11136 11137
11138

11136 11137
11138

Diag. Cht. Nos. 5802 and 5902-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-113 Office No. T-11136 thru T-11138.

LOCALITY

State Oregon

General locality Newport and Toledo

Locality Yaquina Head, Yaquina Bay, Yaquina River

1952-53

CHIEF OF PARTY

F.A.Riddell, Officer in Charge Portland Photogrammetric Office.

LIBRARY & ARCHIVES

DATE June 5, 1958

B-1870-1 (1)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 28 B7
Ed. December 1944

GEOGRAPHIC POSITIONS

GPA 1146

Accession No. of Computation: G-1036[illegible]

Locality YAQUINA RIVER — *North American 1927 Datum* — Third-order Triangulation

STATION	LATITUDE AND LONGITUDE °	′	″	SECONDS IN METERS	AZIMUTH °	′	″	BACK AZIMUTH °	′	″	TO STATION	DISTANCE LOGARITHM (METERS)	METERS	FEET
Corner, 1953	44	37	37.132	1146.2	53	55	14.3	233	54	36.3	Wire	3.169 015	1,475.9	4,842
d.m.	124	02	06.071	133.8	82	05	53.3	262	04	45.6	Yaquina L.E. (old)	3.891 552	2,345.3	7,089
					98	56	04.5	278	55	12.5	Port 2	3.217 485	1,650.0	5,41[illegible]
Mon. No. 1 (U.S.E.), 1958	44	37	33.802	1043.4	266	25	02.4	86	25	54.8	Corner	3.216 946	1,6[illegible].0	5,407
d.m.	124	03	20.682	455.9	329	27	42.2	149	27	56.6	Wire	2.949 5[illegible]	[illegible]	2,920
Yaquina Bay Lt. 10, 1953	44	37	33.643	1038.5	18	52	23.2	198	52	14.9	Wire	2.935 701	8[illegible]	2,640
d.	124	02	48.365	1066.2	90	23	55.2	270	23	32.5	Mon. No. 1 (U.S.E.)	2.852 750	7[illegible]	2,557
					117	32	15.0	297	31	52.7	Port 2	2.895 884	786.8	2,581
					263	24	25.8	83	24	55.5	Corner	2.972 4[illegible]	[illegible]	3,079
Yaquina Bay Boat Basin, west light, 1953	44	37	47.673	1471.6	285	48	42.1	105	49	18.7	Corner	3.07[illegible] 952	1,198.9	3,91[illegible]
d.	124	02	58.179	1282.4	2	06	24.6	182	06	23.2	Wire	3.077 533	1,19[illegible].5	3,922
					49	12	08.8	229	11	53.0	Mon. No. 1 (U.S.E.)	2.8[illegible]6 425	65[illegible].5	2,150
Yaquina Bay Boat Basin, east light, 1953	44	37	42.864	1323.1	295	14	04.1	115	14	16.1	Corner	2.6[illegible] 051	415.0	1,362
d.	124	02	23.100	509.2	38	00	03.0	217	59	37.0	Wire	3.1[illegible] 057	1,327.6	4,356
					77	34	44.4	257	34	04.0	Mon. No. 1 (U.S.E.)	3.1[illegible] 674	1,299.8	4,264
Bady, 1953	44	36	39.927	1232.5	105	29	16.6	285	27	55.4	Wire	[illegible]	3,360.8	11,025
d.m.	124	00	33.293	734.1	109	26	18.3	289	24	05.4	Yaquina L.E. (old)	[illegible]	4,423.3	14,510
Watt, 1953	44	37	32.996	1018.5	8	09	37.3	188	09	29.8	Bady	3.2[illegible] 765	1,654.9	5,429
d.m.	124	00	22.640	499.1	77	57	41.7	257	55	51.0	Wire	3.550 382	3,551.5	11,65[illegible]
					87	50	23.3	267	48	02.9	Yaquina L.E. (old)	3.6[illegible] 285	4,4[illegible]	[illegible]
Yaquina Bay Lt. 14, 1953	44	36	54.636	1686.5	113	13	21.7	293	11	51.9	Mon. No. 1 (U.S.E.)	3.486 793	3,06[illegible]	[illegible]
d.	124	01	12.803	282.3	119	13	05.5	299	11	36.1	Port 2	3.500 9[illegible]	3,2[illegible]	10,5[illegible]
					223	02	24.5	43	02	59.8	Watt	3.209 572	1,62[illegible]	5,316
Gabe, 1953	44	36	51.233	1581.5	105	36	41.4	285	35	33.9	Wire	[illegible]	[illegible]	6,679
d.	124	01	31.246	688.9	229	35	09.0	49	35	57.2	Watt	[illegible]	[illegible]	[illegible]
					285	16	09.8	105	16	50.5	Bady	[illegible]	[illegible]	[illegible]

[1] No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably. (Examples: n. d.=not described; p. l.=probably lost.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 28 BT
Ed. December 1944

GEOGRAPHIC POSITIONS

1147

Accession No. of Com[illegible]

Locality YAQUINA RIVER *North American 1927 Datum* [illegible] *—order Triangulation. State*

STATION	LATITUDE AND LONGITUDE °	′	″	SECONDS IN METERS	AZIMUTH °	′	″	BACK AZIMUTH °	′	″	TO STATION	DISTANCE LOGARITHM (METERS)	DISTANCE METERS	DISTANCE FEET
"A" Hydro. Signal, 1953	44	37	27.977	863.6	267	09	56.7	87	11	36.9	Watt	3.498 12[illegible]	3,[illegible]8.6	10,380
n.d.	124	02	45.295	998.5	296	59	30.8	117	01	03.5	Body	3.514 08[illegible]	3,[illegible]	10,717
					29	12	37.6	209	12	27.1	Wire	2.827 46[illegible]	[illegible]	2,2[illegible]
"B" Hydro. Signal, 1953	44	37	25.395	783.9	265	39	31.4	85	41	10.2	Watt	3.492 6[illegible]	[illegible]	[illegible]
n.d.	124	02	43.286	954.2	296	04	40.6	[illegible]	06	11.9	Body	3.[illegible]	[illegible]	10,[illegible]
					36	17	34.4	216	17	22.5	Wire	2.790 64[illegible]	[illegible]	2,0[illegible]
"C" Hydro. Signal, 1953	44	37	17.221	531.6	260	53	44.8	80	55	21.0	Watt	3.4[illegible] 6[illegible]	[illegible]	10,112
n.d.	124	02	40.686	897.0	292	16	24.8	[illegible]2	17	54.5	Body	[illegible]	[illegible]	9,959
					59	20	41.7	259	20	28.0	Wire	2.698 [illegible]	[illegible]	1,6[illegible]
Yaquina Bay Entrance Range, rear light, 1953	44	37	14.228	439.2	169	28	43.1	349	28	39.6	Mon. No. 1 (U.S.E.)	2.7[illegible]	[illegible]	2,016
d.	124	03	15.592	343.8	174	13	03.9	354	13	00.8	Port 2	2.9[illegible]	[illegible]	[illegible]
					245	13	45.3	65	14	34.2	Corner	3.227 [illegible]	[illegible]	[illegible]
Block, 1953	44	36	54.45	1680.8	170	37	21	350	36	45	Yaquina Head L.H.	3.842 577	6,9[illegible]	22,[illegible]
d.m.	124	03	50.09	1104.4	189	19	46	9	19	52	Yaquina L. H. (old)	3.015 281	1,0[illegible]	[illegible]
					215	59	11	35	59	31	Newport, center of Bridge Light	3.0[illegible]	[illegible]	[illegible]
Yaquina River Lt. 25, 1953	44	35	01.06	32.7	310	10	39	130	11	0[illegible]	King	2.9[illegible]	[illegible]	2,9[illegible]
d.	124	00	40.13	885.3	35	06	45	215	06	[illegible]	Cat	[illegible]	[illegible]	[illegible]
Yaquina River Lt. 42, 1953	44	35	15.839	488.9	107	08	42.0	287	08	25.5	[illegible]	[illegible]	[illegible]	[illegible]
d.	123	56	33.258	735.7	168	10	01.8	340	09	59.5	Grass	[illegible]	[illegible]	[illegible]
					206	42	08.3	26	42	26.0	Field	3.080 [illegible]	1,2[illegible]	[illegible]

[1] No check on this position. Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably. (E[illegible] d; p. [illegible]

DATA RECORD

T-11136 thru T-11138

Project No. (II): Ph-113 Quadrangle Name (IV):

Field Office (II): Newport, Oregon Chief of Party: Fred A. Riddell

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Fred A. Riddell

Instructions dated (II) (III): 27 February 1953 (Field and Office) Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): 11-25-53 Date reported to Nautical Chart Branch (IV): 12-17-53

Applied to Chart No. Date: Date registered (IV): 26 Feb 1958

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): N.A. 1927 Vertical Datum (III):

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water X
Elevations shown as (6) refer to sounding datum X
i.e. mean lower low water

Reference Station (III): See reverse side

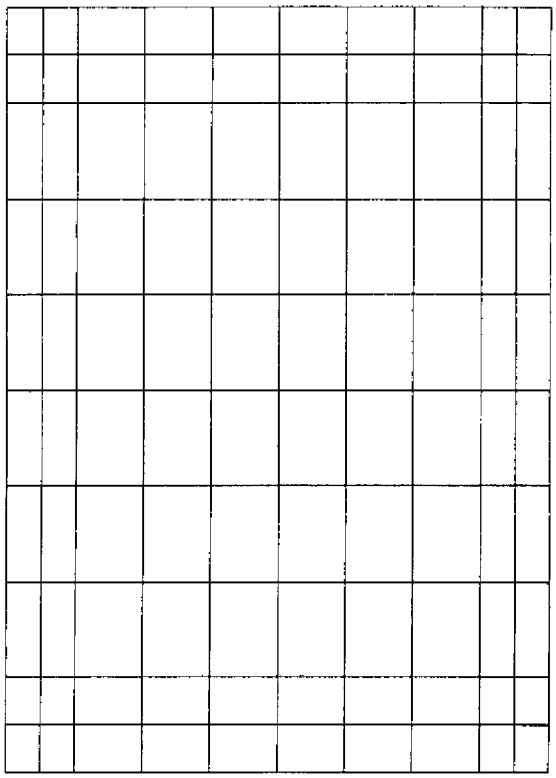
Lat.: Long.: Adjusted Unadjusted

Plane Coordinates (IV): State: Zone:

Y= X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.



Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): Charles Bishop and John Winniford — Date: 3/9/53 thru 6/6/53

Planetable contouring by (II): — Date:

Completion Surveys by (II): — Date:

Mean High Water Location (III) (State date and method of location): 3/9/53 thru 5/29/53 by field inspection and verified by stereoscopic examination of office photographs.

Projection and Grids ruled by (IV): — Date:

Projection and Grids checked by (IV): — Date:

Control plotted by (III): Fred A. Riddell, James L. Harris — Date: 4/2/53, 4/13/53 & 5/11/53

Control checked by (III): J. E. Deal, James L. Harris — Date: 4/14/53 & 5/12/53, 4/3/53

Radial Plot or Stereoscopic Control extension by (III): J. E. Deal and James L. Harris — Date: 5/21/ 53

Stereoscopic Instrument compilation (III):
- Planimetry — Date:
- Contours — Date:

Manuscript delineated by (III): Carita C. Wiebe (All sheets) — Date: 4/9/53 thru 7/20/53

Photogrammetric Office Review by (III): J. E. Deal (All sheets) — Date: 7/8/53 thru 7/21/53

Elevations on Manuscript checked by (II) (III): J. E. Deal — Date: 7/8/53 thru 7/21/53

Dept Agric.

Camera (kind or source) (III): Production Marketing Administration, Fairchild K-3B, 8.25" focal length

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
DFL-12H-161 thru 170	10/5/52 Bar	13:08	1:10,000 ratio	1.2 ft. above M.H.W.
DFL-13H- 28 thru 36	" Yaquina	12:18	"	1.0 ft. above M.H.W.
DFL-13H- 78 thru 85	" Toledo	12:33	"	1.1 ft. above M.H.W.
DFL-13H-147 thru 153	" "	13:00	"	1.2 ft. above M.H.W.

Yaquina Bar Hiesl water at 12:39 @ Bar = 9.2 above MLLW or 1.9 " "
Yaquina 12:59 @ Yaquina = 9.9 " " or 2.6 " "
Toledo 13:39 Toledo 9.9 " " or 2.6 " "

Tide (III)

		MHW	Ratio of Ranges	Mean Range	Diurnal ~~Spring~~ Range	
Reference Station:	Humboldt Bay, California			4.5	6.4	
Subordinate Station:	Bar at Entrance Yaquina Bay, Oregon	7.3	1.3	5.9	7.9	Time = +0.05
Subordinate Station:	Toledo, Oregon	7.4	1.4	6.3	8.1	= +1:05
	Yaquina	7.37	1.4	6.2		+0:25

Washington Office Review by (IV): Date:

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 10 (Shoreline planimetry)
Shoreline (More than 200 meters to opposite shore) (III): 37 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 6 statute miles
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 131 Recovered: 25 Identified: 15
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III): 31*
Number of Temporary Photo Hydro Stations established (III): 212

Remarks: * 6 were established by instrument methods.
5 are from positions furnished by U.S.E.D.
1 was former triangulation station (now destroyed)

These 12 stations were identified and used to supplement the 15 identified triangulation stations for horizontal control in the radial plot.

1 other was from position furnished by U.S.E.D.
5 others were established by instrument methods but not identified.
13 others were identified and located during the running of the radial plot

M-2618-12(4)

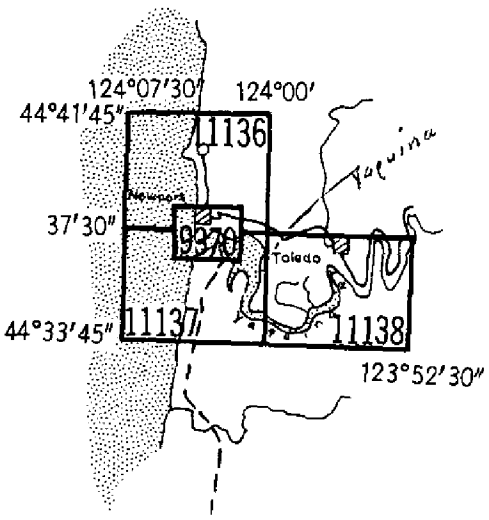
Summary to Accompany
Shoreline Maps T-11136-38, incl.

Instructions for project Ph-113 were issued 27 February 1953. The project was designed to furnish shoreline, positions of aids and hydrographic stations to be used by hydrographic project CS-356. The combined surveys were to afford information for a new edition of chart 6058, Yaquina River and approaches.

Because of the difficulty in recovering enough previous control, a net of third order stations was established in 1953 from Yaquina Bay Entrance Range, rear light, to and including Yaquina River Lt. 42.

SHORELINE MAPPING PROJECT PH-113

Newport, Oreg. Yaquina Bay & River



OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Lin. Miles Shoreline
11136	7
11137	15
11138	15
TOTAL	37

9370 8

FIELD INSPECTION REPORT

Yaquina Bay and River, Oregon

Project Ph-113

Charles H. Bishop - Chief of Unit

2. Area Field Inspection.

The area covered by this report is the outer coast from the vicinity of Yaquina Head south to Lat. 44° 33' 45" and the Yaquina River from the entrance at Newport upstream to Toledo. As the purpose of this project was to provide shoreline and control for hydrographic surveys, only that part of the area which would be included on a nautical chart was field inspected.

From Newport to the north limit of the project the coast is mostly a resort area with numerous summer homes and cabins between the highway and the shoreline. From Yaqyina Head northward the beach is backed mostly by a cliff. Yaquina Head itself is a cliff up to 150 feet in height with numerous offshore rocks. From Yaquina Head southward to Newport the beach is backed by earth and sandstone bluffs.

The coastal area south of Newport is sparsely settled. A sand dune area extends from the south jetty southward for 1.7 miles. The largest dunes are around 60 feet in height. The area between the dunes and the highway is wooded with low pines being next to the dunes and low deciduous trees between the pines and the highway. From the dune area southward the sand beach is backed by an earth bluff up to 100 feet in height. The ground cover is mostly salal and low pines.

The area along both sides of the Yaquina River is wooded. The cover is second growth and mostly deciduous. At present little logging is being done between Newport and Toledo. Most of the timber for the sawmills comes from above Toledo.

The only towns are Newport and Toledo. Industries at Newport are lumbering and fishing, both commercial and sport. There is a crab cannery at Newport and there are oyster beds in the extensive mud flats on the north side of Yaquina Bay just east of the town. Also tourists provide a considerable amount of income to Newport during the summer months. The main industry at Toledo is lumbering.

Yaquina is a very small settlement 3 miles southeast of Newport and on the same side of the river.

Oysterville, about 5 miles southeast of Newport and on the south side of the river, was once a settlement but is now mostly the name of a location. There are three dwellings and a small pier.

Floating logs and logs awash drifting with the current are not uncommon in the Yaquina River. Occasionally a log will become water soaked at one end and drop out of a raft. The heavy end will stick to the bottom and the light end will be awash or project slightly at all stages of the tide, thus being a hazard to navigation.

3. Horizontal Control.

Considerable difficulty was encountered in recovering stations in the arc of triangulation that was established along the Yaquina River in 1914 and only a small percentage were recovered. The original descriptions are in most cases very inadequate. Erosion has changed parts of the area and construction has changed other parts. One side of the arc was along the railroad that ran from Toledo to Yaquina. This railroad has been replaced by a road, thus probably destroying or covering most of the marks on the north side of the river. Several of the stations on the south side of the river were between the high and low water marks. To recover a large percentage of the stations in the arc would require a resurvey and would probably take more time than to run a new arc of triangulation from Newport to Toledo.

(a) Supplemental stations established during field inspection:

Station	Method of Location	Accuracy	
BLOCK	3-point fix	~~Fourth~~ 3rd Order	G-10381
SAND (temporary, not described, not marked)	3-point fix	" "	
CORNER (temporary)	3-point fix	" "	G-10381
WATT	3-point fix	" "	G-10381
BADY	single triangle	" "	G-10381

All of these stations except SAND were established and used to control the radial plot. SAND was established solely for use by the hydrographic party in the area at the time of field inspection.

(b) No datum adjustments were made by the field party.

(c) Positions for the following stations were obtained from

the USED, Portland, Oregon:

Yaquina Bay Lt. 10 (1952)
Boat Basin East Lt. (1951)
Boat Basin West Lt. (1951)
MON NO. 1 (1951) (topo)
Lookout Tower (1948)
Yaquina Bar Rear Range (1948)
Yaquina Bar Front Range (1948)

(d) A sufficient number of stations to control the radial plot were recovered and positively identified on the photographs.

(e) All Coast and Geodetic Survey stations were searched for and Form 526 submitted. One "lost" station, TOLEDO COURTHOUSE FLAGSTAFF 1914, was recovered and identified. The cupola upon which the flagstaff was situated remains intact, but the flagstaff is no longer in existance.

4. Vertical Control.

Not applicable.

5. Contours and Drainage.

Not applicable.

6. Woodland Cover.

Woodland cover along the coastal area is mostly low pine trees and salal, which is a dense brush. Along the Yaquina River, woodland cover is a heavy growth of mixed fir and deciduous trees growing to and overhanging the mean high water line in many places.

7. Shoreline and Alongshore Features.

(a) The mean high water line was inspected and indicated on the photographs in accordance with established procedure.

(b) No attempt was made to identify the low water line. It was left for the hydrographer to determine.

(c) The foreshore along the coastal area is changeable. From Newport to Yaquina Head the beach gradually changes from sand to rocky. The winter storms tend to wash out the sand, thus exposing more rocks. During the summer the sand gradually fills in again making much more beach area late in the summer than in the spring of the year. Southward from Newport, the foreshore is

is sand, with the same seasonal building up and washing out of the beaches.

From Newport to Toledo the foreshore along the river is mud. There are extensive mud flats in Yaquina Bay at low tide.

(d) Cliffs in the area are on the south, west and north sides of Yaquina Head and along the shoreline adjacent to the north side of Yaquina Head. Bluffs up to 100 feet in height are along most of the shoreline from Yaquina Head to the south limit of the project. A cut-face bluff up to 50 feet in height extends from McLean Point to Coquille Point on the northeast and east side of Yaquina Bay. This bluff is broken at intervales by ravines. A high wooded bluff rises along the west side of the river in the area between Oneatta Point and Yaquina Bay. Another high wooded bluff is on the west side of the river just downstream from Toledo.

(e) The outer coast has no piers or similar structures but there are numerous piers and wharves along the north side of Yaquina Bay at Newport, a pier on the south side of the bay just east of the highway bridge at Newport and wharves and piers at Toledo. Smaller piers are scattered along the river between Yaquina and Toledo. All shoreline structures have been indicated on the photographs.

(f) The only submarine cable is the telephone cable across the bay at Newport. Both ends have been identified on the photograph.

(g) The only other shoreline structures are two jetties extending in a southwesterly direction from the shore on either side of the entrance to Yaquina Bay.

8. <u>Offshore Features.</u>

In Yaquina Bay and River are several tie-ups used for securing barges and log rafts. These structures are piles spaced at intervals and in a line with a log boom on each side. The booms are secured together by cross pieces in such a manner that they rise and fall with the tide and serve as a fender between the barges or rafts and the piles. The log-holding areas near Toledo have numerous single piles. No attempt was made to locate these if they could not be identified on the photographs.

Numerous offshore rocks between Newport and Yaquina Head and in the vicinity of Yaquina Head were observed during field inspection and have been indicated on the photographs. Sextant angles were taken to a group of rocks on the south side of Yaquina Head and to a group on the north side. These angles are recorded on contact scale photograph DFL 12H 169. An object which is either an old wreck or a rock located just north of the north jetty was
(½ mile N.W)

intersected from three photo points. One rock near Coquille Point on the east side of Yaquina Bay was located by sextant fix.

9. Landmarks and Aids.

(a) Landmarks already charted were inspected to determine if they should continue to be used. Four new landmarks in the vicinity of Toledo were selected. The old lighthouse at Newport which was recommended for deletion in 1951 because it was to have been destroyed within the next few weeks is still standing and should be retained as a landmark.

(b) No interior landmarks were selected.

(c) There is one aeronautical aid which is the airway beacon at the Newport Municipal Airport.

(d) All fixed aids to navigation have been either identified on the photographs or have been intersected by theodolite cuts..

(e) Floating aids to navigation were not located.

Form 567 is submitted for all landmarks and fixed aids to navigation.

10. Boundaries, Monuments and Lines.

Not applicable.

11. Other Control.

Recoverable topographic stations were not required on this project. However, Stations BLOCK, WATT and BADY which were established to control the radial plot are classified as recoverable topographic stations rather than triangulation. Station CORNER is marked with a pipe with a wooden plug and nail in the end but this is only a temporary mark. Station SAND was not marked or described and is not recoverable.

The disk for triangulation station ET 1914 was found but evidently not in its original position. It was restamped ETON 1953 and the new position will be obtained from the radial plot.

Photo-hydro stations were selected along all the shoreline and temporarily flagged for the hydrographic party. These points have been identified on the photographs and the positions are to be determined by radial plot. All necessary signals for hydrography were built before the photo party left the area.

12. Other Interior Features.

Roads in the area have been classified on the photographs. The gravel road on the south side of the Yaquina River from Toledo toward Oysterville is being extended to Oysterville. Construction is in progress. The new section of road does not appear on the photographs and it was not located by the photo party.

There are no overhead cables over navigable waters.

Bridge clearances were determined as follows:

	Bridge	Type	Horiz. Cl.Ft.	Vert. Cl.Ft.	Time	Date
T-11137	Hwy. 101 bridge over Yaquina Bay	Fixed	395	130	above MHW	
T-11138	First bridge upstream from mouth of Depoe Slough, road leading to lumber mill.	"	37	10.5 5.0 MHW	1530 PST	5/21/53
T-11138	Railroad bridge over Depoe Slough	"	18	13.5	1555 PST	"
T-11138	Hwy. bridge over Depoe Slough	"	12.5	13.0 8.0 MHW	1600 PST	"
T-11138	Hwy. bridge over Yaquina River at Toledo	"	150	48.5	1515 PST	"

The Newport Municipal Airport is 3 miles south along U.S. Highway 101 from Newport and on the east side of the highway.

13 Geographic Names.

Geographic names were investigated and will be the subject of a special report.

14. Special Reports.

(a) "GEOGRAPHIC NAMES REPORT, Newport to Toledo, Oregon, Project Ph-113".

Approved and forwarded,

Fred A. Riddell
Chief of Party

Respectfully submitted,

Charles H. Bishop

Charles H. Bishop
Cartographer

PHOTOGRAMMETRIC PLOT REPORT

PROJECT PH-113

21. Area covered:

This radial plot covers a shoreline survey in the vicinities of Newport, and Toledo, Oregon and comprises Map Manuscripts T-11136 thru T-11138, scale 1:10,000. It includes a portion of the Pacific Coast extending 5.7 miles north and 3.5 miles south from the jetty entrance to Yaquina Bay, all of Yaquina Bay, and Yaquina River from Yaquina Bay to Olallie Creek.

Map Manuscript T-9370, scale 1:5000, which was compiled by Kelsh Plotter in the Washington Office also lies within the area.

22. Method:

Three map manuscripts, of acetate material, each ruled with a polyconic projection in half minute intervals and Oregon State Coordinate Grid in 5000 foot intervals, were used. Base grids were not used.

Ratio prints, scale, 1:10,000 of 1952 single lens 1:20,000 photography, made for the Production Marketing Administration, Department of Agriculture, were used.

Azimuths, horizontal control points, and all photogrammetric points were pricked and transferred by the floating mark method using a prismatic stereoscope.

The templets were drawn on 20" x 20" sheets of .005" clear acetate. No attempt was made to correct the radials for paper distortion becuase the photographs did not contain any marks for this purpose.

In order to furnish the locations of photo-hydro signals and the mean high-water line to the hydrographic party as they were needed, it was necessary to run the radial plot in sections.

As soon as the field unit completed the field data for the first flight of photographs east of the Pacific Ocean shoreline it was forwarded to the Portland Office. These data were immediately transferred to the office photographs and an acetate templet plot was laid for that particular flight. The locations of hydro-signals and shoreline were then compiled and forwarded to the hydrographic party. In this manner the plot progressed easterly as data for each flight of photographs were received until the entire area was completed. As each new flight strip was in-

corporated into the plot it was necessary to make slight adjustments in the locations of a few pass points at the extreme eastern limits of the section previously plotted. These points were always outside of the limits of any location that had been furnished the hydrographic party.

Radials to the photo-hydro signals were drawn on the templets and these signals were located along with other photogrammetric points during the running of the radial plot.

All identified horizontal control stations were held except station ET, 1914 and satisfactory locations were obtained for photogrammetric points.

Refer to Item 25 "Photography" for a description of difficulties in the location of points because of insufficient side lap of the photograph flights.

23. Adequacy of control:

The horizontal control stations identified were adequate.

Refer to correspondence attached to this report concerning station ET, 1914 and also for facts relative to the computation of geographic positions for stations WATT 1953, BADY 1953, GABE 1953, and YAQUINA BAY LIGHT 14, 1953.

24. Supplemental data:

A reduction, scale 1:10,000, printed on clear acetate of map manuscript T-9370 was furnished this office. The results of this radial plot were in excellent agreement with the planimetry compiled on T-9370 by use of the Kelsh Plotter.

25. Photography:

The photography was adequate except that the flights were spaced too far apart and gave insufficient side lap to obtain the best results in a hand templet method radial plot. Many slim angle intersections of radials of photogrammetric points resulted along each of the light lines. These gave good locations in longitude but were doubtful in latitude. These points were resolved as follows:

Before the templets were dismantled in the plot the radials giving slim angle intersections were inked on the reverse side of the map manuscript.

If the photograph, on which any points in question fell near the central part, was in good scale with the results of the radial

plot; the photograph was placed under the map manuscript and fixed in position by holding coincident the strongly located points common to the photograph and map manuscript. The latitude locations of the points in question were then pricked where they fell on the inked radials.

If the photograph was not in good scale the vertical projector was used to bring the photograph into scale with the results of the plot and the latitude location was then pricked.

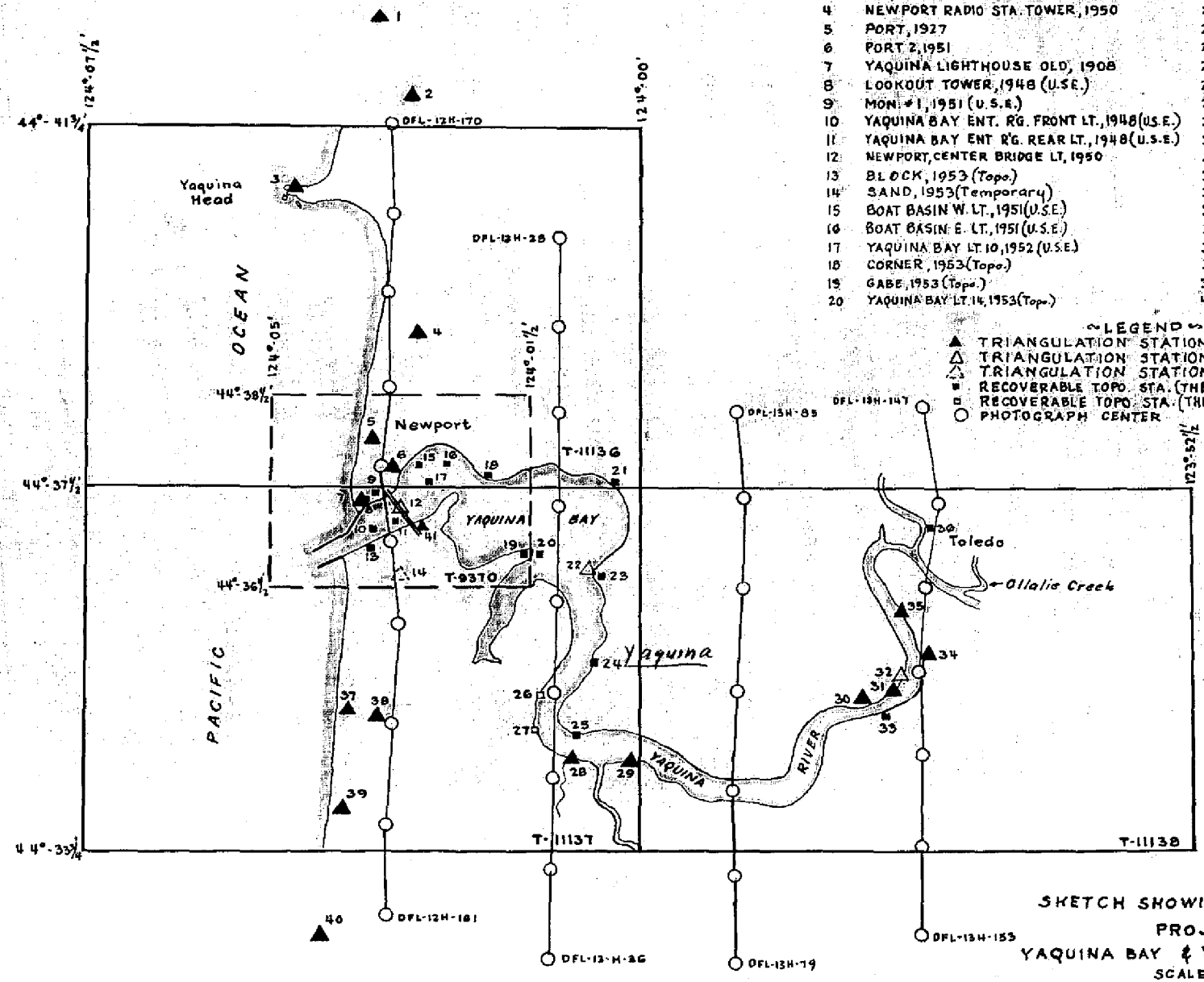
Approved and forwarded:

Fred A. Riddell
Officer-in-Charge

Respectfully submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Cartographer



HORIZONTAL CONTROL STATION TABULATION

1. OTTER, 1927
2. IRON, 1908
3. YAQUINA HEAD LIGHTHOUSE, 1908
4. NEWPORT RADIO STA. TOWER, 1950
5. PORT, 1927
6. PORT 2, 1951
7. YAQUINA LIGHTHOUSE OLD, 1908
8. LOOKOUT TOWER, 1948 (U.S.E.)
9. MON. #1, 1951 (U.S.E.)
10. YAQUINA BAY ENT. RG. FRONT LT., 1948 (U.S.E.)
11. YAQUINA BAY ENT RG. REAR LT., 1948 (U.S.E.)
12. NEWPORT, CENTER BRIDGE LT, 1950
13. BLOCK, 1953 (Topo.)
14. SAND, 1953 (Temporary)
15. BOAT BASIN W. LT., 1951 (U.S.E.)
16. BOAT BASIN E. LT., 1951 (U.S.E.)
17. YAQUINA BAY LT. 10, 1952 (U.S.E.)
18. CORNER, 1953 (Topo.)
19. GABE, 1953 (Topo.)
20. YAQUINA BAY LT. 14, 1953 (Topo.)
21. WATT, 1953 (Topo.)
22. OLD ROCK, 1914
23. BADY, 1953 (Topo.)
24. YAQUINA RIVER LT. 19, 1953 (Topo.)
25. YAQUINA RIVER LT. 25, 1953 (Topo.)
26. YAQUINA RIVER LT. 20, 1953 (Topo.)
27. YAQUINA RIVER LT. 22, 1953 (Topo.)
28. CAF, 1914
29. KING, 1914
30. DEAD, 1914
31. GRASS, 1914
32. APPLE, 1914
33. YAQUINA RIVER LT. 42, 1953 (Topo.)
34. FIELD, 1914
35. DIKE, 1914
36. TOLEDO C.H. CUPOLA, 1953 (Topo.)
37. LIFE, 1908
38. NEWPORT MUN. AIRPORT BN., 1950
39. DODGE, 1927
40. MORRISON, 1927
41. WIRE, 1914

LEGEND

- ▲ TRIANGULATION STATION (IDENTIFIED)
- △ TRIANGULATION STATION (RECOVERED, NOT IDENTIFIED)
- △ TRIANGULATION STATION (TEMPORARY)
- ■ RECOVERABLE TOPO. STA. (THEODOLITE LOC., IDENTIFIED)
- □ RECOVERABLE TOPO. STA. (THEODOLITE LOC., ESTABLISHED)
- ○ PHOTOGRAPH CENTER

SKETCH SHOWING AREA RADIAL PLOT
PROJECT PH-113
YAQUINA BAY & YAQUINA RIVER, OREGON
SCALE, 1:120,000 Approx.

Photogrammetry

MAP T-11136 PROJECT NO. Ph-113 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
OTTER, 1927	G-642	N.A.	44 42 22.231	686.2	(1165.9)					
	P 619	1927	124 03 34.876	767.8	(553.0)					
DO	Field	"	44 42	684.8	(1167.3)					
Sub. Sta.	Comp.		124 03	777.1	(543.7)					
IRON, 1908	G-586	"	44 41 34.540	1066.2	(785.9)					
	P-27		124 03 06.304	138.8	(1182.3)					
DO	"	"	44 41	1050.7	(801.4)					
Sub.Sta .			124 03	152.9	(1168.2)					
YAQUINA HEAD	G-586	"	44 40 36.898	1139.0	(713.1)					
LIGHTHOUSE, 1908	P 28		124 04 41.572	915.6	(405.9)					
NEWPORT RADIO STA.	G-8626	"	44 39 05.518	170.3	(1681.8)					
TOWER, 1950 KNPT	P 1092		124 03 01.342	29.6	(1292.5)					
PORT, 1927	G-611	"	44 38 00.462	14.3	(1837.8)					
	P 77		124 03 37.512	826.8	(495.7)					
DO	Field	"	44 37	1847.7	(4.4)					
Sub. Sta.	Comp.		124 03	837.5	(485.0)					
MON #1, 195~~1~~3	G-10381 USED	"	44 37 33.8~~23~~02	104~~4.1~~3.4	(808.0)					
~~(Topo)~~ 3rd.	p. 1146		124 03 20.~~707~~682	45~~8.5~~5.9	(866.2)					
PORT 2, 1951	G-591	"	44 37 45.427	1402.2	(449.8)					
	P 47		124 03 20.016	441.2	(881.4)					
DO	Field	"	44 37	1384.0	(468.0)					
Sub. Sta.	Comp.		124 03	420.9	(901.7)					
YAQUINA BAY 3rd.	G-10381 p. 1146 USED	" sw	44 37 33.6~~61~~43	1039~~.1~~4.5	(813.0)					
LT. 10, 195~~2~~3			124 02 48.36~~1~~5	1066.~~1~~2	(256.6)					

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

Photogrammetry

MAP T-11136 PROJECT NO. Ph-113 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
BOAT BASIN 3rd	G-10381	N.A.	44 37 47.~~696~~ 73	1472.~~3~~ 1.6	(379.8)					
WEST LIGHT, 195~~1~~ 3	~~USED~~ p.1146	1927	124 02 58.~~180~~ 74	1282.~~5~~ 4	(40.1)					
BOAT BASIN 3rd	G-10381	"	44 37 42.~~890~~ 64	1323.~~9~~ 1	(528.2)					
EAST LIGHT, 195~~1~~ 3	~~"~~ p.1146		124 02 23.~~076~~ 100	508.~~7~~ 9.2	(813.9)					
CORNER, 1953 ~~(TOPO)~~ 3rd	G-10381 ~~Field~~ p.1146 ~~Comp.~~	" 5w	44 37 37.13~~3~~ 2	1146.2	(705.9)					
			124 02 06.0~~67~~ 71	133.~~7~~ 8	(1188.9)					
DO Sub. Sta.	DO	"	44 37	1192.0	(660.1)					
			124 02	98.3	(1224.3)					
WATT, 1953 ~~(Topo.)~~ 3rd	G-10381 ~~Field~~ p.1146 ~~Comp.~~	"	44 37 33.~~022~~ 996	1019.~~3~~ 8.5	(832.7)					
			124 00 22.6~~10~~ 46	498.~~4~~ 9.1	(824.3)					
DO Sub.Sta.	DO	"	44 37	999.2	(852.8)					
			124 00	511.2	(811.5)					

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

Photogrammetry

MAP T- 11137 PROJECT NO. Ph - 113 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE			DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
SIGNAL C 3rd	G-10381 ~~Field~~	N.A.	44	37	17.22~~8~~ 1	531.~~8~~ 6	(1320.3)					
(COMPUTED HYDRO SIG)	p. 1147 ~~Comp.~~	1927	124	02	40.6~~9~~8 6	897.~~2~~ 0	(425.6)					
LIFE, 1908	G-586	"	44	35	16.400	506.2	(1345.8)					
	P 28		124	03	56.982	1257.0	(66.5)					
DO	Field	"	44	35		487.7	(1364.3)					
Sub. Sta.	Comp.		124	03		1236.2	(87.3)					
NEWPORT, MUNICIPAL AIRPORT, BEACON 1950	G-8626	"	44	35	11.940	368.6	(1483.4)					
	P 1092		124	03	35.911	792.2	(531.4)					
DO	Field	"	44	35		366.1	(1485.9)					
Sub. Sta.	Comp.		124	03		765.7	(557.9)					
DODGE, 1927	G-611	"	44	34	14.786	456.4	(1395.6)					
	P 79		124	04	00.583	12.9	(1311.0)					
DO	Field	"	44	34		477.6	(1374.4)					
Sub. Sta.	Comp.		124	04		42.3	(1281.6)					
MORRISON, 1927	G-611	"	44	32	56.195	1734.6	(117.4)		(SOUTH OF SHEET)			
	P 79		124	04	17.943	396.1	(928.3)					
DO	Field	"	44	32		1626.1	(225.9)		DO			
Sub. Sta.	Comp.		124	04		383.5	(940.9)					
GABE, (~~TOPO~~) 3rd	G10381 ~~Field~~	"	44	36	51.2~~40~~ 33	1581.~~7~~ 5	(270.4)					
1953	p. 1146 ~~Comp.~~		124	01	31.~~220~~ 46	688.~~4~~ 9	(634.6)					
YAQUINA RIVER	Field	"	44	35	27.591	851.7	(1000.4)					
LT. 20, 1953 (TOPO)	Comp.		124	01	18.018	397.4	(926.0)					
YAQUINA RIVER	DO	"	44	35	03.484	107.5	(1744.5)					
LT. 22, 1953 (TOPO)			124	01	25.390	560.1	(763.5)					

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

UNITED STATES DEPARTMENT OF AGRICULTURE
Production and Marketing Administration

167 West Second South
Salt Lake City 1, Utah
April 8, 1953

U. S. Coast & Geodetic Survey
Comdr. Fred A. Riddell
c/o Swan Island Postal Station
Portland 18, Oregon

Gentlemen:

The ~~dates~~ times for the Lincoln County pictures are:

(Beginning and ending times of each flight line)

13H: 118 (12:48 PM) - 173 (1:10 PM)
13H: 60 (12:27 PM) - 113 (12:46 PM)
13H: 1 (12:07 PM) - 55 (12:25 PM)
12H: 141 (11:35 AM) - 185 (11:52 AM).

?

Very truly yours,

Jack M. Ahearn
Chief, Western Laboratory
Aerial Photographic & Engineering Service

Du Chaten

Make copy to send to Minneapolis.

Fox

Photogrammetry

MAP T- 11137 PROJECT NO. Ph - 113 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
YAQUINA LIGHT-	G-586	N.A.	44 37 27.565	850.9	(1001.2)					
HOUSE, OLD, 1908	P 28	1927	124 03 42.471	936.3	(386.4)					
LOOKOUT TOWER	USED	"	44 37 27.519	849.5	(1002.6)					
(USE), 1948 (C.G.)			124 03 41.817	921.9	(400.8)					
NEWPORT, CENTER OF	G-8626	"	44 37 22.745	702.1	(1150.0)					
BRIDGE LIGHT, 1950	P 1092		124 03 21.320	470.0	(852.7)					
YAQUINA BAY FRONT	USED	"	44 37 06.631	204.7	(1647.4)					
RANGE, 1948 (USE)			124 03 34.637	763.7	(559.2)					
YAQUINA BAY REAR	G-10381 p.1147	"	44 37 14.2~~42~~ 28	439.~~6~~ 2	(1412.5)					
RANGE, 1948 (USE)			124 03 15.5~~42~~ 9	342.~~7~~ 3.8	(980.1)					
BLOCK, 1953 (~~TOPO~~ 3rd)	G-10381 ~~Field~~ p.1147	"	44 36 54.45~~8~~ 7	1680.~~9~~ 8	(171.2)					
	~~Comp.~~		124 03 50.0~~88~~ 9	1104.4	(218.5)					
DO	DO	"	44 36	1583.6	(268.5)					
Sub. Sta.			124 03	1073.3	(248.6)					
SAND, (TEMPORARY)	DO	"	44 36 42.933	1325.3	(526.8)					
1953			124 03 31.978	705.1	(617.9)					
WIRE, 1914	G-591	"	44 37 08.971	276.9	(1575.2)					
	P 47		124 03 00.173	3.8	(1319.0)					
DO	Field	"	44 37	263.9	(1588.2)					
Sub. Sta.	Comp.		124 03	7.4	(1315.4)					
SIGNAL A (3rd)	G10381 p.1147 ~~DO~~	"	44 37 27.98~~4~~ 77	863.~~8~~ 6	(988.3)					
(COMPUTED HYDRO SIG.)			124 02 45.29~~3~~ 5	998.5	(324.2)					
SIGNAL B (3rd)	G-10381 p.1147 DO	"	44 37 25.~~4~~01 395	784.~~1~~ 3.9	(1068.0)					
(COMPUTED HYDRO SIG.)			124 02 43.28~~0~~ 6	954.~~7~~ 2	(368.6)					

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

Photogrammetry

MAP T-11137 PROJECT NO. Ph - 113 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
CAF, 1914	G-591	N.A.	44 34 45.735	1411.7	(440.3)					
	P 49	1927	124 00 55.207	1218.0	(105.7)					
DO	Field	"	44 34	1357.8	(494.2)					
Sub. Sta.	Comp.		124 00	1134.8	(188.9)					
KING, 1914	G-591	"	44 34 41.994	1296.2	(555.8)					
	P 50		124 00 08.535	188.3	(1135.4)					
DO	Field	"	44 34	1287.1	(564.9)					
Sub. Sta.	Comp.		124 00	126.7	(1197.0)					
OLD ROCK, 1914	G-591	"	44 36 41.448	1279.4	(572.6)					
	P 57		124 00 41.920	924.3	(399.0)					
BADY ~~(TOPO)~~ 3rd	G-10381 ~~Field~~	"	44 36 39.9~~39~~ 27	1232.~~8~~ 5	(619.2)					
1953	p. 1146 ~~Comp.~~		124 00 33.2~~53~~ 9	73~~0~~.2 4.1	(589.8)					
DO	DO	"	44 36	1245.1	(606.9)					
Sub. Sta.			124 00	719.3	(603.7)					
YAQUINA BAY LIGHT	G-10381 p. 1146	"	44 36 54.6~~36~~ 8	1687.~~1~~ 6.5	(165.0)					
14, 1953 3rd ~~(TOPO)~~	DO		124 01 12.~~763~~ 803	281.~~4~~ 2.3	(1041.5)					
YAQUINA RIVER	G-10381 p. 1146	"	44 3~~8~~ 01.06~~7~~	32.~~8~~ 7	(1819.2)					
LT. 25, 1953 3rd (TOPO)	DO		124 00 40.1~~29~~ 3	885.3	(438.3)					
YAQUINA RIVER	DO	"	44 35 42.889	1323.9	(528.1)					
LT. 19, 1953			124 00 39.177	864.1	(459.3)					

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1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

Photogrammetry

MAP T-11138 PROJECT NO. PH - 113 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
DEAD, 1914	G -591	N.A.	44 35 21.713	670.2	(1181.8)					
	P 52	1927	123 56 59.905	1321.4	(2.1)					
DO	Field	"	44 35	677.1	(1174.9)					
Sub. Sta.	Comp.		123 57	13.5	(1310.0)					
GRASS, 1914	G-591	"	44 35 27.259	841.4	(1010.6)					
	P 52		123 56 36.606	807.5	(516.0)					
DO	Field	"	44 35	908.4	(943.6)					
Sub. Sta.	Comp.		123 56	779.9	(543.6)					
APPLE, 1914	G-591	"	44 35 36.799	1135.9	(716.1)					
	P 52		123 56 25.298	558.0	(765.4)					
TOLEDO COURTHOUSE	Former	"	44 37 11.786	363.8	(1488.2)		Formerly "TOLEDO, COURTHOUSE			
CUPOLA, 1953 (Topo.)	Triangu- lation Sta.		123 56 05.607	123.6	(1199.2)		FLAGSTAFF, 1914"			
FIELD, 1914	G-591	"	44 35 50.640	1563.1	(288.9)					
	P 53		123 56 08.760	193.2	(1130.1)					
DO	Field	"	44 35	1625.5	(226.5)					
Sub. Sta.	Comp.		123 56	215.3	(1108.0)					
DIKE, 1914	G-591	"	44 36 15.702	484.7	(1367.3)					
	P 53		123 56 27.616	609.0	(714.1)					
YAQUINA RIVER	G-10851 ~~Field~~	"	44 35 15.8~~41~~ 39	48~~9.0~~ 8.9	(1363.0)					
LT. 42, 1953 3rd	p. 1147 Comp.		123 56 33.25~~9~~ 8	733.7	(589.9)					

Page 22

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

C
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Washington, D. C.

711-aal

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

5 June 1953

To: Comdr. Fred A. Riddell
U. S. Coast & Geodetic Survey
Swan Island Postal Station
Portland 18, Oregon

Subject: Radial Plot, Ph-113

Reference: Your Preliminary Monthly Report for May

I gather from your report that the radial plot for project Ph-113 is apparently satisfactory after rejecting station ET, 1914 and recomputing your three-point fix position using what were originally intended to be check angles and rejecting the directions on station ET, 1914. This has apparently solved the radial plot, but it leaves the plot in this area based on no check positions and does not resolve the position discrppancy at station ET, 1914.

A search of the geodetic records does not indicate any apparent error in position of this station. Therefore, I think, as you do, that the station mark has been disturbed and to resolve this matter we should:

(1) verify the identification of the station as located on the photograph, and if it has been properly identified,

(2) make a search for the sub-surface mark for the station, and if this is not found,

(3) make new observations for the position of the recovered mark for ET, 1914 and call it ET 2, (date), then,

(4) when the new position is determined, recompute the three point fixes.

It does not seem wise to accept the plot based on no check three-point fix positions and to reject the triangulation station. Please proceed with any field work necessary to solve this matter and write to me informing me of your action and the results thereof.

S/ O.S.READING

O. S. Reading,
Chief, Div. of Photogrammetry

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Portland Photogrammetric Office
Swan Island Postal Station
Portland 18, Oregon

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

C O P Y

7 July 1953

To: The Chief, Division of Photogrammetry
U. S. Coast & Geodetic Survey
Department of Commerce
Washington 25, D. C.

Subject: Radial Plot, Ph-113

Reference: Chief's ltr 711-aal dated 5 June 1953

As directed by the reference the identification on the photograph of the disk found in the vicinity of triangulation station ET, 1914 was verified. A search was made for the sub-surface mark but it could not be found. After a personal examination of the site I do not doubt that the station has been destroyed and that the disk as found is in a new location. The point has eroded and is in the process of further erosion. The disk as now placed would have been three feet under ground before erosion. Prior to receipt of the reference the disk (previously unstamped) was reenforced with additional concrete and was stamped ETON 1953. The position was determined by the radial plot and it is considered a recoverable topographic station.

On the enclosed print of Chart 6058 stations used to control the radial plot have been indicated. A good solid plot which should satisfy charting requirements was obtained. The methods used to locate the topographic stations also have been indicated. Although a theodolite was used the resulting positions are not considered sufficiently accurate to be classed as triangulation. Originally the position of WATT was determined from the three point fix (ET - WIRE - YAQUINA LIGHTHOUSE, old). When we found that this position of WATT as well as the position of ET, 1914 could not be held in the plot it was recomputed using OLD ROCK, on the left.

To make new observations to determine the position of a new station ET 2 is beyond the scope of my present party. It would

To: The Chief, Division of Photogrammetry
7 July 1953

require a scheme of triangulation involving about six figures starting at the line WIRE - PORT 2 or a scheme involving about four figures starting at the line CAF - KING. At station PORT 2 a 20-30 ft. tower is required. (To see CORNER it was occupied 14.6 meters eccentrically). At station CAF a 30-40 ft. tower is required.

For the purposes of Project Ph-113 I do not believe that this work is warranted. If any additional control work is done I recommend a party be organized to establish a complete new scheme from Newport to Toledo.

Fred A. Riddell
Comdr., USC&G Survey
Officer-in-Charge

cc: Comdr. Beyma
FAR/bd

C
O
P
Y

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Washington 25

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

731-mkl

20 July 1953

To: Comdr. Fred A. Riddell
U. S. Coast and Geodetic Survey
c/o Swan Island Postal Station
Portland 18, Oregon

Subject: Radial plot - Ph-113

Receipt of your letter dated 7 July 1953, informing this office that triangulation station ET 1914, Newport, Oregon, has been destroyed, is acknowledged.

This office concurs with your disposition of the mark as outlined in your letter and agrees that the cost of re-establishment of triangulation station ET is not warranted.

S/ O. S. READING

O. S. Reading
Chief, Division of Photogrammetry

cc: 60

70

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 606
Ed. Mar. 1952

REPORT OF TRIANGULATION COMPUTATIONS

DIVISION OF GEODESY

State: Oregon Classification: Third -order, North American 1927 datum.

Locality: Yaquina River Date of field work: 1953

Chief of Party: Fred A. Riddell Acc. No. GTZ: G-10381

OFFICE COMPUTATION

Date of computation: 1954 Acc. No. GTZ°: GTZ G-10381

Fixed data used: Yaquina LH (old), Port 2, Wire, Yaquina Head LH, Newport Center of Bridge Light, Gaf, King, Dead, Grass and Field.

Accuracy (main scheme): Third
Average triangle closure:
Maximum triangle closure:
Average v:
Maximum v:
Maximum correction to angle:
Azimuth closure:

	Closure (1 part in—) Before adj.	After side and angle
Length		
Position		

Number of stations: Main scheme: Supplemental: 4 Intersection: 12

Azimuth marks added on litho. pages:

List of stations superseded by this computation:

List of points that could not be adjusted: *

Acc. Nos. of other computations containing lists of directions used in this computation:

Comments: * Station ETON, 1953 was observed from BAGY and WATY and the angle at ETON was not observed. Because of the very poor intersection the position of ETON was not computed. Four no check points observed from ETON could not be computed. Those points are: Yaquina River Lights 17, 19, 20 and 22.

A position for YAQUINA BAY ENTRANCE RANGE FRONT LIGHT is given in the descriptive report for this project. The light is a no check point in this work and the position differs by about 300 feet from that given in the report. The position in the report was determined from [illegible] observations. Because of the discrepancy [illegible] the light was not listed.

B.K. Meade
Computation in charge of work.

Chief, Section of Triangulation.

Chief of Division.

U. S. GOVERNMENT PRINTING OFFICE 16—60465-1

COMPILATION REPORT
T-11136 thru T-11138
PROJECT PH - 113

31. Delineation:

Graphic methods were used for the compilation of all planimetric details outside the limits of T-9370 and for this map the mean high-water line and the parts of shoreline structures and buildings at the mean high-water line were compiled in the Washington Office on the Kelsh Plotter at a scale 1:5000.

Many prominent points of detail on this Kelsh Plotter compilation were also located during the running of the radial plot for T-11136 thru T-11138 at a scale 1:10,000. A comparison between the radial plot locations of these points and a reduction of the Kelsh compilation, scale 1:10,000, printed on clear acetate, gave excellent agreement. Except for a very slight movement in the mean high-water line at one place the planimetric details shown on the reduction were traced directly on T-11136 and T-11137. Additional planimetry, to meet the requirements of a shoreline survey within the limits of T-9370, was compiled graphically.

Throughout the three sheets numerous dolphins, piers, and a small marsh island were plotted from sextant fix locations entered on the reverse sides of several field photographs.

Upstream from station FIELD, 1914 the field unit did not fully field inspect buildings and for this part of T-11138 they have been interpreted by stereoscopic examination of the photographs and then compiled.

32. Control:

The identification of horizontal control stations was satisfactory.

Refer to Item 23, "Adequacy of Control" in the Photogrammetric Plot Report which is included in this descriptive report.

33. Supplemental data:

Reduction, scale, 1:10,000 of shoreline manuscript T-9370, compiled at scale 1:5000.

Refer to remarks Item 31, "Delineation" of this report.

34. Contours and drainage:

Contours are not applicable.

Drainage streams have been shown where they empty into the main bodies of water.

35. Shoreline and alongshore details:

The field inspection of shoreline and alongshore details was complete and satisfactory. The photographs were taken at a predicted tide averaging 8.6 ft. above M.L.L.W. which is about 1.3 ft. above mean high-water. This was taken into account when locating the mean high-water line. Also for this reason foreshore areas could not be detailed from the photographs. They have been noted as indicated by field inspection. 9+ft MHW = 7.3 to 7.4

Many other water features that might be desirable to show on a shoreline survey of this type could not be detailed because no low-water photographs were available.

36. Offshore details:

Offshore details have been compiled as indicated by field inspection.

Refer to Item 49, "Notes to the hydrographer".

37. Landmarks and aids:

Forms 567 for these features were forwarded to the Washington Office on 9 July 1953. (copies attached)

38. Control for future surveys:

Forms 524 for thirty-one recoverable topographic stations are submitted and these along with descriptions for two hundred and twelve photo-hydro stations are listed under Item 49.

The location of any particular number of recoverable topo-

graphic stations was not a requirement of this project, but for those submitted the following facts are pertinent.

The methods by which stations established by the U.S.E.D. were located could not be definitely ascertained and these have been listed as recoverable topographic stations. All were checked by the radial plot.

Stations WATT, BADY, CORNER, BLOCK, GABE and YAQUINA BAY LT. 14 were originally intended to be 3rd order triangulation stations, but for reasons contained in correspondence attached to this report they also have been listed as recoverable topographic stations.

P.8 FI. 3rd order G-10881

Station ETON is the mark found in the field for triangulation station ET, 1914. Correspondence is also attached concerning this station.

TOLEDO COURTHOUSE CUPOLA has the same geographic position as triangulation station TOLEDO, COURTHOUSE FLAGSTAFF, 1914. The flagstaff has been removed.

Other recoverable topographic stations listed were located either by theodolite or radial plot as aids to navigation or landmarks for charts.

39. Junctions:

Satisfactory junctions have been made between all map manuscripts in this project.

40. Horizontal and vertical accuracy:

There are no areas considered to be of subnormal accuracy and the planimetry of the map manuscripts is satisfactory for charting purposes.

Vertical accuracy is inapplicable.

46. Comparison with existing maps:

A visual comparison was made with the Yaquina, Oregon U.S.G.S. 15 minute quadrangle, reprinted 1946, scale, 1:62,500.

A visual comparison was made with the Toledo, Oregon U.S.G.S. 15 minute quadrangle, edition of 1946, scale, 1:62,500.

47. Comparison with nautical charts:

Comparison was made with Nautical Chart, No. 6058, scale, 1: 20,000, Published August 1942 (19th Edition) last printed 6/18/51, hand corrected 11/14/52, by use of the vertical projector.

Numerous differences were noted and the most radical are indicated by lines in red crayon on an ozalid print of each of the three map manuscripts. These prints are being forwarded along with other data for this project.

Items to be applied to nautical charts immediately.

An old boiler which bares 5 ft. at M.L.L.W. is located about 215 meters southeast of Yaquina Bay Light 14 at the west edge of the navigation channel.

Approved and forwarded:

Fred A. Riddell
Chief of Party

Respectfully submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Cartographer

48. Geographic Name List:

The geographic names on these three map manuscripts were obtained from Nautical Chart No. 6058 and are shown for location purposes only.

Final action on the recommendations contained in the special report entitled, "Geographic Names Report, Newport to Toledo, Oregon, Project Ph-113" has not been furnished this office.

T 11136

Yaquina Head
Agate Beach
Newport
Yaquina Bay
McLean Pt.
Pacific Ocean
U.S. 101 Jumpoff Joe

T 11137

Yaquina Bay
Southbeach
Southbeach P.O.
U.S. 101
Pacific Ocean
King Slough
Yaquina River
Coquille Pt.
Oneatta Pt.
Oysterville
Pooles Slough
McCaffery Slough
Hinton Pt.

T 11138

Depoe Creek
Toledo
Olallie Cr.
Southern Pac. R.R.
Yaquina River

Names approved
8-25-54
A.J.W.

49. Notes for the hydrographer:

Rocks shown on the map manuscripts are those from field inspection data.

No attempt has been made to compile other rocks shown on Chart No. 6058 or those for which a general location was indicated by field inspection.

There were many piling areas indicated by field inspection in approximate location. These could not be seen clear enough on the photographs for accurate compilation.

Forms 524 are submitted for the following recoverable topographic stations:

T-11136

* CORNER, 1953
* MON. No. 1, 1951 (U.S.E.)
NEWPORT RADIO STATION KNPT, EAST TOWER, 1953
WARN, 1953
* WATT, 1953
* YAQUINA BAY LT. 10, 1953 (U.S.E.)
* YAQUINA BAY BOAT BASIN EAST LT., 1953 (U.S.E.)
* YAQUINA BAY BOAT BASIN WEST LT., 1953 (U.S.E.)

T-11137

* BADY, 1953
* BLOCK, 1953
C. G. LOOKOUT TOWER (U.S.E., 1948), 1953
ETON, 1953
* GABE, 1953
YAQUINA BAY ENTRANCE RANGE FRONT LT. 8, 1953 (U.S.E.)
* YAQUINA BAY ENTRANCE RANGE REAR LT., 1953 (U.S.E.)
* YAQUINA BAY LT. 14, 1953
YAQUINA RIVER LT. 17, 1953
YAQUINA RIVER LT. 19, 1953
YAQUINA RIVER LT. 20, 1953
YAQUINA RIVER LT. 22, 1953

T-11138

ABLE, 1953
BETA, 1953
CADO, 1953
TOLEDO, COURTHOUSE CUPOLA, 1953

*YAQUINA RIVER LT. 25, 1953
YAQUINA RIVER LT. 30, 1953
YAQUINA RIVER LT. 32, 1953
YAQUINA RIVER LT. 37, 1953
*YAQUINA RIVER LT. 42, 1953
YAQUINA RIVER LT. 44, 1953
YAQUINA RIVER LT. 47, 1953

* Given triangulation symbol during review, from G-10381, third order.
LTS

PHOTO-HYDRO SIGNALS

T-11136

Number	Description
* 3601	Top of pinnacle
* 3602	Tip of brush
* 3603	Top of pinnacle rock
3604	Tip of vegetation
3605	Center of concrete tank
3606	West gable on Radar station
3607	West gable
**3608	West gable
**3609	West gable
**3610	S.W. corner of roof
3611	North gable
**3612	Center of bush
**3613	PAT
3614	Center of intersection of foot paths
3615	Center of rounded roof
3616	Center of large rock
3617	N.E. gable of Coast Guard Shop (#14, T-9370)
3618	Dolphin off S.W. end of pier (#15, T-9370)
3619	4-pile dolphin west of iron dolphin
3620	East corner of roof of Columbia River Packers Bldg. (#13, T-9370)
3621	S. E. corner of pier
3622	S.W. corner of pier (#12, T-9370)
3623	South corner of pier
3624	S. W. corner of pier (#11, T-9370)
3625	End of pier (#10, T-9370)
3626	End of center of pier (#9, T-9370)
3627	S.W. corner of bldg. (#8, T-9370)
3628	S.E. corner of bldg. (#7, T-9370)
3629	S.W. gable of boathouse (#6, T-9370)
3630	S.W. end of pier (#5, T-9370) F.I photo 13H-31 says "Bkw, not a pier"
3631	S.W. gable of bldg. (#4, T-9370)
3632	Dolphin close to bend in pier (#3, T-9370)
3633	S.E. corner of pier (#2, T-9370)
3634	East gable of bldg. (#1, T-9370)
3635	West gable
3636	Bend in breakwater (#21, T-9370)
3637	Center of dolphin bearing cable crossing sign (#22, T-9370)
3638	Center of submerged cable crossing sign (Hydro #7002)
3639	Dolphin
**3640	Southwest gable of white house, grey roof
3641	West gable of white house, aluminum roof
3642	East gable of white house, aluminum roof

* Intersection from 2 photos only.

** Located on slim angle of intersection cuts. Longitude location probably good. Cross cut by sextant to check location of stations in latitude is recommended.

PHOTO-HYDRO SIGNALS

T-11137

Number	Descriptions
3701	Center of sharp earth mound
3702	End of sharp, thin rock ridge
3703	Center of platform on tower ruins (#16, T-9370)
3704	Dolphin on West end of "V" (#17, T-9370)
**3705	Dolphin on point
3706	Dolphin on West end of "V" (#18, T-9370)
3707	Center of large dolphin (#19, T-9370)
3708	Center of large dolphin (#20, T-9370)
**3709	White Y mast
**3710	Center of dolphin on trestle
3711	Dolphin (#23, T-9370)
3712	Dolphin (#24, T-9370)
3713	Top of prominent rock
3714	East end of rock
3715	East end of rock
3716	East end of rock
**3717	Center of rock
3718	West gable
3719	Center of sharp, grassy hummock
3720	North gable (#25, T-9370)
3721	N.E. gable (#26, T-9370)
* 3722	Corner of bulkhead
* 3723	North gable (highest house)
3724	East corner of bare sand patch. Not the highest point in the area.
* 3725	Center of oblong grass hummock - 1 m. wide by 6 m. long
3726	Center of oblong grass hummock
3727	Target on highest dune
3728	Center of highest part of dune (flat area about 4 m. in diameter)
* 3729	South end of line of brush 8 feet high
* 3930	Cupola at intersection of roof ridges
3731	S.E. corner of bare area
3732	Center of bare spot on west side of trail
3733	North gable gray house with pink trim and brown roof
3734	N.W. gable of tourist cabin, white with green roof. 3 cabins are N.E. of one selected
3735	South gable of green roofed bldg., middle of three
3736	East corner of clump of low pine brush bordering on bare strip
3737	Southerly of 2 west gables on tourist cabin
3738	South gable, most southerly gray house with red roof.
3739	Center of low tree
* 3740	Center of bush at stump
3741	West gable of building
3742	Northwest corner of pier (ruins)
3743	West gable of store
3744	Northwest corner of building

3745 Northwest corner of building
3746 Most westerly of 4 dolphins
3747 South gable of unpainted building
**3748 Southwest corner of warehouse
**3749 Middle of bush
3749a Center of bush by telephone pole No. 74
* 3750 Gable of red house, green roof
3750a N. gable, 2 story "L" shaped house, red roof
3751 Northeast tip
3752 North tip of bank
3753 Center of end of brush on N. end dike
3754 Center of isolated, truncated alder
3755 Center of tree
3756 Tip of bank
3757 End of bank in meander
3758 Gable on front porch
3759 Center of N. end of bridge in ruins
3760 N. end of log at end of fence
3761 Tip of round point
3762 Small tree on stump
3763 Tip of bank
3764 Tip of bank
3765 Tip of bank
3766 Open of angle in bank
3767 Tip of bank
3768 N.W. tip of 8 ft. high root
3769 E. end of old log
3770 Tip of bank
3771 Tip of bank
3772 N. gable
3773 E. end of log
3774 Junction of log and south bank of slough
3775 Northwest end of log
3776 Tip of bank
3777 W. end of log
3778 N. end of ridge on roof
3779 Tip of bank
**3780 Center of pyramidal roof on green house
3781 Dolphin on north end of line of piling 23 m & MHWL (FI) 13H-33 (S. end) 32 m " " " "
3782 Flat triangular boulder on south side of log (blazed)
3783 10 ft. dolphin (southerly of 2)
**3784 8 ft. stump at M.L.L.W. line
3785 Center of end of pier (4')
**3786 25 ft. Fir tree
3787 North gable abandoned house (30')
* 3788 West gable
3789 East end of log (14 m. from ~~M.L.L.W.~~ MHW (F.I.)) 13H-32
3790 East end of log (~~2.5~~ 26. m. from ~~M.L.L.W.~~ MHW (F.I.))

* Intersection from 2 photos only

** Located on slim angle of intersection cuts. Longitude location probably good. Cross cut by sextant to check location of stations in latitude is recommended.

PHOTO-HYDRO SIGNALS

T-11138

Number	Description
3801	20 ft. Fir tree
3802	End of pier
3803	S.E. end of bridge railing
3804	20 ft. Fir tree with broken top at MHWL
3805	E. gable of blue building, slate roof
3806	25 ft. Fir tree with triple trunk
3807	S. E. gable green building, slate colored roof
3808	E. tip of bank on S. side of slough
3809	Intersection of small sloughs
3810	Pile, largest of two
3811	E. end of first support of old trestle south of fill
3812	Center of clump of alders, 15 ft. high
3813	S.E. end of first support of old trestle at S.W. end of trestle
3814	S.E. gable green roofed building, paper sides.
3815	N.W. end of large log
3816	S. gable white frame building, greenish gray roof
3817	W. end of log
3818	S. gable of tin roofed building, behind flat extension
3819	N. gable tin building on float
3820	S.E. corner of "Jacks Sport Shop"
3821	E. gable of white house with rail fence in front
3822	Easterly of two dolphins
3823	E. gable unpainted house, white trim
3824	E. end of log
3825	Center of bush
3826	12 ft. Maple bush
3827	Dolphin
3827a	S.E. gable brown house, green trim
3828	Finial on silver colored water tank on hillside (150')
3829	S.E. gable red barn
3830	Yellow sign on white pole on E. end of S.E. bridge rail
**3831	Elev. tank (black)
3831a	W. gable of metal building
**3832	W. gable "Toledo Machine Works"
**3833	Metal stack on sawmill
**3834	N.W. gable of shack in ruins
3835	Bow of wreck
3836	N.W. side of NE concrete pier supporting bridge
3837	Dolphin in ruin
3838	Break in dike
3839	West gable of white house
3840	Dolphin at S.E. end of tie-up
3841	Center of bush on dike
**3842	E. gable small green shack, white trim, brown roof

3843	N.W. gable with diamond shaped window beneath
3844	S.W. gable of red building
**3845	E. corner red building
**3846	E. Corner of small red building with shed roof
3847	Most northerly gable of red building
3848	Dolphin S.E. end of tie-up
3849	N.E. gable of open shed
3850	S.E. gable of long white building
3851	White skeleton tower on white building
3852	Dolphin at end of pier
3853	S.E. gable of small red building
3854	Dolphin
3855	Old dolphin
3856	N.E. tip of bank
3857	W. tip of bank on E. side of intersection of slough
3858	E. tip of bank on inside of bend
3859	S.W. end of large log
**3860	Center of 10 ft. Fir on top of dike
**3861	S.W. tip of bank
3862	S.W. corner red building
3863	S. gable, old barn
3864	W. gable of building
3865	N.W. corner of bridge
3866	W. gable, unpainted shack, red patch on roof
3867	Center of 10 ft. alder bush
3868	S.W. tip of bank on N. side of slough
3869	Small tower, close to walk
3870	N. gable red shed, aluminum roof
3871	End of pier in ruin
3872	Dolphin on west end tie-up
**3873	E. end of log
3874	Center of bend in small slough
3875	N.W. tip of bank on E. side of slough
3876	Dormer on N. side of hip-roofed house

* Intersection from 2 photos only.

** Located on slim angle of intersection cuts. Longitude location probably good. Cross cut by sextant to check location of stations in latitude is recommended.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION

NONFLOATING AIDS ~~OR LANDMARKS FOR CHARTS~~

TO BE CHARTED / TO ~~BE DELETED~~ } STRIKE OUT ONE

Portland, Oregon 3 June, 19 53

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by _____

See Letter 935 (1953)

Fred A. Riddell
Chief of Party.

STATE: OREGON

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° '	LATITUDE D.M. METERS	LONGITUDE ° '	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
	YAQUINA BAY												
ENTRANCE RANGE FRONT LIGHT 8 T-11137	White square daymark with red vertical stripe on pile structure		44 37	204.7	124 03	763.7	NA 1927	USED	1953		X	X	5802 5902 6058
ENTRANCE RANGE REAR LIGHT T-11137	White Diamond daymark with red vertical stripe on skeleton tower		44 37	439.6 (2)	124 03	~~342.7~~ (3.8)	"	△ Ph-113 ~~USED~~	1953		X	X	5802 5902 6058
BOAT BASIN WEST LIGHT	White platform on pile T-11136		44 37	~~1472.3~~ (1.6)	124 02	~~1282.5~~ (4)	"	△ Ph-113 ~~USED~~	1953		X	X	5802 5902 6058
BOAT BASIN EAST LIGHT	White platform on pile T-11136		44 37	1323.9 (.1)	124 02	508.7 (9.2)	"	△ Ph 113 ~~USED~~	1953		X	X	5802 5902 6058
LIGHT 10	White platform with red triangle on dolphin T-11136		44 37	~~1039.1~~ (4.5)	124 02	~~1066.1~~ (2)	"	Ph-113 USED	1953		X	X	5802 5902 6058
LIGHT 14	White house with red triangle on dolphin T-11137		44 36	~~1687.1~~ (6.5)	124 01	~~281.4~~ (2.3)	"	Triangulation Ph-113	1953		X	X	5802 5902 6058

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information [illegible] heading should be given.

April 1954

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION

NONFLOATING AIDS ~~OR LANDMARKS FOR CHARTS~~

TO BE CHARTED
~~TO BE DELETED~~ } STRIKE OUT ONE

Portland, Oregon 3 June, 1953

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

Fred A. Riddell
Chief of Party.

STATE OREGON

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° '	D.M. METERS	LONGITUDE ° '	D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
	YAQUINA RIVER T-11137												
LIGHT 17	White square house with black rectangle on concrete posts.		44 36	733.0	124 00	715.3	NA 1927	Radial Plot	1953		X		6058
LIGHT 19	White square house with black rectangle T-11137		44 35	1323.9	124 00	864.1	"	Triangulation	1953		X		6058
LIGHT 20	White square house with red triangle T-11137		44 35	851.7	124 01	397.4	"	"	1953		X		6058
LIGHT 22	White square house with red triangle T-11137		44 35	107.5	124 01	560.1	"	"	1953		X		6058
LIGHT 25	White square house with black rectangle T-11137		44 35	32.~~8~~ 7	124 00	885.3	"	"	1953		X		6058
LIGHT 30	White square house with red triangle T-11138		44 34	480	123 58	570	"	Radial Plot	1953		X		6058
LIGHT 32	White square box with red triangle on white platform on dolphin T-11138		44 34	555	123 57	1238	"	"	1953		X		6058
LIGHT 37	White square house with black rectangle T-11138		44 35	63	123 57	1046	"	"	1953		X		6058

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area a[illegible]

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION Ph-11

NONFLOATING AIDS ~~OR LANDMARKS FOR CHARTS~~

TO BE CHARTED
~~TO BE DELETED~~ } STRIKE OUT ONE

Portland, Oregon 3 June, 1953

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by _____

Fred A. Riddell
Chief of Party.

STATE OREGON

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° '	LATITUDE D.M. METERS	LONGITUDE ° '	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTE
	YAQUINA RIVER (Con't.)												
LIGHT 42 T-11138	White square house with red triangle		44 35	489.0 8.9	123 56	733.7	NA 1927	Triangulation	1953		X		6058
LIGHT 44 T-11138	White square house with red triangle		44 35	1062	123 56	139	"	Radial Plot	1953		X		6058
LIGHT 47 T-11138	White cylinder with black rectangle on white platform on dolphin		44 35	1576	123 56	444	"	Radial Plot	1953		X		6058
	OREGON COAST												
YAQUINA HEAD LIGHTHOUSE T-11136	White conical tower *		44 40	1139.0	124 04	915.6	"	Triangulation	1908		X	X	5902 6058
AERO BN. T-11137	Newport, Municipal Airport, beacon *		44 35	368.6	124 03	792.2	"	"	1950		X	X	5802 6058
	* These objects have not been inspected from seaward.												

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION

ph-113

~~NONFLOATING AIDS OR~~ LANDMARKS FOR CHARTS

TO BE CHARTED ~~TO BE DELETED~~ } STRIKE OUT ONE

Portland, Oregon 3 June, 1953

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~(delete from)~~ the charts indicated.

The positions given have been checked after listing by Fred A. Riddell

Fred A. Riddell
Chief of Party.

STATE OREGON			POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE								
CHARTING NAME	DESCRIPTION	SIGNAL NAME	° '	D.M. METERS	° '	D.P. METERS	DATUM						
RADIO MAST (WESTERLY OF TWO)	Newport Radio Station (KNPT Tower)		44 39	170.3	124 03	29.6	NA 1927	Triangulation	1950		x	x	5902 6058
T-11136	(This is the W l/y of two towers. The E l/y tower bears 118° E, distance 281 feet from the W l/y tower.)												
LIGHT HOUSE	abandoned (Yaquina Lighthouse, old)		44 37	850.9	124 03	936.3	"	"	1908				5802 5902 6058
T-11136	(This structure was recommended for deletion in 1951, because it was to be torn down within a few weeks. However, it is still standing and is a good landmark.)												
T-11136													
LOOKOUT TOWER	house 9' x 9', 7'4" high on 49' skeleton steel tower		44 37	849.5	124 03	921.9	"	"	*				5802 5902 6058
	* This position was obtained from Corps of Engineers.												

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey [illegible] ...eading should be given

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW SECTION

~~NONFLOATING AIDS OR~~ LANDMARKS FOR CHARTS

TO BE CHARTED / ~~TO BE DELETED~~ } STRIKE OUT ONE

Portland, Oregon 3 June 19, 1953

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~(determination)~~ the charts indicated.

The positions given have been checked after listing by Fred A. Riddell

Fred A. Riddell
Chief of Party.

STATE OREGON

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° '	LATITUDE D.M. METERS	LONGITUDE ° '	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
MARKER (FLR LT) T-11137	Newport, Center of Bridge Light		44 37	702.1	124 03	470.0	NA 1927	Triangulation	1950		x	x	5802 5802 6058
TANK	T-11138 silver, low elevated with conical top	BETA	44 37.	23	123 56.	1031	"	Radial Plot	1953		x		6058
STACK (NORTHEAST OF TWO)	T-11138 black metal	CADO	44 37	11	123 56	541	"	"	1953		x		6058
~~STACK (Southeast of two)~~	~~black metal~~		~~44~~		~~123 56~~		~~"~~	~~"~~			~~x~~		~~6058~~
TANK (ELEVATED)	T-11138 black, on steel skeleton	ABLE	44 37	0	123 56	440	"	"	1953		x		6058

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual f[illegible] heading; sho[illegible] given.

PHOTOGRAMMETRIC OFFICE REVIEW

T-11136 thru T-11138

1. Projection and grids ✓ 2. Title ✓ 3. Manuscript numbers ✓ 4. Manuscript size ✓

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ✓ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ✓ 7. Photo hydro stations ✓ 8. Bench marks None
9. Plotting of sextant fixes ✓ 10. Photogrammetric plot report ✓ 11. Detail points ✓

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line None 14. Rocks, shoals, etc. ✓ 15. Bridges ✓ 16. Aids to navigation ✓ 17. Landmarks ✓ 18. Other alongshore physical features ✓ 19. Other alongshore cultural features ✓

PHYSICAL FEATURES

20. Water features ✓ 21. Natural ground cover ✓ 22. Planetable contours None 23. Stereoscopic instrument contours None 24. Contours in general None 25. Spot elevations None 26. Other physical features ✓

CULTURAL FEATURES

27. Roads ✓ 28. Buildings ✓ 29. Railroads ✓ 30. Other cultural features ✓

BOUNDARIES

31. Boundary lines None 32. Public land lines None

MISCELLANEOUS

33. Geographic names ✓ 34. Junctions ✓ 35. Legibility of the manuscript ✓ 36. Discrepancy overlay None 37. Descriptive Report ✓ 38. Field inspection photographs ✓ 39. Forms ✓
40. _____ Reviewer

J. Edward Deal Jr. Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

_____ Compiler _____ Supervisor

43. Remarks:

Review Report, T-11136 to 38, inclusive
Shoreline Maps
26 August 1954

62. Comparison with Registered Surveys

Area of T-11136

T-1086	1:10,000	1886	Cape Foulweather, entrance Yaquina Bay

Besides the great cultural changes since 1886, the shoreline is much altered despite its rocky structure. Small headlands have retreated or disappeared.

About a half mile offshore north of Yaquina Head a line of rocks on T-1086 suggest the outer edge of a submerged shelf; a single rock northwest of Yaquina Head is farther offshore on T-1086 than on T-11136. This rock is visible on the photographs and was field-inspected. A group of sunken rocks on T-1086 was not field-inspected but the appearance of the photographs suggests their presence. A group at 44° 41-3/4' / 124° 04½' on T-1086 is represented on T-11136 by only five rocks. Three were delineated by the aid of angles furnished by field inspection on photograph 12H-169, 1:20,000. A dashed line was added to show that the area of obstruction extends beyond the three rocks delineated by angle methods and the photograph indicates the probability.

T-4339	1:20,000	1927	Yaquina Head to 44° 53'
T-4411	"	1928	Alsea Bay to Yaquina Head
T-4412	1:10,000	1928	Yaquina Bay Entrance

That portion of T-4412 which includes the Pacific shore at Newport and the north shore of Yaquina Bay applies to T-11136. Since 1928 the Pacific shore has straightened and the bay structures are greatly increased.

A double line of islets off the Pacific shore of Newport on T-4412 are not on T-11136. The photographs used to delineate T-11136 were taken when the tide was above MHW and no islets show. The alignment of waves indicates shallow water or a ledge along this coast, though it does not seem likely that the rocks are exposed at MHW. These rocks probably should be referenced to MLLW instead. Only specific investigation can clarify this situation.

Area of T-11137

T-1754	1:10,000	1868	Yaquina Bay & Yaquina River
T-4411	1:20,000	1928	
T-4412	1:10,000	1928	

Area of T-11138

T-1754 1:10,000 1868

This survey has an approximate shoreline in the area mapped by T-11137.

These older surveys are superseded by the present surveys for shoreline and cultural features.

63. Comparison with Maps of Other Agencies

USGS	Yaquina, Oreg.	1:62,500, ed. 1942
USE	" "	1:50,000, ed. 1951
USGS	Toledo, "	1:62,500, ed. 1942
USE	" "	1:50,000, ed. 1947

The maps of Ph-113 supersede the quadrangles for shoreline and near-shore details used in charting.

64. Comparison with Hydrographic Surveys

H-8039	1:5,000	1953	Yaquina Bay
H-8040	1:10,000	1953	Yaquina Head & Yaquina Bay Entrance
H-8041	1:10,000	1953	Yaquina Bay and River to Toledo

The shoreline and planimetry of the hydrographic surveys are taken from T-11136-38 as well as those rocks and piles and obstructions located by the photogrammetric party.

Changes made during review:

T-11136 (all changes and additions in red)

Six control stations were given the triangulation symbol.

Datum reference values were changed for 10 rocks on the Pacific shore.

Three rocks at 44° 41-3/4' / 124° 04½' were entered from fix data. They form a line just north of two rocks entered by radial cuts and they are on range with station IRON.

Several rocks were added to the ledge on the south side of Yaquina Head.

T-11137

Nine control stations were given the triangulation symbol.

T-11137 (cont.)

A portion of shoreline along the mud flats of Yaquina Bay was made a definite line.

Hydrographic stations 3711 and 3712, together with the "tie-up" between them, were relocated during review. The change in position was small. Radial cuts from five photographs were used.

The shoreline at station ETON 1953 was altered.

T-11138

The shoreline in the vicinity of Light 32 was made a full line and moved inland to match the field inspection information.

Two "tie-ups" and 6 piles were added in Depoe Creek.

The old public wharf (Hy 3831a to 3832) was redrawn to show a walk with connecting walks in front of the wharf.

Piles in the vicinity of APPLE 1914 were added.

65. Comparison with Nautical Charts

6058 1:20,000 ed. Aug. 1942, cor. April 1950

The present surveys supersede this chart for shoreline and near-shore planimetry. Offshore features supplement the contemporary hydrographic surveys. A new chart will be issued from this 1953 data.

66. Accuracy

These shoreline surveys meet the National Standards of Map Accuracy.

Reviewed by:

Lena T. Stevens

Lena T. Stevens

Approved by:

L C Lande

Chief, Review Branch

Max G Ricketts

Chief, Div. of Nautical Charts

J Bull

Chief, Div. Photogrammetry

J S Gerald

Chief, Div. Coastal Surveys

NAUTICAL CHARTS BRANCH

T. 11136
T. 11137
SURVEY NO. T. 11138

Record of Application to Charts

	DATE	CHART	CARTOGRAPHER	REMARKS
T.11136	1954	New chart 6055	M.C.Z. B.E. W.S.	Before After Verification and Review Advance print
T.11137	"	"	" " "	" "
T.11138	"	"	" " "	Before After Verification and Review " "
	2/13/62	6055	JMDailey	[redacted] After Verification and Review
				Before After Verification and Review
				Before After Verification and Review
				Before After Verification and Review
				Before After Verification and Review
				Before After Verification and Review
				Before After Verification and Review
				Before After Verification and Review

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.