

7089

a & b

Diag. Cht. No. 5902-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

HO-A-52

Field No. HO-B-52 Office No. T-7089 a & b

LOCALITY

State OREGON

General locality

Locality DEPOE BAY

194 52

CHIEF OF PARTY

H. G. Conerly

LIBRARY & ARCHIVES

DATE FEBRUARY 16, 1953

8-1870-1 (1)

7089  
a & b

FORM 537a  
(9-24-47)

DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

REGISTER NO. T-7089a

TOPOGRAPHIC TITLE SHEET

FIELD NO. HO-A-52

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE

OREGON

GENERAL LOCALITY

Lincoln County

LOCALITY

Depoe Bay

SCALE

1:2,500

DATE OF SURVEY

April, 1952

VESSEL

HODGSON

CHIEF OF PARTY

H.G. Conerly

SURVEYED BY

H.D. Nygren

INKED BY

H.D. Nygren

HEIGHTS IN FEET ABOVE MHW OR

☐ TO GROUND

☐ TO TOPS OF TREES

CONTOUR

APPROXIMATE CONTOUR

FORM LINE INTERVAL FEET

PROJECT NUMBER

CS 348

REMARKS



DESCRIPTIVE RECORD

to accompany

Topographic Survey

Field No. HO-A-52

(T-70896)

Depoe Bay, Oregon

Scale 1:2,500

Horace G. Conerly

Chief of Party  
Comdg. Ship HODGSON

Harley D. Nygren

In Charge, Field Work

Authority for this survey is contained in instructions for CS-348, Depoe Bay, Oregon, dated 12 February 1952.

This survey covers the area around the inner harbor, or basin, of Depoe Bay, Oregon. This basin was originally a shallow lagoon which partially dried at low tide, consequently only small vessels could remain in it. A narrow, concrete, arch bridge carried the old Roosevelt Highway over the entrance. The entrance was a narrow defile in solid rock. In recent years, and since the previous survey T-4339 was made, the area has expanded in importance. The basin has been converted, by dredging and construction, to an excellent boat harbor, and the entrance has been widened and deepened. The bridge has been widened to carry increased traffic of U.S. 101, the Oregon Coast Highway. The town of Depoe Bay has grown, and fire and logging operations have removed most of the timber in the limits of this sheet.

(T-70896)  
The only landmarks of importance in this area which were not discussed in the report on HO-B-52, are two steel poles, on either side of the channel, which support powerful floodlights for nighttime illumination of the narrow entrance. A steel pole supporting the sign by a Chevron Service Station south of the bay was used as an orientation station during the survey of the inner harbor.

The basic control for this survey was furnished by a traverse along U.S. 101 from BALD 1927 to DEPOT 1927. Station CLEAR 1952 was located by triangulation from stations on this traverse. The range structures were located by triangulation from CLEAR 1952 and REEF 1952. Topographic points in the inner harbor were located whenever possible by intersection. In general the high and low water lines were located by rod readings. Control points Abe, Bake, Char and Dog, to also be used in control of hydrography, were located by intersection cuts, checked where possible by direct measurement with a steel tape. REEF RM 1 1952 was a computed point occupied with the planetable. A U. S. Engineers traverse station under the north end of the bridge was located by intersection, checked by direct measurement from point Char. Another U. S. Engineers traverse station east of the bay was located by traverse, using base measurement methods.



No planetable traverses were run on this survey. ✓

The topography of the inner bay has remained stable (except for added buildings) on the North and west sides of the harbor. The extremely steep banks here possibly have eroded some, but appear to be fairly firm. The east and south sides of the bay have been changed completely because of the construction of the dam and seawall, and the dumping of dredged materials. ✓

See  
TP 2  
of  
Re-  
view.

Standard topographic methods were used throughout this survey. ✓

There appears to be no local agreement as to the proper name of the inner harbor. Many assume that it is Depoe Bay.

Photographs of the inner bay were obtained, and are forwarded with this report. ✓

*In Geographic Branch*

Respectfully submitted,

*Harley D. Nygren*  
Harley D. Nygren,  
Lt. (jg), USC&GS

Approved and forwarded:

*Horace G. Conerly*  
Horace G. Conerly,  
Lt. Comdr., USC&GS  
Comdg., Ship HODGSON



FORM 537a  
(9-24-47)

DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

REGISTER NO. T -

7089 6

TOPOGRAPHIC TITLE SHEET

FIELD NO.

H0-B-52

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE

OREGON

GENERAL LOCALITY

Lincoln County

LOCALITY

Depoe Bay

SCALE

1:5,000

DATE OF SURVEY

April

, 19 52

VESSEL

HODGSON

CHIEF OF PARTY

H.G. Conerly

SURVEYED BY

H.D. Nygren

INKED BY

H.D. Nygren

HEIGHTS IN FEET ABOVE MHW OR

☐ TO GROUND

☐ TO TOPS OF TREES

CONTOUR

APPROXIMATE CONTOUR

FORM LINE INTERVAL

FEET

PROJECT NUMBER

CS 348

REMARKS

DESCRIPTIVE REPORT

to accompany

Topographic Survey

Field No. HO-B-52

Scale 1:5000

CS-348

1952

Horace G. Conerly

Chief of Party  
Comdg. Ship HODGSON

Harley D. Nygren

In charge, Field Work

Authority for this survey is contained in instructions for CS-348, Depoe Bay, Oregon, dated 12 February 1952.

The topography along this part of the Oregon coast is extremely rugged, in general consisting of nearly vertical rock cliffs between 40 and 60 feet in elevation. Many ledges, reefs, and detached rocks lie along the shoreline.

A few scattered houses lie along the bluffs on either side of Depoe Bay, several of which are prominent enough to make good landmarks. The outstanding landmarks in the Depoe Bay area, however, are a standpipe on the shoulder of a bare hill north-east of the town, and the arch bridge which crosses the entrance to the inner harbor. A large, square, white house of three stories lies about  $1\frac{1}{2}$  miles south of Depoe Bay, and makes an excellent landmark when approaching from the south. Several small landmarks of value, when close inshore, are the stone column of the Fishermen's Memorial in Depoe Bay, the storm warning display mast by the bridge, and the entrance range structures under the bridge. At night the entrance is illuminated by floodlights on each side of the channel.

This survey was controlled by a traverse run between station BALD 1927 and DEPOT 1927, new stations being established along U. S. 101 in the Depoe Bay area.

Stations RILL, CLEAR, and the range structures were located by triangulation. All topographic stations and other landmarks were located by plane-table intersection. Shoreline and details were rodded in from five short planetable traverses. The traverse closure errors were all too small to justify any adjustment, as no traverse was over  $3/4$  mile in length. Two traverses were tied in to tape end points marked during the main traverse measurements.



The shoreline and detail east of station RILL 1952 were rodded in from two set-ups located by the three point problems. Adequate resection cuts checked these locations. The outer limits of the reefs and ledges lying south of this section were located by intersection cuts, but the details were sketched. The limits of the breakers on the north and south reefs of the outer bay were obtained by intersection at a minus tide, with a heavy sea running.

In general, there has been little change in the shoreline since the 1927 survey, except for erosion of the earth bank above the high water line in several places. The town of Depoe Bay has expanded, and the highway and bridge have both been widened. The inner harbor of Depoe Bay has been dredged, and a seawall constructed as shown on a large scale topographic survey. The rocks shown as awash off the south point of the outer bay were not seen at zero tides, although this entire area was covered with breakers.

See  
AP 2  
of  
Re-  
view

Considering the difference in scale and datums, the 1927 and 1952 surveys check adequately. See AP 2 of Review.

The details of the street layout of the village of Depoe Bay could have been more extensively determined.

Standard topographic methods were used throughout this survey.

Geographic names in this area are of long standing, with the exception of the inner harbor of Depoe Bay, and the streams emptying into it. There seems to be no local agreement as to the proper name of this basin, one school of thought claiming that it is Depoe Bay. The reefs partly enclosing the outer bay are known as the North Reef and Flat Rock.

Photographs of the outer bay and the inner bay were obtained, and are forwarded with this report.

Respectfully submitted,

Harley D. Nygren  
Harley D. Nygren,  
Lt.(jg), USC&GS

Approved and forwarded:

Horace G. Conerly  
Horace G. Conerly,  
Lt. Comdr., USC&GS  
Comdg., Ship HODGSON



GEOGRAPHIC NAME LIST

Topographic Survey HO-A-52

Project CS 348

Depoe Bay, Oregon

1952

DEPOE BAY (Bay)

DEPOE BAY (Town)

NORTH DEPOE CREEK

OREGON

SOUTH DEPOE CREEK

*See "Geographic Name Report, CS 348, 1952"  
for discussion of local names.*



GEOGRAPHIC NAME LIST

Topographic Survey H0-B-52

Project CS 348

Depoe Bay, Oregon

1952

DEPOE BAY (Town)

DEPOE BAY (Bay)

FLAT ROCK

NORTH REEF

OREGON

PACIFIC OCEAN

PIRATE COVE

See "Geographic Name Report, CS 348, 1952"  
for discussion of local names.

## RECOVERABLE TOPOGRAPHIC STATIONS

[illegible]

Copy - 11/11



[illegible]

4-2719-5

Category: Other

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7089a & b

HO-A-52  
FIELD NO. HO-B-52

Oregon - Depoe Bay

Instructions dated 12 February 1952

Surveyed in April 1952

Scale 1:2,500 & 1:5,000

Plane Table Survey

Aluminum Mounted

Chief of Party - H. G. Conerly  
Surveyed by - H. D. Nygren  
Inked by - H. D. Nygren  
Reviewed by - I. M. Zeskind, 22 June 1953  
Inspected by - R. H. Carstens

1. Adjoining Surveys

There are no contemporary topographic surveys in the area covered by the present survey.

2. Comparison with Prior Surveys

T-1776 (1887) 1:40,000  
T-4339 (1927) 1:20,000

The present survey lies entirely within the area covered by the prior surveys. A comparison between the prior and present surveys of the outer harbor of Depoe Bay reveals minor differences in the delineation of the shoreline and inshore detail. These differences in topographic features are attributed principally to differences in generalization and sketching of the shoreline and to interpretation of the highwater line. The greater difference in shoreline delineation occurs in the vicinity of lat.  $44^{\circ} 48.35'$ , long.  $124^{\circ} 03.73'$ , where the prior shoreline lies 35 meters west of its present survey position. Differences of 25 and 40 meters occur at the limits of the present survey on the north and south.



The rock awash and 2 sunken rocks shown on T-4339 in the vicinity of lat.  $44^{\circ} 48.28'$ , long.  $124^{\circ} 04.0'$ , have been carried forward to the present survey. The topographer noted that the rock awash could not be seen at zero tide though breakers were seen throughout the area.

In the inner harbor of Depoe Bay the changes in topographic features are principally man made. The entrance to the inner harbor has been widened and a wider bridge crosses the entrance. A seawall has been constructed on the east and the area between it and the former shoreline has been filled in. A dam has been constructed on the south. The entire area has been dredged.

With the addition of the rocks mentioned above, the present survey supersedes the prior survey within the common area.

3. Comparison with Chart 5902 (Latest print date 5-4-53)

Information from the present survey has been completely applied to the chart before review. The clearance of the overhead power line in the vicinity of lat.  $48^{\circ} 40.6'$ , long.  $124^{\circ} 03.7'$ , as determined from the Descriptive Report of H-7896 (1952) is 49 ft. <sup>at MHHW</sup> The value shown on the chart is 45 ft.

4. Condition of Survey

The survey was neatly inked and conforms to the requirements of the Topographic Manual.

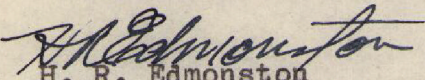
The Descriptive Report covers all matters of importance.

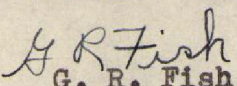
5. Compliance with Project Instructions

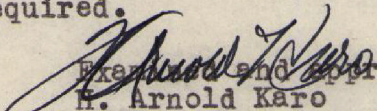
The present survey adequately complies with the Project Instructions.

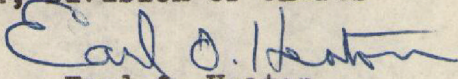
6. Additional Field Work Recommended

The survey adequately serves the purpose intended and no additional field work is required.

  
H. R. Edmonston  
Chief, Nautical Chart Branch

  
G. R. Fish  
Chief, Section of Hydrography

  
Reviewed and approved:  
H. Arnold Karo  
Chief, Division of Charts

  
Earl O. Heaton  
Chief, Division of Coastal Surveys



Applied to chV 5902 (plan)

RDG H7A 3/12/53



## NAUTICAL CHARTS BRANCH

SURVEY NO. T. 7089 a & b

### Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.