4423

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

State: California Oregon

DESCRIPTIVE REPORT

Topographic / ~~*Hydrographic*~~ *Sheet No.* D 4423

LOCALITY

Chetco Pt.

Winchuck River to

Chetco River

1928

CHIEF OF PARTY

F.G. Engle

GOVERNMENT PRINTING OFFICE

4423

DESCRIPTIVE REPORT

To Accompany Topographic Sheet No. D. 4423

Instructions dated March 13, 1928. U.S.C.& G.S.S.DISCOVERER
F. G. Engle, H.& G.Engineer,
Commanding.

Surveyed by Herman Odessey, H.& G.Engineer June 28-August 24, 1928

General description of shore line:

From the northern limit of the sheet to Chetco Point the coast is composed of high broken cliffs bordered by numerous rocky islets and ledges, sunken and awash, extending in some cases as much as ½ mile offshore. For about ½ mile on each side of the mouth of the Chetco River the beach is sandy. From a point about ½ mile south of the mouth of the Chetco River to the mouth of the Winchuck River, the coast is composed ofa high broken cliff, bordered with small rocks and sunken ledges. South of the Winchuck River to the southern limit of the sheet, the beach is sandy. South of this point there is a low bluff.

The entire beach is backed by a low table land not more than ¾ mile wide at any point. Several prominent rocky knolls 100 to 200 feet high rise above this table land. Back of this the ground is steep, wooded, and broken by numerous intermittent streams.

Description of sheet:

The sheet extends from a point 1.2 miles north of Chetco Point to a point 0.6 mile south of the California-Oregon boundary. The survey was made on a 1:10 000 scale. Elevations shown are in feet above mean high water. The contour interval used is 20 feet.

Landmarks:

On this sheet, the landmarks useful as aids to navigation include the Green Water Tank, Brookings, the Northeasterly of Two Stacks, Brookings, and McVay Rock, about three miles south of Brookings. All three of these are triangulation stations. The piers of the wooden trestle over the Chetco River are also quite prominent. All three of them were located by plane table, and are shown by the conventional symbol on the sheet.

The lumber mill at Brookings, and the town of Brookings, as shown on the sheet, show only the buildings actually located by the plane table. The accompanying blue print of the town of Brookings, was verified in the field and shows additional buildings in this area. The blue print was furnished by Mr. W.J. Ward of Brookings, Oregon.

Bp 22568

Control used:

The control for the topography consisted of triangulation stations Harris, Green Water Tank, Northeasterly of Two Stacks, McVay and Cone Rock. Signals were built over Harris and McVay. At the other stations no signals were necessary.

Beginning at the Green Water Tank in Brookings,a traverse was run down to Macklyn Cove, and from there to the northern limit of the sheet, where a closure was made on a position established by running a traverse on Sheet "C" from station Harris. The closure on this position was 13 meters, and was adjusted on the basis of the distance run from the starting point. From the Green Water Tank, another traverse was run to Signal Chet, and thence south along the coast to Signal Toe, where a 3-point fix was taken on the Green Water Tank, Northeasterly of Two Stacks, and McVay, and check by cuts from topographic signals located as the work progressed. The closure here was practically zero and required no adjustment. From this point the traverse was continued along the coast to McVay, where a closure of 16 meters was obtained. This was adjusted on the basis of the distance run from Signal Toe. From McVay south the traverse was continued to the end of the sheet, where a closure of 3 meters was obtained on a position established by a two point fix on McVay and Cone Rock, and resections from outlying rocks located as the work progressed. No adjustment was considered necessary.

A separate traverse was run along the highway to locate the road and interior details and to establish elevations and check contours. Frequent checks were made by 3-point fixes on signals and rocks located along the beach, and adjustments made wherever necessary.. These were all well within the required degree of accuracy.

Auxiliary surveying methods:

Methods other than standard were not employed on any portion of the sheet.

Revision work:

This sheet is a resurvey, the original sheet having been done in 1870. From the northern limit of the sheet to the mouth of the Chetco River, the original work was found to be so much in error, as measured by present standards, that it was necessary to relocate the entire shore line as well as the outlying rocks and islets. In many cases rocks shown on the old sheet were found to be nonexistent, while numerous rocks shown on the new sheet were not shown on the old one at all.

The old positions of prominent rocks and islets north of Chetco Point were found to be out of position as much as 100 meters in some cases. It is suggested that these discrepancies are probably the result of approximate methods used in locating offlying details at the time the original survey was made.

From Chetco Point south to the mouth of the Chetco River, the agreement between the old and the new survey is somewhat better. The mouth of the Chetco River is changeable, depending on storm conditions, but where a connection was made to the unchangeable shoreline up the river in the vicinity of the highway bridge, the agreement was good.

From the Chetco River to the southern limit of the sheet, the agreement between the new and the old work was better, improving toward the southern limit of the sheet. All of the area was however resurveyed.

Outlying rocks, rocks awash, sunken rocks and breakers shown on the old sheet were all checks, and those not found marked "could not verify" or "N.E." These include one group of breakers and several sunken rocks. None of these features were found by the hydrographic party working in this area.

The area between the highway and the beach was recontoured, and the contours back of the highway checked by elevations determined at frequent intervals. All elevations established are shown in red on the sheet, and are in feet above mean high water.

Junction with adjacent sheets:

Junctions with adjacent sheets to the north and south were very good, and no adjustment found necessary.

New names:

The larger of the two islands in Macklyn Cove is sometimes referred to locally as "Zwaggs Island" after an old sea captain who lived on the island after having been shipwrecked there.

Winchuck Riveris spelled as shown on the sheet. There is no "d" in the name as spelled locally. It is correctly spelled in the Coast Pilot.

List of Plane table positions:

A list of plane table positions is submitted on a separate sheet attached to this report.

Changes in coast line:

These are noted above in describing the revision of the original survey.

Respectfully submitted,

Herman Odessey

Herman Odessey,
H.& G.Engineer,
Togographer.

Approved and forwarded:

F.G.Engle

F.G.Engle,
H. &. G. Engineer.

T-4423

Object and description	Latitude		D.M.	Long.		D.P.	Height
	o	'	Meters	o	'	Meters	Feet
Grass, 8ft. tripod with center pole	42	03	1589	124	18	719	34
Sen, top of sharp rock - - -	42	03	1015	124	18	145	22
Fen, 12ft. pole with white banner	42	03	992	124	17	1332	112
Rye, 12ft. pole with white banner	42	03	390	124	17	1323	80
Mack, 16ft. pole with black and white banner	42	02	1622	124	17	957	82
Chet, 16ft. pole with black and white banner	42	02	1238	124	17	546	82
Lite, Outer electric light pole on wharf	42	02	1082	124	17	209	15
War, whitewashed rock	42	02	1352	124	17	115	32
Bin, water tank-40ft. high	42	02	1498	124	17	93	62
Fig, 12ft. pole with white target	42	02	1266	124	16	1233	50
Shak, top of sharp rock 38ft. high	42	02	1369	124	16	597	38
Toe, 12ft. pole with white banner	42	02	332	124	15	785	62
Spit, 12ft. pole with white banner	42	02	1298	124	16	55	3
Wow, whitewashed shack	42	02	944	124	15	1031	12
Fall, whitewashed rock	42	02	659	124	15	965	15
Dam, whitewashed top of island rock	42	02	500	124	15	903	8
Cap, 16ft. pole with white banner	42	02	99	124	15	555	15
Red, 16ft. pole with white banner	42	01	1391	124	15	254	20
Vo, 12ft. pole with white banner	42	01	1116	124	14	1176	22
Vim, 12ft. pole with white banner	42	01	791	124	14	367	48
Sam, 12ft. pole with white banner	42	00	1506	124	13	1009	32
Dog, 12ft. pole with white banner	42	00	1166	124	13	369	18
Win, 16ft. pole with large white banner	42	00	687	124	12	1220	24

T-4423

Object and description	Latitude		D.M.	Long.		D.P.	Height
	o	'	Metr.	o	'	Meters	Feet
Pat, 12ft. pole with white banner	42	00	250	124	12	946	4
Ned, 12ft. pole with white banner	41	59	1560	124	12	767	4
Ead, whitewashed top of large rock ashore	41	59	791	124	12	617	55

TABLE OF STATISTICS
To Accompany Descriptive Report for Topographic Sheet "D"

Area in square miles surveyed	10.1
Length of shoreline in statute miles	19.5
Rivers in statute miles	4.3
Creeks in statute miles	1.0
Ponds in statute miles	0.7
Roads and streets in statute miles	16.0

Herman Odessey

Herman Odessey,
H.& G. Engineer.

Observation for determining corrections to declinatoires for alidades Nos. 94,180,& 111

On Dec. 8, 1928, a comparison was made between compass declinometer No. 4, and declinatoire for alidade No. 94, declinatoire No. 118 for alidade No. 180, and declinatoire No. 175, for alidade 111, to determine corrections to be applied to the declinatoires used by topographers attached to the Str. DISCOVERER during the field season of 1928.

The following was the method of making the comparison: The declinometer was set up at a point free from local attraction, and a point on the horizon in line with zero was selected. A plane table was then set up, and an alidade pointed at the initial selected on the declinometer zero line. On a sheet of paper on the plane table a line was then drawn along the fiducial edge of the alidade. Each declinatoire was then set down on the table and manipulated until its needle pointed at the zero mark on its scale. A line was then drawn along the edge of the declinatoire box. The angle between this line and the line of zeromagnetic bearing as established by the declinometer was measured, and, is listed below, the plus sign indicating that the declinatoire zero was to left of declinometer zero.

		(Difference bet. Declinatoire & Declinometer.)	(Resulting corr. Declinometer+5.9)
Declinatoire No. , for alidade No.	94	0-00' -- --	+5'.9
118, " " "	180	-0-49' -- --	-43'.1
175, " " "	111	-0-17' -- --	-11'.1

These observations were taken between 10:00 AM. and 11:00 AM. on December 8, 1928.

Herman Odessey

Herman Odessey
H.& G. Engineer,
U.S.C.& G.Survey.

4409
4410
4405

4423

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON October 19, 1929.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4423

Winchuck River to Chetco River, Oregon

Surveyed in 1928

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

Chief of Party, F. G. Engle.

Surveyed and inked by H. Odessey.

1. The survey complies with the General Instructions. It also complies with the specific instructions, except that there are about a dozen rocks that appear on the old survey which are not shown on T. 4423, nor is there any indication that they are non-existent.

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

3. The junction with T. 4410 shows several differences between the two sheets. At the junction with T. 4404 the two sheets are identical, except for one unimportant rock.

4. There is no authority for the method of representing the abandoned bridge and approach over the Chetco River and the similar features over the Winchuck River. The sheet does not make it clear whether bridges exist or not.

5. The field drafting is excellent.

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

Approved:

K. T. Adams
Chief, Section of Field Records (Charts)

J. B. Borden
Chief, Section of Field Work (H. & T.)

Form 537a
11—5813

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4423

TOPOGRAPHIC TITLE SHEET

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

Field No. D

REGISTER NO. 4423

State California & Oregon

General locality ~~Oregon - California Boundary to Chetco River~~ Chetco Pt.

Locality ~~Brookings, Oregon to Chetco River~~ Winchuck River to Chetco River

Scale 1/10,000 Date of survey June 29, Aug. 25, 1928

Vessel Str. DISCOVERER

Chief of Party F. G. Engle

Surveyed by Herman Odessey

Inked by Herman Odessey

Heights in feet above M.H.W. to ground to tops of trees

Contour, ~~Approximate contour, Form line~~ interval 20 feet

Instructions dated March 13, 1928

Remarks:

Original survey dated 1870, Sheet No. 1227

GPO