DESCRIPTIVE REPORT

To Accompany Topographic Sheet No. D, 44-L-3

F. G. Engle, H. G. Engineer, Commanding.

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

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 of a high broken cliff, bor-
dered 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 ½ 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, Brook-
ings, and McVey 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.
Control used:

The control for the topography consisted of triangulation stations Harris, Green Water Tank, Northeast 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 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 Chat, and thence south along the coast to Signal Toe, where a 3-point fix was taken on the Green Water Tank, Northeast 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 shoeline 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 recocontoured, 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 "Zwagga Island" after an old sea captain who lived on the island after having been shipwrecked there.

Winchuck River is 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 Odessa,
H. & G. Engineer,

Approved and forwarded:

H. & G. Engineer.
<table>
<thead>
<tr>
<th>Object and description</th>
<th>Latitude</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Height</th>
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<td>Grass, 8ft. tripod with center pole</td>
<td>42 03</td>
<td>1569</td>
<td>124 18</td>
<td>719</td>
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<td>Sen, top of sharp rock</td>
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<td>Roads and streets in statute miles</td>
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Herman Odesseny,  
H & G. Engineer.
Observation for determining
corrections to declinatoires for alidade Nos. 94, 180, & 111

On Dec. 8, 1928, a comparison was made between compass
dehlinometer 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 dehlinometer 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 dehlinometer 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
dehlinometer was measured, and, is listed below, the plus sign in-
dicating that the declinatoire zero was to left of dehlinometer zero.

\[
\begin{array}{ccc}
\text{Declinatoire No.} & \text{for alidade No.} & \text{(Difference bet. Declinatoire & Dehlinometer.)} & \text{(Resulting corr. Dec-} \\
94 & 0-00' & -5' 9 & \text{linometer, 5' 9)} \\
118, " & " & 180 & 0-49' -45' 1 \\
175, " & " & 111 & 0-17' -11' 1 \\
\end{array}
\]

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

Herman Odessy
H. & G. Engineer,
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. C. 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)

Chief, Section of Field Work (H. & T.)
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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
Winchuck River to Chetco River

Locality  Brookings, Oregon 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