

4401

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

E. Lester Jones, Director

State: OREGON

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. B

4401

LOCALITY

~~Oregon~~ Cook Point

~~Curry County~~ Whales Head to

~~Mack Arch to Whalehead~~

1928

CHIEF OF PARTY

F. G. Engle, H. & G. Engr.

GOVERNMENT PRINTING OFFICE

4401

DESCRIPTIVE REPORT

T O A C C O M P A N Y

TOPOGRAPHIC SHEET NO. B * - - - - - - - - - -SCALE: 1 ; 10,000

Instructions Dated March 13, Supp. May 8, 1923. Str. DISCOVERER

EXTENT: This sheet extends from Crook Point to a point on the shore line opposite Δ Whalehead. The entire shoreline and all off-shore rocks were relocated.

GENERAL DESCRIPTION: The shoreline is bold and abrupt along this section of the coast, with the high-water line at the base of the bluff, except for short stretches in some of the bights where there is a small beach between the high-water line and the bluff. The bluff is slightly convex from Crook Point south to the small headland opposite Yellow Rock, but from here south the bluff is bare rock, for the most part, and varies from forty or fifty feet up to two hundred feet in height. The character of the shoreline is well shown by the topographic sheet executed in 1873 and has not been duplicated on this sheet.

SURVEY METHODS: The shoreline, rocks, and important contours were transferred from the photostat of Sheet 1317, and the location obtained by the old and new work was compared as the topography progressed.

A traverse was run from Δ Clay southward, and from Δ Whalehead northward, meeting near the center of the area to be surveyed. The error in alignment was three meters and the error in distance thirty meters. A section of the traverse from the north, run under very unfavorable conditions, was rerun, and the closing error reduced to eight meters, which was adjusted.

Rod readings were taken on the shoreline, where ever possible, supplemented by cuts, and angles of depression were taken to points impossible to reach, where the plane-table was at sufficient elevation to give the desired accuracy. Before using angles of depression the elevation of the instrument above the water line was obtained and checked, and angles less than twenty degrees were seldom used.

Numerous cuts were taken to off-shore rocks to determine their location and shape, and it was found that a number of

them were shown too large on the previous sheet, and a considerable part of the change of position was due to this feature. The majority of the rocks were shifted slightly, none of the changes being large, and in only one instance was a rock shown on the previous sheet that did not appear on the ground. This discrepancy was noted on the topographic sheet in pencil.

From Mack Arch to opposite Yellow Rock the old and new location of the shore-line agreed quite closely, and any changes might be laid to erosion. South of Yellow Rock the coast is very difficult, and wide discrepancies in location were obtained in some of the bights and around a few of the headlands. Near the old triangulation stations the shore-line, as shown on the photostat, agreed with the new location, and it appears that the shifting in the bights may be due to faulty traverses run to these points. Along the southern end of the sheet the new location coincided quite closely with the old position.

A few elevations were taken to check the contours, and in a majority of instances were found to agree with those shown, a few positions being in error by a considerable amount, especially on steep slopes and where vegetation interfered with sights to the extreme top of the ridge. The character of the country is as delineated by the contours, and the creeks are as shown. In recent years the trees and brush have grown out to the top of the bluff, along the central portion of the area, and it is impossible to obtain any elevations without taking considerable time and running a special traverse.

MAGNETICS: Declinatoire #175 was used to obtain the magnetic variation at Whalehead.

Variation scaled from topographic sheet - - - - 20 35 E
 Correction to declinatoire - - - - - 11

True variation - - - - - 20° 24' E

Respectfully submitted,

Gilbert R. Fish
 Gilbert R. Fish,
 Aid,
 Topographer.

Approved and forwarded:

F. G. Engle
 F. G. Engle,
 Chief of Party.

PLANE TABLE POSITIONS:

Object:	Latitude	D.M.	Longitude	D.M.	Description:
WW -----	42-09	1673	124-21	916	--- Whitewash on rock, face of bluff.
Shin -----	-10	220	-21	1071	---Signal cloth on bush, top of bluff.
Top -----	-10	969	-22	473	---Top of most NW'ly rock for several miles about 18' hg.
Point -----	-10	953	-21	1277	---Peak of westerly of 3 light brown pointed rocks.
Lost -----	-10	1131	-21	883	---WW on face of bluff about 40'
Tree -----	-11	19	-21	1156	---Signal cloth in tree, on point Elev. 300'
Dead -----	-11	647	-22	141	---Small dead pine tree(bushy), on point.
Pine -----	-11	885	-22	409	---Tallest pine tree on highest part of island. Rock has a low portion extending to south.
High -----	-11	1453	-22	713	---Top of knob on rock south of point.
Dot -----	-11	1560	-23	233	---Highest point of white tipped black rock about 1 mile south of Yellow Rock 43'
Spire -----	42-12	1321	124-22	836	---Rocky peak on NW point of jutting land.
Yel -----	-12	1253	-23	432	---Top of long hump on Yellow Rock 84'
Tip -----	-13	464	-22	1007	---WW tip of pointed rock.
Row -----	-13	777	-22	1183	---WW on face of bluff.
Pest -----	-13	1332	-23	256	---Signal on top of small grassy knoll.
Wash -----	-14	86	-23	668	---WW rock on top of bluff.

STATISTICS FOR TOPOGRAPHIC SHEET NO. 1317-B

Statute miles of shoreline - - - - - 14.4

Statute miles of roads - - - - - .2

Area, square miles - - - - - 2.5

AND REFER TO NO. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4401

Whales Head to Mack Arch, Oregon

Surveyed in 1928

Instructions dated March 13 and May 8, 1928 (DISCOVERER)

Chief of Party, F. G. Engle.

Surveyed and inked by G. R. Fish.

This survey complies with the general and specific instructions. The old surveys were transferred to the sheet for checking, as instructed, and the new survey should be used for chart compilation of shoreline and rock details to the exclusion of the old work.

Rocks and islets form the dominating features of this sheet, and the representation of the rocks is faulty. The topographer appears to have departed from Coast Survey practice in the use of sunken and awash rock symbols.

On low water areas there are 36 sunken rocks, which is an impossible formation. They probably should be awash rocks. Outside of the low water line are 10 awash rocks and 243 sunken rocks. Many of the sunken rocks are isolated and have no connection with along-shore reefs. In view of the difficulty in locating this class of rocks by the topographer it is believed that most of them were visible, in which case they are dry or awash.

The majority of these rocks, as well as many of the dry rocks, were shown of microscopic size and had to be retouched in the office.

The junctions of the shoreline with the adjoining sheets are adequate, but the representation of rocks at the junction with T. 4410 differs. There is no way to decide which sheet is correct.

Pencil notations of doubtful details which should be cleared up by the field party have been placed on the sheet.

Reviewed by E. P. Ellis, June, 1929.

Approved:

(Signed) L. O. Colbert

Chief, Division of Charts

Chief, Div. of Hyd'y and Top'y

Chief, Field Records Section (Charts)

Chief, Field Work Section (H. & T.)

T 4401 (1928)

The present survey had several notes in pencil showing rocks and islands which were not found. These features were thoroughly investigated in accordance with standard methods of treatment of such matters. Rocks whose existence has been disproved are not carried forward and at the same time pencil ^{regarding them} notations have been removed as no longer necessary. However, this method of leaving a pencil notation for each rock which has been disproved is highly desirable where the Descriptive Report ~~to~~ contains only a general statement that some rocks were not found.

Reviewed: *W. Jankowski*
March 9, 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

REG. NO.

1401

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter B

REGISTER NO.

4401
1401State OregonGeneral locality Cook PointLocality Whales Head to Mack ArchScale 1:10,000 Date of survey Oct. & Nov., 19 28Vessel U.S.C. & G.S.S. DISCOVERERChief of Party F. G. EngleSurveyed by Gilbert R. Fish, Aid.Inked by Gilbert R. Fish, Aid.Heights in feet above H.W. to ground ~~to tops of trees~~Contour ~~Approximate contour~~ Form line interval 20 feetInstructions dated March 13, Supp. May 8, 1928

Remarks: