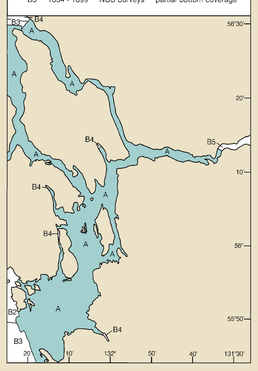
Formerly C&GS 8161, 1st Ed., Oct 1924 KAPP 2709

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A	1990 - 2009	NOS Surveys	full bottom coverage
B2	1970 - 1989	NOS Surveys	partial bottom coverage
B3	1940 - 1969	NOS Surveys	partial bottom coverage
B4	1900 - 1939	NOS Surveys	partial bottom coverage
B5	1834 - 1899	NOS Surveys	partial bottom coverage



CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

SCALE 1:80,000

Nautical Miles

Yards

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE COAST SURVEY

UNITED STATES

ALASKA - SOUTHEAST COAST

ERNEST SOUND - EASTERN PASSAGE AND ZIMOVIA STRAIT

Mercator Projection
Scale 1:80,000 at Lat 56° 08'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 1.268 " southward and 6.073 " westward to agree with this chart.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical; Al alternating; B black; Bn beacon; C can; DIA diaphone; F fixed; Fl flashing; G green; IQ interrupted quick; Iso isophase; LT HO lighthouse; M nautical mile; m minutes; MICRO TR microwave tower; Mkr marker; Mo morse code; N nun; OBSC obscured; Oc occulting; Or orange; Q quick; R red; Ra Ref radar reflector; R Bn radiobeacon; R TR radio tower; Rot rotating; s seconds; SEC sector; St M statute miles; VQ very quick; W white; WHIS whistle; Y yellow

Bottom characteristics:

Blds boulders; bk broken; Cy clay; Co coral; G gravel; Grs grass; gy gray; h hard; M mud; Oys oysters; Rk rock; S sand; so soft; Sh shells; sy sticky

Miscellaneous:

AUTH authorized; ED existence doubtful; PA position approximate; PD position doubtful; Rep reported; Subm submerged

21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings

HEIGHTS

Heights in feet above Mean High Water.

WIRE DRAGGED AREAS

The area tinted green was swept in 1916 for previously undetected dangers to navigation. All dangers found are shown on this chart.

LOG STORAGE AREAS CAUTION

The limits of log storage areas are variable and only known areas are shown on this chart. Mariners should exercise caution in these areas.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

The contour lines are hill shapes, sketched to afford the navigator a generalized indication of the character of the land forms. They should not be relied upon as lines of equal elevation.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 8 for important supplemental information.

COLREGS, 80.1705 (see note A)

International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 8. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOAA WEATHER RADIO BROADCASTS

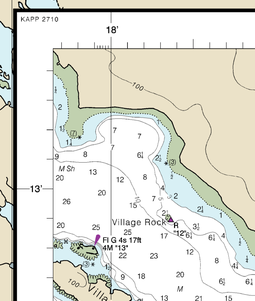
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Sukkwan I, AK	KZZ-89	162.425 MHz
Cape Fanshaw, AK	KZZ-88	162.425 MHz
Zarembo I, AK	KZZ-91	162.450 MHz
Gravina I, AK	KZZ-96	162.525 MHz
Duke I, AK	KZZ-92	162.450 MHz
Wrangell, AK	WXJ-83	162.400 MHz
Craig, AK	KXI-80	162.475 MHz
Ketchikan, AK	WXJ-26	162.550 MHz

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Wrangell	(56°28'N/132°23'W)	16.0	15.1	1.5

Dashes (- -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the internet from http://tidesandcurrents.noaa.gov.
(Nov 2011)



WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 10° from the normal variation have been observed in the eastern part of Union Bay, and a difference of 38° from normal has been observed at a small islet 0.8 mile southwest of Union Point.