N, 131.00786869°W
565: 54.79845704°N, 131.01190334°W
566: 54.80259309°N, 131.01593964°W
567: 54.80673892°N, 131.01970495°W
568: 54.81004607°N, 131.02254983°W
569: 54.81337011°N, 131.02540226°W
570: 54.81691915°N, 131.02796448°W
571: 54.82105907°N, 131.03093353°W
572: 54.82546925°N, 131.03359452°W
573: 54.82950871°N, 131.03622186°W
574: 54.83236076°N, 131.03831185°W
575: 54.83593157°N, 131.04063307°W
576: 54.83734770°N, 131.04130254°W
577: 54.83796434°N, 131.04162178°W
578: 54.83997265°N, 131.04267477°W
579: 54.84133240°N, 131.04322161°W
580: 54.84294738°N, 131.04382500°W
581: 54.84452788°N, 131.04439399°W
582: 54.84677257°N, 131.04528636°W
583: 54.84850378°N, 131.04624630°W
584: 54.85005068°N, 131.04726086°W
585: 54.85131012°N, 131.04810514°W
586: 54.85254209°N, 131.04897924°W
587: 54.85420311°N, 131.05004809°W
588: 54.85543783°N, 131.05086481°W
589: 54.85694139°N, 131.05183546°W
590: 54.85878419°N, 131.05320983°W
591: 54.86056167°N, 131.05461841°W

592: 54.86256984°N, 131.05631000°W
593: 54.86449251°N, 131.05784780°W
594: 54.86598011°N, 131.05906747°W
595: 54.86994678°N, 131.06192707°W
596: 54.87157247°N, 131.06295305°W
597: 54.87343574°N, 131.06396165°W
598: 54.87669245°N, 131.06495742°W
599: 54.87892038°N, 131.06540031°W
600: 54.87998820°N, 131.06571840°W
601: 54.88080488°N, 131.06611097°W
602: 54.88180385°N, 131.06672491°W
603: 54.88315037°N, 131.06767317°W
604: 54.88500241°N, 131.06891714°W
605: 54.88747925°N, 131.07047083°W
606: 54.88879706°N, 131.07109823°W
607: 54.89023064°N, 131.07173629°W
608: 54.89080184°N, 131.07197457°W
609: 54.89196465°N, 131.07236176°W
610: 54.89308243°N, 131.07270143°W
611: 54.89428602°N, 131.07301590°W
612: 54.89546637°N, 131.07332295°W
613: 54.89657538°N, 131.07359673°W
614: 54.89749377°N, 131.07397926°W
615: 54.89810830°N, 131.07436489°W
616: 54.89872823°N, 131.07480229°W
617: 54.90000454°N, 131.07564780°W
618: 54.90068109°N, 131.07598053°W
619: 54.90196201°N, 131.07650348°W
620: 54.90299036°N, 131.07665781°W
621: 54.90339011°N, 131.07661911°W
622: 54.90375215°N, 131.07657848°W
623: 54.90425992°N, 131.07611013°W
624: 54.90520684°N, 131.07445386°W
625: 54.90551958°N, 131.07366813°W
626: 54.90593634°N, 131.07279101°W
627: 54.90629044°N, 131.07210878°W
628: 54.90756501°N, 131.07036931°W
629: 54.90842687°N, 131.07006099°W
630: 54.90902596°N, 131.07014010°W
631: 54.90938207°N, 131.07018334°W
632: 54.91189072°N, 131.07002818°W
633: 54.91290536°N, 131.06966837°W
634: 54.91389049°N, 131.06887795°W
635: 54.91520156°N, 131.06763143°W
636: 54.91580261°N, 131.06733146°W
637: 54.91650139°N, 131.06725651°W
638: 54.91743662°N, 131.06776011°W
639: 54.91796544°N, 131.06816486°W
640: 54.91832433°N, 131.06846727°W
641: 54.91909141°N, 131.06913238°W
642: 54.91995788°N, 131.06981978°W
643: 54.92114756°N, 131.07063462°W
644: 54.92202479°N, 131.07121809°W
645: 54.92269005°N, 131.07168613°W
646: 54.92742110°N, 131.07245376°W
647: 54.92956383°N, 131.07277780°W
648: 54.93160122°N, 131.07311207°W
649: 54.93326586°N, 131.07337724°W
650: 54.93378187°N, 131.07347873°W
651: 54.93561127°N, 131.07383359°W
652: 54.93724751°N, 131.07418322°W
653: 54.93952306°N, 131.07467666°W
654: 54.94127248°N, 131.07503064°W
655: 54.94323609°N, 131.07547375°W
656: 54.94607586°N, 131.07635090°W
657: 54.94946143°N, 131.07758428°W
658: 54.95235216°N, 131.07900160°W
659: 54.95438118°N, 131.08003411°W
660: 54.95616451°N, 131.08097906°W
661: 54.95746165°N, 131.08181305°W
662: 54.95782682°N, 131.08206154°W
663: 54.95912109°N, 131.08295793°W
664: 54.96014613°N, 131.08367173°W
665: 54.96126767°N, 131.08441869°W
666: 54.96232127°N, 131.08530120°W
667: 54.96363065°N, 131.08641573°W
668: 54.96640284°N, 131.08871077°W
669: 54.96894457°N, 131.09123321°W
670: 54.97036716°N, 131.09266025°W
671: 54.97163802°N, 131.09392012°W
672: 54.97325100°N, 131.09551196°W
673: 54.97511105°N, 131.09742154°W
674: 54.97648095°N, 131.09877283°W
675: 54.97787589°N, 131.10007864°W
676: 54.97912410°N, 131.10092835°W
677: 54.98103429°N, 131.10258477°W
678: 54.98236121°N, 131.10371538°W
679: 54.98405249°N, 131.10493078°W
680: 54.98708939°N, 131.10702491°W
681: 54.99184503°N, 131.11009437°W
682: 54.99618929°N, 131.11226270°W
683: 54.99926120°N, 131.11404248°W
684: 55.00251672°N, 131.11616840°W
685: 55.00462958°N, 131.11809838°W
686: 55.00597362°N, 131.11937341°W
687: 55.00940853°N, 131.12259815°W
688: 55.01029550°N, 131.12348490°W
689: 55.01149203°N, 131.12440214°W
690: 55.01304143°N, 131.12523800°W
691: 55.01466648°N, 131.12611703°W
692: 55.01760945°N, 131.12749769°W
693: 55.02084891°N, 131.12888488°W
694: 55.02428703°N, 131.12970551°W
695: 55.02845595°N, 131.13078101°W
696: 55.03441738°N, 131.13251065°W
697: 55.03825268°N, 131.13364413°W
698: 55.04351297°N, 131.13527159°W
699: 55.04823952°N, 131.13745032°W
700: 55.05185454°N, 131.13884068°W
701: 55.05416234°N, 131.13968399°W
702: 55.05673806°N, 131.14031936°W
703: 55.06039303°N, 131.14076500°W
704: 55.06296209°N, 131.14142054°W
705: 55.06463841°N, 131.14198463°W
706: 55.06732549°N, 131.14349242°W
707: 55.06839836°N, 131.14437993°W
708: 55.06989199°N, 131.14561895°W
709: 55.07113871°N, 131.14704533°W
710: 55.07214038°N, 131.14819708°W
711: 55.07305028°N, 131.14945518°W
712: 55.07449760°N, 131.15132807°W
713: 55.07552446°N, 131.15262863°W
714: 55.07672853°N, 131.15407352°W
715: 55.07784902°N, 131.15505966°W
716: 55.07916025°N, 131.15608589°W
717: 55.08098249°N, 131.15703472°W
718: 55.08279321°N, 131.15756780°W
719: 55.08493754°N, 131.15783998°W
720: 55.08657909°N, 131.15777483°W
721: 55.08821488°N, 131.15727372°W
722: 55.08980171°N, 131.15689844°W
723: 55.09138625°N, 131.15660137°W
724: 55.09285174°N, 131.15652983°W
725: 55.09431890°N, 131.15641448°W
726: 55.09583392°N, 131.15659168°W
727: 55.09851179°N, 131.15718891°W
728: 55.10068064°N, 131.15759890°W
729: 55.10263319°N, 131.15834529°W
730: 55.10504490°N, 131.15920119°W
731: 55.10682212°N, 131.16030516°W
732: 55.10855063°N, 131.16136741°W
733: 55.11008451°N, 131.16250703°W
734: 55.11232730°N, 131.16442049°W
735: 55.11492153°N, 131.16724232°W
736: 55.11723527°N, 131.16955846°W
737: 55.11986318°N, 131.17224950°W
738: 55.12204622°N, 131.17458108°W
739: 55.12445574°N, 131.17711346°W
740: 55.12660849°N, 131.17937491°W
741: 55.12942188°N, 131.18253857°W
742: 55.13212296°N, 131.18559458°W
743: 55.13523027°N, 131.18884896°W
744: 55.13906745°N, 131.19284840°W
745: 55.14369909°N, 131.19874090°W
746: 55.14664298°N, 131.20291265°W
747: 55.14939622°N, 131.20713101°W
748: 55.15006354°N, 131.20830106°W
749: 55.15443189°N, 131.21597976°W
750: 55.15657483°N, 131.22071537°W
751: 55.15803658°N, 131.22380917°W
752: 55.15941570°N, 131.22723927°W
753: 55.16067243°N, 131.23032837°W
754: 55.16222503°N, 131.23369954°W
755: 55.16321802°N, 131.23547742°W
756: 55.16434120°N, 131.23706643°W
757: 55.16544652°N, 131.23845197°W
758: 55.16716073°N, 131.23976811°W
759: 55.16923150°N, 131.24207639°W
760: 55.17036582°N, 131.24364133°W
761: 55.17187696°N, 131.24704765°W
762: 55.17291862°N, 131.24924679°W
763: 55.17437627°N, 131.25155117°W
764: 55.17567144°N, 131.25354971°W
765: 55.17725887°N, 131.25563715°W
766: 55.17787437°N, 131.25642584°W
767: 55.17859004°N, 131.25796942°W
768: 55.17927724°N, 131.25959313°W

769: 55.17973733°N, 131.26018149°W
770: 55.18035498°N, 131.26065942°W
771: 55.18117260°N, 131.26140472°W
772: 55.18207758°N, 131.26257598°W
773: 55.18295030°N, 131.26417745°W
774: 55.18358901°N, 131.26589138°W
775: 55.18370071°N, 131.26645852°W
776: 55.18437648°N, 131.26898050°W
777: 55.18547125°N, 131.27216736°W
778: 55.18635209°N, 131.27510969°W
779: 55.18729285°N, 131.27840121°W
780: 55.18849151°N, 131.28308389°W
781: 55.18938791°N, 131.28695612°W
782: 55.19106599°N, 131.29456724°W
783: 55.19235811°N, 131.29850364°W
784: 55.19335352°N, 131.30077176°W
785: 55.19540520°N, 131.30355510°W
786: 55.19769641°N, 131.30464913°W
787: 55.19910497°N, 131.30597829°W
788: 55.19970671°N, 131.30752488°W
789: 55.20067141°N, 131.31074111°W
790: 55.20216705°N, 131.31543576°W
791: 55.20333529°N, 131.31871451°W
792: 55.20556975°N, 131.32448077°W
793: 55.20677257°N, 131.32725440°W
794: 55.20838903°N, 131.33119198°W
795: 55.21007439°N, 131.33490441°W
796: 55.21241449°N, 131.33981102°W
797: 55.21390830°N, 131.34374877°W
798: 55.21555646°N, 131.34909356°W
799: 55.21668879°N, 131.35423382°W
800: 55.21793510°N, 131.36104458°W
801: 55.21845032°N, 131.36507185°W
802: 55.21862074°N, 131.36763851°W
803: 55.21906503°N, 131.37225134°W
804: 55.21976378°N, 131.37509799°W
805: 55.22066682°N, 131.37802140°W
806: 55.22213666°N, 131.38183578°W
807: 55.22372864°N, 131.38633866°W
808: 55.22444502°N, 131.38845258°W
809: 55.22559996°N, 131.39272374°W
810: 55.22615298°N, 131.39546025°W
811: 55.22701043°N, 131.39953461°W
812: 55.22820552°N, 131.40521479°W
813: 55.22960795°N, 131.41057915°W
814: 55.23100412°N, 131.41533957°W
815: 55.23213915°N, 131.41920839°W
816: 55.23339805°N, 131.42280814°W
817: 55.23415529°N, 131.42496035°W
818: 55.23636734°N, 131.43196440°W
819: 55.23677430°N, 131.43409398°W
820: 55.23728346°N, 131.43866494°W
821: 55.23763873°N, 131.44179981°W
822: 55.23816533°N, 131.44450007°W
823: 55.24095339°N, 131.45186077°W
824: 55.24240518°N, 131.45404733°W
825: 55.24351323°N, 131.45499982°W
826: 55.24356900°N, 131.45504259°W
827: 55.24542096°N, 131.45632580°W
828: 55.24712465°N, 131.45715942°W
829: 55.24871210°N, 131.45782859°W
830: 55.24986911°N, 131.45840199°W
831: 55.25048768°N, 131.45884145°W
832: 55.25145544°N, 131.45948347°W
833: 55.25242126°N, 131.46013169°W
834: 55.25396244°N, 131.46113342°W
835: 55.25610582°N, 131.46262730°W
836: 55.25664969°N, 131.46329364°W
837: 55.25730357°N, 131.46483242°W
838: 55.25860371°N, 131.46739501°W
839: 55.26041091°N, 131.47003961°W
840: 55.26162275°N, 131.47172035°W
841: 55.26348986°N, 131.47446510°W
842: 55.26455910°N, 131.47577203°W
843: 55.26688070°N, 131.47852975°W
844: 55.26794127°N, 131.47981905°W
845: 55.26981509°N, 131.48213682°W
846: 55.27083887°N, 131.48320045°W
847: 55.27173063°N, 131.48399296°W
848: 55.27299210°N, 131.48512507°W
849: 55.27363882°N, 131.48581103°W
850: 55.27447926°N, 131.48695945°W
851: 55.27516390°N, 131.48794543°W
852: 55.27546391°N, 131.48844130°W
853: 55.27591541°N, 131.48931039°W
854: 55.27632478°N, 131.49004145°W
855: 55.27667864°N, 131.49076117°W
856: 55.27767018°N, 131.49353172°W
857: 55.27843561°N, 131.49685039°W
858: 55.27852123°N, 131.49868402°W
859: 55.27793975°N, 131.50315268°W
860: 55.27796432°N, 131.50878535°W
861: 55.27842561°N, 131.51140014°W
862: 55.27890329°N, 131.51264916°W
863: 55.27962928°N, 131.51401783°W
864: 55.28007009°N, 131.51469924°W
865: 55.28065234°N, 131.51571402°W
866: 55.28118256°N, 131.51663577°W
867: 55.28212319°N, 131.51766385°W
868: 55.28260989°N, 131.51755765°W
869: 55.28315970°N, 131.51726803°W
870: 55.28341798°N, 131.51707965°W
871: 55.28379184°N, 131.51673478°W
872: 55.28431124°N, 131.51595813°W
873: 55.28464631°N, 131.51544542°W
874: 55.28507922°N, 131.51472155°W
875: 55.28544135°N, 131.51420423°W
876: 55.28591103°N, 131.51344012°W
877: 55.28631051°N, 131.51276764°W
878: 55.28669589°N, 131.51203755°W
879: 55.28699195°N, 131.51141048°W
880: 55.28739796°N, 131.51050684°W
881: 55.28748848°N, 131.51030150°W
882: 55.28785695°N, 131.50934348°W
883: 55.28825633°N, 131.50836850°W
884: 55.28875938°N, 131.50724725°W
885: 55.28909616°N, 131.50669357°W
886: 55.28996271°N, 131.50559834°W
887: 55.29044620°N, 131.50529802°W
888: 55.29079903°N, 131.50514384°W
889: 55.29103726°N, 131.50509899°W
890: 55.29122823°N, 131.50507952°W
891: 55.29147591°N, 131.50509986°W
892: 55.29178231°N, 131.50523731°W
893: 55.29232357°N, 131.50575661°W
894: 55.29284248°N, 131.50635801°W
895: 55.29311605°N, 131.50686833°W
896: 55.29332714°N, 131.50735738°W
897: 55.29350350°N, 131.50783008°W
898: 55.29370856°N, 131.50848102°W
899: 55.29383414°N, 131.50906237°W
900: 55.29394865°N, 131.50970131°W
901: 55.29404783°N, 131.51029832°W
902: 55.29421424°N, 131.51147301°W
903: 55.29427825°N, 131.51220644°W
904: 55.29434692°N, 131.51301894°W
905: 55.29440697°N, 131.51376945°W
906: 55.29445006°N, 131.51468903°W
907: 55.29450841°N, 131.51539061°W
908: 55.29460270°N, 131.51705228°W
909: 55.29463729°N, 131.51877477°W
910: 55.29457702°N, 131.51973507°W
911: 55.29448012°N, 131.52081435°W
912: 55.29433970°N, 131.52147655°W
913: 55.29412823°N, 131.52200978°W
914: 55.29391136°N, 131.52245601°W
915: 55.29365983°N, 131.52292682°W
916: 55.29333312°N, 131.52355512°W
917: 55.29296859°N, 131.52436058°W
918: 55.29274759°N, 131.52487584°W
919: 55.29233579°N, 131.52587991°W
920: 55.29205503°N, 131.52684976°W
921: 55.29197880°N, 131.52770973°W
922: 55.29194668°N, 131.52826218°W
923: 55.29193870°N, 131.52929820°W
924: 55.29201391°N, 131.53070024°W
925: 55.29204418°N, 131.53097469°W
926: 55.29206604°N, 131.53126436°W
927: 55.29209141°N, 131.53160151°W
928: 55.29212337°N, 131.53196743°W
929: 55.29216403°N, 131.53239062°W
930: 55.29223729°N, 131.53267253°W
931: 55.29224199°N, 131.53322575°W
932: 55.29228186°N, 131.53368670°W
933: 55.29230266°N, 131.53419999°W
934: 55.29232817°N, 131.53466003°W
935: 55.29234865°N, 131.53501577°W
936: 55.29238281°N, 131.53514555°W
937: 55.29243020°N, 131.53537384°W
938: 55.29247617°N, 131.53571388°W
939: 55.29248781°N, 131.53588948°W
940: 55.29250582°N, 131.53606076°W
941: 55.29261276°N, 131.53675441°W
942: 55.29333141°N, 131.53816136°W
943: 55.29354040°N, 131.53844251°W

NOTICE TO MARINERS

Issued By:

CENTER FOR OPERATIONAL OCEANOGRAPHIC
PRODUCTS & SERVICES

1305 East-West Highway, N/OPS3
Silver Spring, MD 20910-3281
301-713-2815
Tide.Predictions@noaa.gov
https://tidesandcurrents.noaa.gov

NOAA is Discontinuing the Printed Tide Tables and Tidal Current Tables.

NOAA is ending the production of the printed Tide Tables and Tidal Current Tables publications.
The 2020 Tide Tables and Tidal Current Tables were the final printed editions.
There will not be NOAA printed Tide Tables and Tidal Current Tables publications for 2021.

NOAA is discontinuing the production of these annual publications due to: (a) recent changes by the U.S. Coast Guard in the interpretation of the requirements for predictions, no longer requiring these publications in paper format and (b) the availability of online and electronic services providing tide and tidal current predictions which meet the U.S. Coast Guard requirements for navigation, and support other activities along the U.S. coast.

Tide and Tidal Current predictions are available through NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) online services:

- NOAA Tide Predictions: https://tidesandcurrents.noaa.gov/tide_predictions.html
- NOAA Current Predictions: https://tidesandcurrents.noaa.gov/noaacurrents/Regions

These online services provide predictions which equal or exceed the accuracy and availability of the predictions for domestic locations provided through printed publications, and provide additional capabilities allowing the predictions to better meet a variety of user needs. These online services provide predictions for the U.S. coasts. International predictions will not be available from the online services. Predictions for countries outside the U.S. may be obtained through the Oceanographic / Hydrographic agency in that country.

Contact NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) with questions or for further information.
E-mail: Tide.Predictions@noaa.gov
Phone: 301-713-2815

Issued: November 1, 2020

Launch dates/times and NOTMAR and water area restrictions for Astra – P128

Mission P128 will launch from Alaska Aerospace's Pacific Spaceport Complex Alaska (PSCA) Launch Pad LP-3B at Narrow Cape, Kodiak, Alaska with a window of 07 December - 18 December 2020 (local).

Each day will have a launch time window of 1000 – 1330 hours Alaska Standard Time (1900 – 2230 hours UTC), which encompasses debris times, on a launch azimuth of approximately 195 degrees.

The launch window, encompassing 30-minutes for debris, will be:

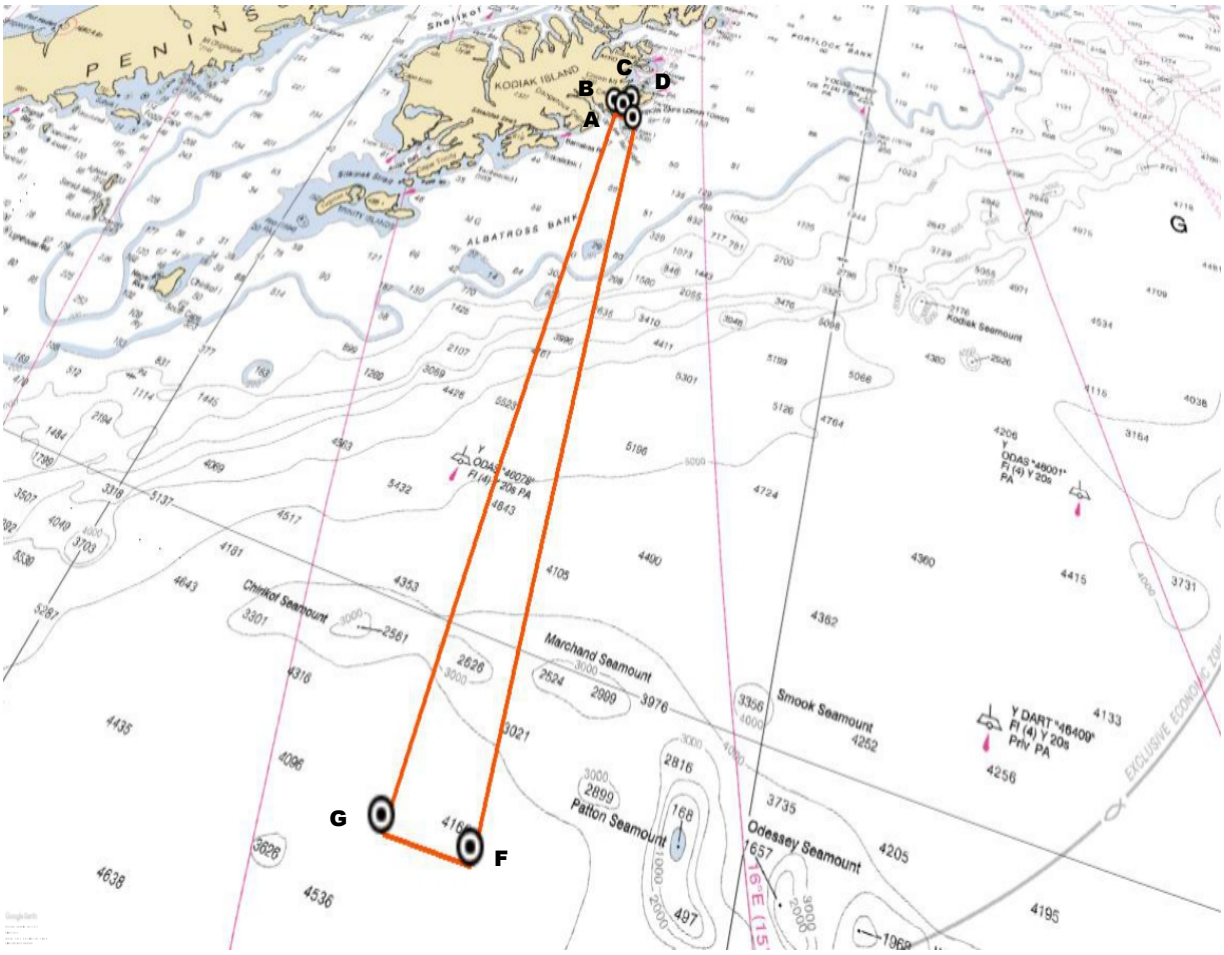
P128 MISSION LAUNCH WINDOW			
EVENT	**ZULU (UTC)**	**LOCAL DATE**	**LOCAL TIME**
Primary Launch Day	071900 DEC - 072230 DEC 2020	07 DEC 2020	1000 – 1330
Backup Day #1	081900 DEC - 082230 DEC 2020	08 DEC 2020	1000 – 1330
Backup Day #2	091900 DEC - 092230 DEC 2020	09 DEC 2020	1000 – 1330
Backup Day #3	101900 DEC - 102230 DEC 2020	10 DEC 2020	1000 – 1330
Backup Day #4	111900 DEC - 112230 DEC 2020	11 DEC 2020	1000 – 1330
Backup Day #5	121900 DEC - 122230 DEC 2020	12 DEC 2020	1000 – 1330
Backup Day #6	131900 DEC - 132230 DEC 2020	13 DEC 2020	1000 – 1330
Backup Day #7	141900 DEC - 142230 DEC 2020	14 DEC 2020	1000 – 1330
Backup Day #8	151900 DEC - 152230 DEC 2020	15 DEC 2020	1000 – 1330
Backup Day #9	161900 DEC - 162230 DEC 2020	16 DEC 2020	1000 – 1330
Backup Day #10	171900 DEC - 172230 DEC 2020	17 DEC 2020	1000 – 1330
Backup Day #11	181900 DEC - 182230 DEC 2020	18 DEC 2020	1000 – 1330

Alaska Aerospace respectfully recommends implementing a simplified 7-point polygon which encompasses the hazard area:

P128 RECOMMENDED NOTMAR POLYGON FOR UPRANGE AREA				
	LATITUDE		**LONGITUDE**	
POINT	**DEG**		**DEG**	
A	57.4260	N	152.5023	W
B	57.4419	N	152.4949	W
C	57.4290	N	152.3477	W
D	57.4855	N	152.2935	W
E	57.4419	N	152.1030	W
F	54.6597	N	153.4704	W
G	54.6778	N	153.7256	W
A	57.4260	N	152.5023	W

Graphical Depiction of Recommended Uprange Area NOTMAR Polygon

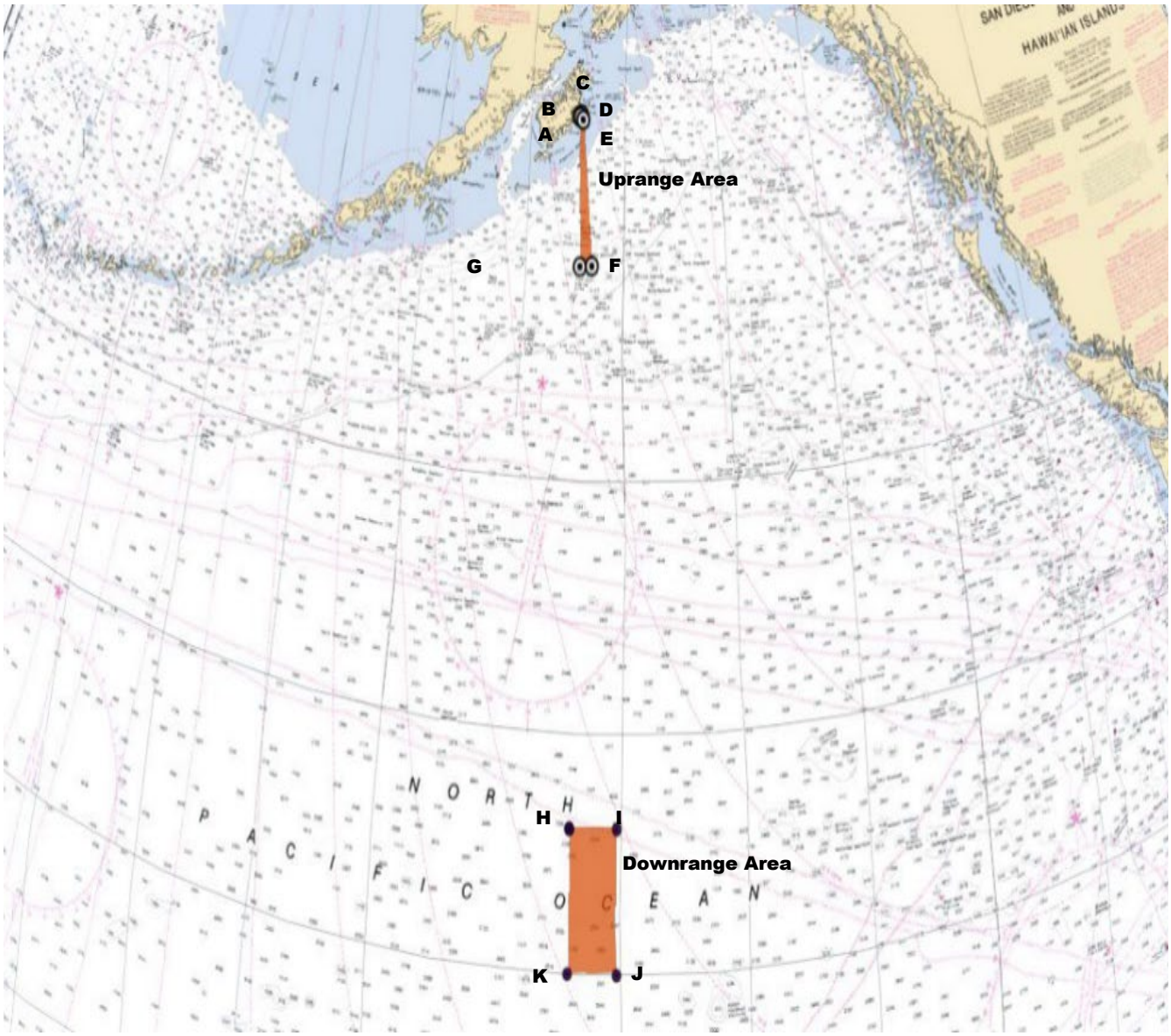
The launch vehicle operator provided downrange hazard area is a simple 4-point polygon. As such, Alaska Aerospace recommends using it as provided:



P128 RECOMMENDED NOTMAR POLYGON FOR DOWNRANGE AREA				
	LATITUDE		LONGITUDE	
POINT	DEG		DEG	
H	44.8238	N	158.9077	W
I	44.3053	N	156.1578	W
J	40.6646	N	157.4061	W
K	41.2610	N	160.1399	W
H	44.8238	N	158.9077	W

The following graphic provides a representative view of the water affected area for both areas.

Graphical Depiction of Uprange and Downrange Areas



AAC respectfully requests to inform all ships of the hazardous operations and to remain clear of this area for the duration of operations. Potential hazard risks are blast and debris, which are best managed by rerouting to stay out of the area.

The Primary POC is the PSCA Spaceport Manager:
Robert Green, robert.greene@akaerospace.com, office: 907-743-3539, cell: 907-229-2007.

The Secondary POC is the PSCA Operations Director (OD):
Shannon Edwards, shannon.edwards@akaerospace.com, cell: 509-713-4368.

U.S. Department of Homeland Security
United States Coast Guard

Commander
United States Coast Guard
Sector Anchorage

PO Box 5800
JBER, AK 99505
Staff Symbol: s
Phone: 907-428-4200
FAX: 907-428-4218

16710
November 20, 2020

CAPTAIN OF THE PORT, WESTERN ALASKA
NAVIGATION SAFETY ADVISORY

Dear Mariner:

Cold temperatures are causing a significant buildup of ice in the upper Cook Inlet that poses extreme danger to vessels. To assist mariners, we are implementing the **Operating Guidelines for Ice Conditions for Upper Cook Inlet**, **effective November 20, 2020**. These guidelines were updated and signed on November 5, 2020.

All vessels scheduled to arrive in areas north of Homer, AK in Cook Inlet must submit a voyage plan no less than 24 hours prior to arrival at the Kachemak Bay Pilot Station. We have posted a voyage plan template and the Guidelines referenced above to the Sector Anchorage Homeport webpage.

Sector Anchorage Homeport webpage:
https://homeport.uscg.mil/port-directory/western-alaska-(anchorage)

While use of the voyage plan template is not mandatory, your voyage plan must include all information listed in the template. Voyage plans must be e-mailed to Sector.Anchorage@uscg.mil. Based on information in your voyage plan, we will determine if the vessel needs an exam prior to entry into Cook Inlet and will notify the submitter if an exam is required. Vessel agents can coordinate with Marine Safety Detachment Homer at (907) 235-3292 to schedule an exam.

The National Weather Service's Cook Inlet Sea Ice analysis:
https://www.weather.gov/afc/ice

Please direct questions regarding this advisory, or the Guidelines referenced above, to the Sector Anchorage Waterways Management Division at (907) 428-4189 or after hours (907) 428-4100.

Sincerely,

L. M. LUSK
Captain, U. S. Coast Guard
Captain of the Port, Western Alaska

Copy: Commander, Seventeenth Coast Guard District (dp)

Marine Safety Information Bulletin

Commandant
U.S. Coast Guard
Waterways Policies and Activities Division (WWM-1)
2703 Martin Luther King Jr Ave SE, STOP 7501
Washington, DC 20593-7501

MSIB Number: 17-20
Date: 06/03/2020
Contact: LCDR John Downing
Phone: (202) 372-1568
E-Mail: cgwwm@uscg.mil

On-Water Mass Gatherings – Recreational, Sporting, or Cause-Related Events

On-water mass gatherings pose concerns due to the safety issues they create for the boating public and the Maritime Transportation System (MTS). Regardless of the nature of these gatherings, whether recreational, sporting or cause-related, they are primarily a boating safety issue. As these types of marine events continue to grow in popularity throughout the country, the Coast Guard will work together with its port partners to ensure the safety on the marine transportation system. These actions will take into account health and safety factors including but not limited to local COVID-19 and social distance guidelines as well as current unrest.

The Coast Guard issues permits for, and monitors marine events, to ensure safety of life at sea and on our waterways. Permits are required for powerboat races, sailing regattas, and other marine events that have the potential to draw an accumulation of spectator craft, may obstruct a waterway, or introduce extra or unusual hazards to the safety of human life on the navigable waters of the United States. A large gathering of recreational boaters would not necessarily meet the requirement for an event permit. It is recommended you contact your local Captain of the Port to determine if your event will require a permit.

The Coast Guard and our port partners are committed to ensuring the safety and security of the waterway. The Coast Guard and other local agencies will provide on-water safety and law enforcement assets. The goal of these patrols is to ensure mariners using the waterway are not negatively impacted due to the anticipated increase in vessel traffic and to ensure that commercial traffic can safely continue operations.

Regardless of the nature of the event, the Coast Guard's role is to ensure the safety and security of the maritime transportation system. The presence of the Coast Guard and its partners on the waterway is not to support the event itself, but to ensure the waterway is safe for all mariners due to the anticipated increase in traffic.

Boating accidents can occur quickly and without warning. To ensure a safe and enjoyable time on the water, the Coast Guard is asking boaters to ensure they have the necessary knowledge and safety equipment before getting underway. This includes a properly fitting life jacket for each passenger, a VHF radio, and flares. The Coast Guard regularly conducts recreational boating safety checks. Failure to have the necessary safety equipment may result in the termination of a voyage. Having the basic equipment can ensure a safe and enjoyable day on the water.

It is recommended participants in the event, and mariners in general, follow guidance from the CDC and local government health authorities to prevent the spread of coronavirus, including social distancing and the use of face coverings when social distance cannot be maintained.

Questions concerning this notice may be forwarded to Coast Guard Office of Waterways Policies and Activities Division (CG-WWM-1) by email to cgwwm@uscg.mil.

-uscg-

This release has been issued for public information and notification purposes only.