Formerly CAGS 6161 - 1st Ed., May 1914 C-1910-01 KAPP 1737

COLUMBIA RIVER

PACIFIC OCEAN TO HARRINGTON POINT

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

OREGON - WASHINGTON

Mercator Projection
Scale 1:40,000 at Lat 46° 13'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS AND CLEARANCES OF BRIDGES
AND OVERHEAD CABLES IN FEET
AT MEAN LOWER LOW WATER

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

SCALE 1:40,000
Nautical Miles 0 1 2
Statute Miles 0 1 2 3
Yards 0 1000 2000 3000 4000 5000

SOURCE

A	1990-2011	NOS Surveys	full bottom coverage
B1	1990-2008	NOS Surveys	partial bottom coverage
B2	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
BS	Pre-1900	NOS Surveys	partial bottom coverage

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.

BAKER BAY WEST CHANNEL
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORTS TO SEP 2016

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	DEPTH (FEET)	WIDTH (MILES)
ENTRANCE BUOY 6	6	9	18	6/16	200	17	16
ENTRANCE TO FORT CANBY (0.7 - 1.9)	13	15	12	8/16	200	17	16
FT CANBY TO ILWACO (1.9 - 3.2)	15	15	12	8/16	150	13	16

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
(O)=Accurate location) o(A)=approximate location)

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations and requirements for use of the waterway may be obtained from the 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.
Refer to charted regulation section numbers.

NOTE B

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

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 in areas of depths of 10 fathoms or less and in all anchorage areas where pipelines and cables may exist, and when anchoring, dragging, or mooring.
Covered wells may be marked by lighted or unlighted buoys.

ILWACO HARBOR
Scale 1:20,000
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

FORT CANBY

SAND ISLAND
REGULATED NAVIGATION AREA 165.1325 (see note A)

SAND ISLAND RANGE (see tabulation)

LOWER DESDEMONA SHOAL (see tabulation)

TIDAL INFORMATION

PLACE NAME (LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
Columbia River Entrance (46°16'N/124°04'W)	7.5	6.8	1.2
Hwkin, Baker Bay (46°18'N/124°02'W)	7.5	6.8	1.0
Harrington Point (46°16'N/123°39'W)	7.1	7.0	0.9
Tongue Point (46°14'N/123°46'W)	7.3	7.0	1.2
Astoria, Tongue Point (46°12'N/123°46'W)	7.3	7.0	1.2
Chinook, Baker Bay (46°16'N/123°57'W)	8.1	7.4	1.3

Datties (–) located in datum columns indicate unreliable 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. (Sep 2016)

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
Bk black
Bn beacon
Bu blue
DIA diaphone
F fixed
Fl flashing
G green
Iso isophase
LT HO lighthouse
m meters
MICRO, Mi microwave tower
Mkr marker
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
Rb racon/beacon
R TR radio tower
Rot rotating
s second
SEC sector
Vi vertical stripes
VQ very quick
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds boulders
Cbl cobble
Cy clay
Grs grass
gr gray
h hard
m mud
Oys oysters
rk rock
s sand
so soft
Sh shells
sy stony

Miscellaneous:

ALOW advisorbot
ED existence doubtful
PA position approximate
PD position doubtful
Rep reported
Subm submerged

(O), Wreck, rock, obstruction, or kelp swept clear to the depth indicated.
(+) Rocks that cover and uncover, with heights in feet above datum of soundings.
COUNCOS International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: ———

CHANGEABLE AREAS

Areas outside of the Columbia River channel; limits are subject to frequent change.

CAUTION

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

NOTE B

Woody Island Channel is subject to continual change. Woody Island Channel Buoys 2, 4, & 5 are not charted because they are frequently shifted and are private.

CAUTION

Prairie Channel is subject to frequent change.

COLUMBIA RIVER TABULATION DIAGRAM

A Left outside quarter controlling depth (including widener)
B Left inside quarter controlling depth
C Right inside quarter controlling depth
D Right outside quarter controlling depth

COLUMBIA RIVER TABULATION DIAGRAM

Columbia River main channel - Controlling depths for outside quarters include the adjacent widener/filler when applicable.

COLUMBIA RIVER CHANNEL DEPTHS
ENTRANCE TO MILLER SANDS RANGE
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF
Controlling Depths in Feet at MEAN LOWER LOW WATER (MLLW) - SEE FOOTNOTE

NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	10-Sep-16 PROJECT DIMENSIONS Width (Feet)	Length (STAT. Miles)	Depth (Feet)
Entrance Range **	56	46	50	48	24-Aug-16	2000	3.3	55
"	"	"	"	"	24-Aug-16	1000	2.3	48
Sand Island Range **	53	53	50	48	24-Aug-16	600	3.3	48
"	"	"	"	"	24-Aug-16	1000	2.3	48
Lower Desdemona Sands	47	46	50	52	29-Jul-16	600	3.4	43
Upper Desdemona Sands	47	44	43	41	25-Aug-16	600	3.6	43
Tansy Point Turn 5, Range	46	42	45	35	25-Aug-16	600	4.8	43
Astoria Range	41	41	43	46	11-Aug-16	600	2.7	43
Tongue Point Channel	41	48	44	44	24-Aug-16	600	3.2	43
Tongue Point Turning Basin	41	48	44	44	5-Sep-16	600	2.9	43
Main Stem Columbia River (ATONs)	43	43	43	43	25-Aug-16	600	23	43

* Controlling Depths in Channels is/were lowering from Seaward in feet at Mean Lower Low Water from the Entrance to Harrington Point and Columbia River Datum (CRD) above that point.
For Controlling Depth Information, consult the Local Notice to Mariners and/or the following Portland District US Army Corps of Engineers website: http://www.nwp.usace.army.mil/Missions/Navigation.aspx. Channel status reports.
** Channel width is 2640 feet with two controlling depths, northern width is 2000 feet and southern width is 640 feet

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered identical to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.03" southward and 4.53" eastward to agree with this chart.

NOTE B

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

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.

SKIPANON WATERWAY

The controlling depth was 6 feet for a mid-width of 100 feet to the turning basin, thence 3 feet in the turning basin, thence 7 feet for a width of 100 feet to the end of the project.
Mar 2015 - Mar 2016

NOAA WEATHER RADIO BROADCASTS

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

Astoria, OR	KEC-91	162.400 MHz
Nosphaltres, OR	WWF-94	162.425 MHz
Tillamook, OR	WWF-95	162.475 MHz
Portland/Salmon Peak, WA	WXM-62	162.475 MHz

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

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

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

BASCULE BRIDGE CLEARANCES

For basculs bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

AIDS TO NAVIGATION

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

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).

STATUTE MILES
COLUMBIA RIVER

Mileage distances along the Columbia River are in Statute Miles. Distances along the Columbia River are eastward from the mouth, and are indicated thus: ——
Tables for converting Statute Miles to International Nautical Miles are given in Coast Pilot 7.

CHINOOK CHANNEL

The controlling depth was 7 feet for the mid-width of 75 feet Oct 2015

SCALE 1:40,000
Nautical Miles 0 1 2
Statute Miles 0 1 2
Yards 1000 2000 3000 4000 5000

CONTINUED ON CHART 18520

CONTINUED ON CHARTS 18525 AND 18580

CONTINUED ON CHART 18523

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notices to Mariners published after the dates shown in the lower left hand corner may not appear on new editions. nauticalcharts.noaa.gov

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.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

75th Ed., Nov. 2013. Last Correction: 12/7/2016. Cleared through:
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