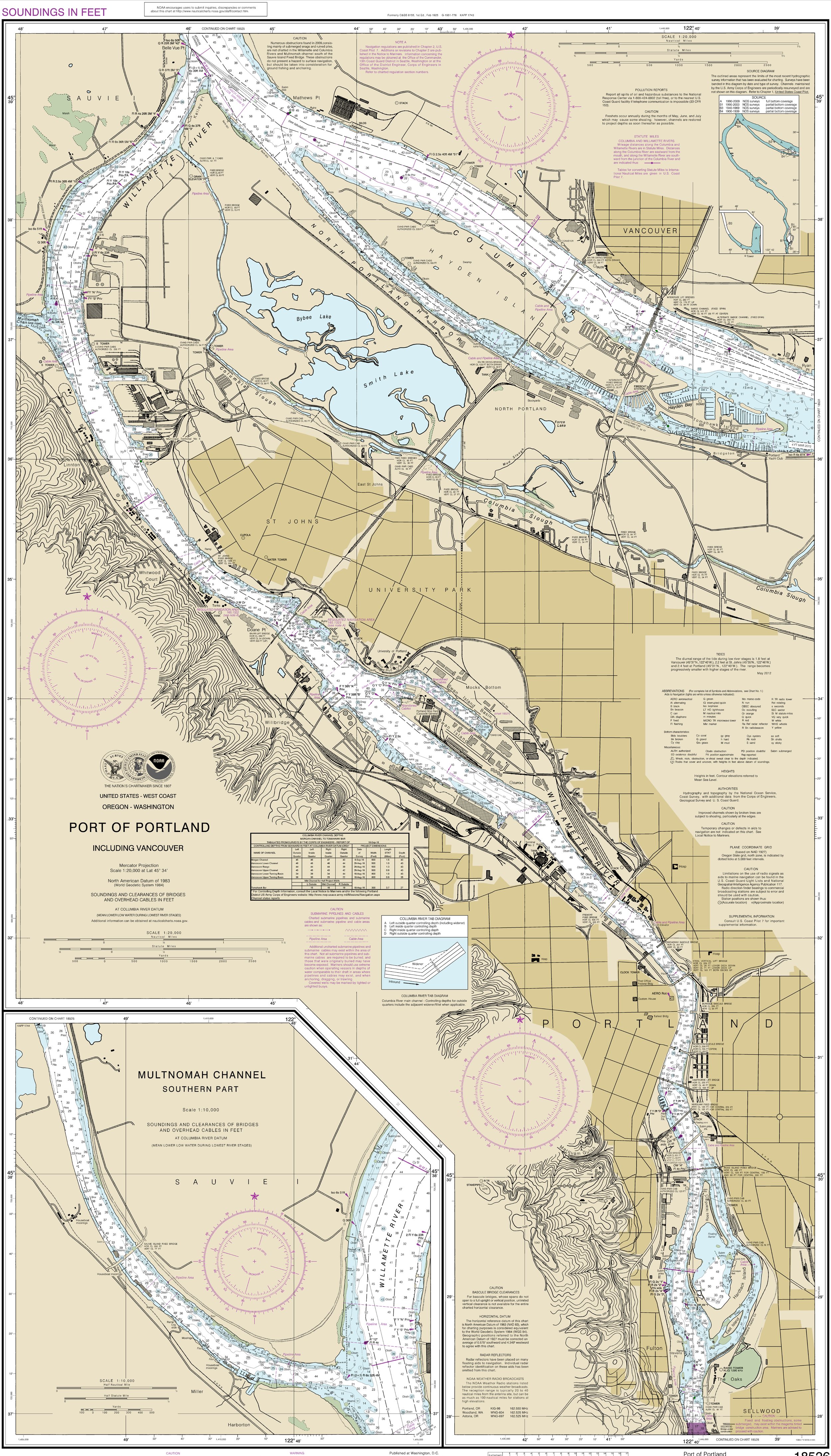
NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

Formerly C&GS 6155, 1st Ed., Feb 1925 G-1951-776 KAPP 1743



MULTNOMAH CHANNEL

SOUTHERN PART

Scale 1:10,000

SOUNDINGS AND CLEARANCES OF BRIDGES AND OVERHEAD CABLES IN FEET

AT COLUMBIA RIVER DATUM

(MEAN LOWER LOW WATER DURING LOWEST RIVER STAGES)

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

OREGON - WASHINGTON

PORT OF PORTLAND

INCLUDING VANCOUVER

Mercator Projection
Scale 1:20,000 at Lat 45° 34'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS AND CLEARANCES OF BRIDGES AND OVERHEAD CABLES IN FEET

AT COLUMBIA RIVER DATUM

(MEAN LOWER LOW WATER DURING LOWEST RIVER STAGES)

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

SCALE 1:20,000

Nautical Miles ½ 0 ½ 1 1½

Statute Miles ½ 0 ½ 1 1½

Yards 500 0 500 1000 1500 2000 2500

COLUMBIA RIVER CHANNEL DEPTHS MORGAN CHANNEL TO TOMAHAWK BAR TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF 16-Sep-16								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD)*					PROJECT DIMENSIONS			
NAME OF CHANNEL	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length STAT (Miles)	Depth (Feet)
Morgan Channel	45	46	47	43	6-Sep-16	600	1.5	43
Vancouver Lower Channel	46	48	46	44	29-Aug-16	500	1.0	43
Vancouver Range	44	44	44	39	29-Aug-16	500	1.3	43
Vancouver Upper Channel	45	45	43	42	29-Aug-16	500	0.9	43
Vancouver Lower Turning Basin	34	39	34	44	10-Aug-16	800	1.0	43
Vancouver Upper Turning Basin	36	30	25	22	10-Aug-16	800	0.9	35
	Mid Channel for Half Project Width							
		L Outside	Mid Channel	R Outside				
Tomahawk Bar		15	16	19	10-Aug-16	300	3.7	27

* 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

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.

COLUMBIA RIVER TAB 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 TAB DIAGRAM

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

TIDES

The diurnal range of the tide during low river stages is 1.8 feet at Vancouver (45°37'N., 122°40'W.), 2.2 feet at St. Johns (45°35'N., 122°46'W.) and 2.4 feet at Portland (45°31'N., 122°40'W.). The range becomes progressively smaller with higher stages of the river.

May 2012

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, 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, Obstn obstruction, PA position approximate, PD position doubtful, Rep reported, Subm submerged

(2) 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. Contour elevations referred to Mean Sea Level.

AUTHORITIES

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

CAUTION

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

CAUTION

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

PLANE COORDINATE GRID

(based on NAD 1927)
Oregon State grid, north zone, is indicated by dotted ticks at 5,000 feet intervals.

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:
⊙(Accurate location) o(Approximate location)

SUPPLEMENTAL INFORMATION

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

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 Notice to Mariners published after the dates shown in the lower left hand corner are available at 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.

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Port of Portland

SOUNDINGS IN FEET - SCALE 1:20,000

SOUNDINGS IN FEET

60th Ed., Jun. 2012. Last Correction: 12/5/2016. Cleared through:
LNM: 4816 (11/29/2016), NM: 5016 (12/10/2016), CHS: 1116 (11/25/2016)

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