

4193

4193

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
State: <u>Washington</u>	
<small>11-5613</small>	
DESCRIPTIVE REPORT.	
Topographic	D Sheet No. <u>4193</u>
LOCALITY:	
<u>Strait of Juan de Fuca-S. Shore</u>	
<u>New Dungeness to E. Side of</u>	
<u>Port Angeles</u>	
<hr/> 1926 <hr/>	
CHIEF OF PARTY:	
<u>H.A. Cotton</u>	

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET No ⁴¹⁹³ 4193
(Field Letter "D")

NEW DUNGENESS

to

PORT ANGELES

STRAIT OF JUAN DE FUCA - WASHINGTON

May - June
1926

Scale - 1 : 20,000

AUTHORITY -

The topography was executed in accordance with Instructions to the Commanding Officer of the Motor Vessel NATOMA, dated March 4th, 1926.

LIMITS -

The work on this sheet is a re-survey, extending westward from the base of Dungeness Spit to within a half mile of the Lyon-Hill's Mill on the eastern side of Port Angeles. These mills were formerly the U. S. Government Spruce Mills. The sheet also includes the portion of the mainland south of Dungeness Spit as far east as the Dungeness River. The longitude limits are $123^{\circ} 23\frac{1}{2}'$ on the westward and $123^{\circ} 06'$ on the eastward.

CONTROL -

Only four old triangulation stations, Ediz Hook L. H., New Dungeness Radio Compass Station, New Dungeness (1921) and New Dungeness L. H. were recovered. Of these the Radio Compass station has been moved but the center of the old station is still preserved by a $\frac{1}{2}$ " pipe set in concrete. However four new tertiary stations were established, viz. Mill, Morse2, Green2, and Bluff2 and an additional intersection station, Ho was determined, giving a total of 9 control points for the survey.

ELEVATIONS -

Inasmuch as this was a re-survey, few elevations were determined. All shown refer to height above Mean High Water.

METHODS -

The entire portion of the sheet to the eastward of Triangulation Station Bluff2 was surveyed by plane table triangulation and three point fixes. Traverses were run along the beach for the portion of the sheet to the westward of Triangulation Station Bluff2. The traverses with their length and closure are as follows :

From	To	Length (St. Mi.)	Closure Meters	Closure per Mi.
△ Bluff2	△ Green 2	5.75	18	3.1
△ Green 2	△ Morse 2	3.37	17	5.0
△ Morse 2	Point determined by 3 point fix	1.75	07	4.0
	Total	10.87	42	—

Average closure per mile 3.86

CHARACTER OF SHORELINE -

The greater part of the shore line west of Triangulation Station Bluff 2 has a sandy beach and yellow clay bluffs averaging 100 to 150 feet in height. The high water line touches the base of the bluffs.

Dungeness Spit is sand and is completely covered with driftwood.

The portion south of the spit has a sandy ~~mud~~ shore line except for the sand spits which protrude from this shore.

An alluvial fan is formed at the mouth of Dungeness River. This is discussed further under "Changes in Shore Line".

There is a good deal of kelp along the shore to the westward of Triangulation Station Morse 2. It extends offshore for about 150 to 200 meters.

The beach from Triangulation Station Green 2 as far as the point about 2 miles west of Triangulation Station Green 2 has numerous boulders and on that point there are a number of low water rocks which were located by the topographer. The heights they bare above M.L.L.W. are given. These were obtained by noting the time, date, and height bare and later reducing for tide.

PROMINENT OBJECTS -

There are several breaks in this bluff line which are quite prominent and are suitable for land marks from offshore. Of these the three V-shaped ravines and the cave mouth noted on the sheet between Triangulation Stations Green 2 and Morse 2 are the most prominent. The breaks in the cliff line caused by the large creek between Stations Bluff 2 and Green 2 is also prominent.

The water tank at the radio station (described as Signal Tank) is a good land mark, though too close to the light to be of much use. At the point marked "Old Town" on the shore south of the spit there is a prominent group of white buildings. The most outstanding one is the north gable of a white house which is described as Signal *Sec* on Form 524. The church steeple, Signal *Chu* and school house cupola, Signal *School* show well in some directions but are of little use when a mile or more north of the spit.

GEOGRAPHIC NAMES -

The group of white buildings about $1\frac{1}{2}$ mile west of Dungeness Post Office is known locally as "Old Town" and has been so shown on this sheet. However most of these buildings are now deserted and will probably deteriorate.

The creek at Triangulation Station Morse 2 is known locally as Morse Creek.

The creek at Green Point 2 is known as Siebert Creek.

LOW WATER LINE -

The low water line in Dungeness Bay may be found on the hydrographic smooth sheet which had not been plotted at the time of transmission of these records.

ANCHORAGES -

The only anchorages offering shelter are those inside the spit. As hydrography was executed here these places will be fully taken up in the hydrographic descriptive report.

CHANGES IN SHORE LINE * -

The most important changes have occurred on Dungeness Spit and at the mouth of the Dungeness River. The latter carries a good deal of sediment which is deposited at the mouth forming an alluvial fan of mud flats, covering a large area. The high water mark here is indefinite as it is very flat and the storm high water mark extends far in from the ordinary high water mark. The shore line here has built out about 200 meters.

The spit which protrudes southward from the main spit has widened 15 to 20 meters, due to building up on the east side. This is due to driftwood which is beached here forming a revetment which fills in with sand. The end of the main spit has grown to the eastward about 150 meters, for the same reasons as those just mentioned above. The lines of driftwood plainly mark the advance of the H. W. mark.

The narrow portion of the spit between the N.R.C. station and the lighthouse has moved to the southward about 30 to 40 meters throughout its length. It is the belief of the topographer that this is caused by the winter storms throwing drift logs clear across the spit, thus forming a revetment on the south side.

The general movement of the spit has been toward the south and east and it has widened toward the eastern and western ends.

It is reported by the lighthouse keeper that the spit breaks through at the thin portion near the lighthouse almost every winter.

The shore line between Station Green Point 2 and Station Morse 2 was found to differ from the last survey. This portion of the shore line is found to be from 20 to 40 meters north of that shown on bromied # 2859 of the 1907-08 survey. On this sheet the topographer ran a traverse from Station Morse 2 and closed on Station Green 2 with a closing error of 17 meters to the northward, checking in distance exactly and with a 17 meter error in azimuth. This error was distributed throughout the traverse. As azimuth checks from at least two stations, viz. Station Ediz Hook L.H. and either Station Morse 2 or Station Green Point 2 were to be had through almost the entire length of the traverse and no large discrepancy was noted at any time, it is felt that this portion of the shore line is correct as shown.

The shore line at Station Morse is still cutting in at a slow rate. Station Morse was lost and plotted just on or slightly below high water. This shore line has eroded 10 to 12 meters since 1908. It has eroded a total of about 40 meters since 1892.

The small creek shown as emptying into the mouth of Morse Creek from the westward has entirely disappeared. Only an occasional indication of the old bed can be found.

The remaining shore line agrees with the old survey.

COMMUNICATIONS -

Daily service of a train each day is maintained over the Chicago, Milwaukee & Puget Sound Railroad, a portion of which is shown on this sheet.

The Olympic Highway parallels the coast a short distance inland. Bus service is maintained over the highway between Port Angeles, Sequim and points east.

The S. S. "Sol Duc", freight and passenger, docks daily at New Dungeness County Wharf.

The hydrographic report will furnish more detailed information regarding New Dungeness.

GENERAL DESCRIPTION OF COUNTRY -

The country in general is a relatively flat plateau for several miles inland, where the foothills of the mountains begin. From Station Bluff 2 to Port Angeles the cliff is continuous, except for creek breaks, though only the portion from Station Morse 2 eastward has bare yellow cliffs.

GENERAL NOTES -

There is little logging done in this portion of the country as compared with the section 15 to 20 miles to the westward. For the most part, it is a dairying country with fruit, berry and truck farming carried on on a minor scale

S T A T I S T I C S

Statute miles of shore line	28.87
Statute " " creeks, sloughs, etc.	4.5
Statute " " roads and railroads, etc.	6.5
Number of elevations	18
Number of recoverable positions	31
Triangulation	10
Plane Table	21
Number of positions occupied	83

Examined, approved and forwarded,

Respectfully submitted,


HAROLD A. COTTON,

Hyd. & Geo. Engineer,
C. & G. Survey,

Commanding M. V. NATOMA.


CARL I. ASLAKSON,

Hyd. & Geo. Engineer,
C. & G. Survey,

LIST OF PLANE TABLE POSITIONS

Name & Description	Latitude & Longitude	Seconds in Meters	Est. Height above H.W. ft	Remarks
RAD, New Radio Compass Station	48 10 123 07	1016 (837) 1163 (77)	20	Described Form 524
TANK, Tank at N. R. C.	48 10 123 08	841 (1012) 100 (1140)	40	" " "
GUN, Flagstaff, Olympic Gun Club	48 08 123 07	1775 (78) 536 (704)	20	" " "
CHU, Church spire in New Dungeness	48 08 123 07	1554 (299) 367 (873)	65	" " "
SCHOOL,	48 08 123 07	1093 (760) 798 (443)	80	" " "
YEL, North gable of Yellow House	48 08 123 08	1522 (331) 67 (1174)	90	" " "
GHIM, Cement chimney, red roofed house	48 08 123 08	1765 (88) 587 (654)	100	" " "
TAR, Water tank near Signal Chim	48 08 123 08	1753 (100) 649 (592)	100	
SILCO, near Signal Chim	48 08 123 08	1686 (169) 693 (548)	100	
DOC, East gable, house on dock	48 09 123 08	454 (1399) 1224 (17)	40	
SAC, North gable, white house in Old Town	48 09 123 09	41 (1812) 143 (1097)	90	Described Form 524
WET, Shack on beach, north gable	48 08 123 09	1766 (86) 1201 (39)	15	
BIG, North gable of big barn	48 08 123 10	1690 (163) 11 (1229)	50	
DRY, East gable, white house	48 08 123 09	1646 (207) 1193 (47)	60	

LIST OF PLANE TABLE POSITIONS (Continued)

Name & Description	Latitude & Longitude	Seconds in Meters	Est. Height above H.W. ft	Remarks
NEW, East gable of new house	48 08 123 10	1182 (671) 19 (1221)	150	
BAD, East gable, new barn	48 08 123 10	965 (888) 321 (919)	150	
SPOT, Center, small shack on spit	48 08 123 10	1801 (52) 1196 (44)	10	
BOULDER,	48 07 123 13	709 (1144) 756 (484)	2	Described Form 524
WEDGE, (Marked)	48 07 123 15	67 (1786) 594 (647)	3	" " "
CAVERN,	48 06 123 19	1535 (318) 468 (773)	50	" " "
ISLE, (Marked)	48 06 123 22	1701 (152) 123 (1118)	3	" " "

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

4193

U. S. Coast and Geodetic Survey.

Register No. 4193 (Field Letter "D")

State Washington

General locality . . . ~~South Shore~~, Strait of Juan de Fuca, ~~S. Shore~~

Locality . . . New Dungeness to East side of Port Angeles.

Chief of party HAROLD A. COTTON, H. & G. E.

Surveyed by CARL I. ASLAKSON, Jr. H. & G. E.

Date of survey May, June - 1926.

Scale 1 : 20,000

*Heights in feet above . . . Mean Sea Level

Contour interval ----- feet.

Inked by . . . C. I. A. . . . Lettered by C. I. A.

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet

Remarks:

* Where notation on rocks awash "Bares _____", occurs, the number refers to the height the rock bares above M. L. L. W.