18502 (formerly C&GS 6/95)

VHF WEATHER BROADCASTS FOR MARINERS

FM Station with frequency of 162.40 megahertz and range approximately 40 miles, is in continuous operation 24 hours daily broadcasting weather warnings, forecasts and reports from the NATIONAL WEATHER SERVICE Office as follows:

KEC-91 Astoria, Oregon

PLANE COORDINATE GRID

The Washington State plane coordinate grid, South Zone, is indicated on this chart at 10,000 foot intervals thus + 4 +. This grid is shown on the Westhaven Cove inset at 2,000 foot intervals. The last three digits are omitted.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7, or weekly Notice to Mariners which include new or revised regulations. Information concerning the regulations may be obtained at the Office of the District Engineer, Corps of Engineers in Seattle, Wash.

Anchorage regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Wash.

Refer to section numbers shown with area designation.

CAUTION

Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Hydrographic Center Publication H.O. 117 (A&B).

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)

CONTINUATION OF CHEHALIS RIVER

Scale 1:40,000

The controlling depth at mean lower low water was 9 feet to Montesano, Apr. 1943

NEW CHART NUMBERING SYSTEM

The National Ocean Survey, in cooperation with the Defense Mapping Agency Hydrographic Center, is in the process of adopting a new national chart numbering system. See Notice to Mariners No. 19, May 11, 1974, or Nautical Chart Catalog for cross references of old and new chart numbers.

WISHKAH RIVER BRIDGES

The two swing bridges and one bascule bridge crossing the Wishkah River have a horizontal clearance of 75 feet and a vertical clearance of 8 feet. The fixed bridge has a horizontal clearance of 75 feet and a vertical clearance of 16 feet.

GRAYS HARBOR - NORTH CHANNEL AND CHEHALIS RIVER

Corps of Engineers – reports to Aug 1974

Name of Channel	Controlling depths in channels entering from seaward in feet at Mean Lower Low Water: Left outside quarter	Middle half of channel	Right outside quarter	Date of Survey	Project Dimensions: Width (feet)	Length (naut. miles)	Depth M.L.L.W. (feet)
Sand I. Shoal Channel							
West Reach	31.1	31.4	30.5	7-74	350	1.2	30
East Reach	24.3	29.5	29.0	7-74	350	0.65	30
Crossover Channel	28.8	30.2	32.1	7-74	a350	1.9	30
Moon Island Reach	26.0	24.3	22.5	6.7-73, 7-74	a350	2.6	30
Hoquiam Reach	23.0	30.4	24.8	6.7-73	350	2.85	30
Cow Point Reach	25.0	30.1	27.6	6-73	350	0.6	30
Aberdeen Reach	28.3	29.5	29.5	5.6-73	200	1.1	30
West Turning Basin	24.3	28.3	29.5	5.6-73	600	0.17	30
Thence to the East Turning Basin	28.5	29.2	27.5	1-74	400 to 200	1.8	30
East Turning Basin	b15.9	26.2	30.0	1-74	350	0.2	0.2
East Turning Basin to Cosmopolis	28.1	28.4	28.3	1-74	200	0.3	30

a. Only the north 350 feet of the widener at the junction of Crossover Channel and Moon Island Reach is included in the depth tabulation; a depth of 23.9 feet was available in the remainder of the widener.

b. Controlling depth was located near the edge of the basin; a depth of 21.4 feet was available in the inside half of the quarter.

Note.–The Corps of Engineers should be consulted for changing conditions subsequent to the above.

LOGARITHMIC SPEED SCALE

To find SPEED, place one point of dividers on nautical miles run and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in knots. Example: with 4.0 miles run in 15 minutes, the speed is 16.0 knots.

AUTHORITIES

Hydrography and topography by the National Ocean Survey (formerly the Coast and Geodetic Survey) with additional data from the Corps of Engineers and U.S. Coast Guard.

SUPPLEMENTAL INFORMATION

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

STORM WARNINGS

The National Weather Service displays storm warnings at the following approximate location: Grays Harbor C.G. Sta. (46°54.3'-124°07.2')

PLANE COORDINATE GRID

Corps of Engineers local plane coordinate grid is shown by dotted ticks at 10,000 foot intervals. Origin is East Base 1909.

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 Notice to Mariners.

AIDS TO NAVIGATION

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

UNITED STATES - WEST COAST
WASHINGTON
GRAYS HARBOR

Mercator Projection
Scale 1:40,000 at Lat. 46°56'

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

TIDAL INFORMATION

Place Name (Lat/Long)	Height referred to datum of soundings (MLLW): Mean Higher High Water	Mean High Water	Mean Tide Level	Mean Lower Low Water	Extreme Low Water
	feet	feet	feet	feet	feet
Point Chehalis (46°55'N./124°07'W)	9.0	8.3	4.8	0.0	−3.5
Aberdeen (46°58'N./123°51'W)	10.1	9.4	5.4	0.0	−3.0
Montesano, Chehalis River (46°58'N./123°36'W)	8.1	7.5	4.1	0.0	−3.0

(073)

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

Lights (Lights are white unless otherwise indicated.)
F. fixed; Fl. flashing; Qk. quick; Gp. group; E. Int. equal interval; Oc. occulting; Alt. alternating; Q. interrupted quick; Ma. (A) morse code; OBSC. obscured; WHIS. whistle; DIA. diaphone; M. nautical miles; Rot. rotating; SEC. sector; m. minutes; sec. seconds

Buoys: T.B. temporary buoy; C. can; N. nun; S. spar; B. black; R. red; Or. orange; G. green; W. white; Y. yellow

Bottom characteristics:
Cl. clay; Co. coral; G. gravel; Grs. grass; M. mud; S. sand; Sh. shells; hrd. hard; rky. rocky; sft. soft; stk. sticky; bk. black; br. brown; bu. blue; gn. green; gy. gray; rd. red; wh. white; yl. yellow

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

C.G. Coast Guard station; AERO. aeronautical; Bn. radiobeacon; Bn. daybeacon; R. Bn. radiobeacon; R. TR radio tower; D.F.S. distance finding station

AUTH. authorized; Obstr. obstruction; P.A. position approximate; E.D. existence doubtful

HEIGHTS
Heights in feet above Mean High Water.

(Inner Mathne 60.23cm N.S. x 95.19cm E.W.)

Mercator Projection
Scale 1:10,000

WESTHAVEN COVE

Scale 1:10,000

RESTRICTED DUMPING GROUND 205.69 (see note A)

CAUTION
Bar Channel
The bar channel is subject to frequent changes. Deep draft vessels should not enter without knowledge of conditions at the time of entering. The deepest water is not always on the range.

(CONTINUED ON CHART 18500) (formerly C&GS 6000)

68th Ed., Sept. 7/74
18502
(formerly C&GS 6/95)

CAUTION
This chart has been corrected from the Notice to Mariners published weekly by the Defense Mapping Agency Hydrographic Center and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the print date shown in the lower left hand corner.

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

SOUNDINGS IN FEET

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 18 19 20 21 22 23 24 25 26 27 28 29 30 31

(Grays Harbor, Wash.)
SOUNDINGS IN FEET - SCALE 1:40,000

18502
(formerly C&GS 6/95)

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