

6386
6387 a-b

U. S. COAST & GEODETIC SURVEY
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Acc. No.

6386
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: OREGON

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. C, CC & D

LOCALITY

Columbia River

Tongue Point to Marsh Island

1935

CHIEF OF PARTY

Robert W. Knox

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYU. S. COAST & GEODETIC SURVEY
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REG. NO.

Acc. No.

TOPOGRAPHIC TITLE SHEET

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

Field Letter DREGISTER NO. **T6386**State OREGONGeneral locality Columbia RiverLocality vicinity Marsh Island + VicinityScale 1:10,000 Date of survey June, 19 35Vessel Party No. 9Chief of Party Robert W. KnoxSurveyed by R. A. PhilleoInked by R W K

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 26, 1935, 19

Remarks: _____

DEPARTMENT OF COMMERCE
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DEC 28 1935

REG. NO.

TOPOGRAPHIC TITLE SHEET

Acc. No. _____

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

Field Letter CREGISTER NO. **T6387a**State OREGONGeneral locality Columbia RiverLocality Tongue Point & VicinityScale 1:10,000 Date of survey April & May, 19 35~~Vessel~~ Party No. 9Chief of Party Robert W. KnoxSurveyed by R. A. PhilleoInked by R W K

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 26, 1935, 19

Remarks: _____

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYU. S. COAST & GEODETIC SURVEY
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DEC 28 1935

REG. NO.

TOPOGRAPHIC TITLE SHEET

Acc. No. _____

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

Field Letter CCREGISTER NO. **T6387b**State OREGONGeneral locality Columbia RiverLocality Seal Island vicinity Svensen IslandScale 1:10,000 Date of survey May, 19 35Vessel Party No. 9Chief of Party Robert W. KnoxSurveyed by R A PhilleoInked by R W K

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated February 26, 1935, 19

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEETS

NOS. C, CC, & D

Scale 1:10,000

COLUMBIA RIVER

OREGON
1935

TONGUE PT. TO WOODY ISLAND

Instructions dated Feb. 26, 1935 Surveyed by R. A. Philleo.

GENERAL DESCRIPTION: The three topographic sheets C, CC and D are a survey of the Oregon side of the Columbia River, from Tongue Point to the vicinity of Woody Island, a distance of about 14 statute miles.

The high mountains of the Coast Range give away to hills of varying heights as the Columbia River is reached. In spite of the fact that these hills have all been logged off, the second growth of coniferous trees, alders, vine maple, devils club and other brush is so dense as to make progress through the woods and almost impossible task without the use of a machete or an axe.

In the lower part of the River the vegetation on the islands is limited to tules, or bulrushes, marsh grass and the like; from Carlson and Marsh Islands eastward the islands are exceptionally heavily brushed. These islands are low and most of them cover during the high tides; all of them during the freshlet season.

The first storms of the winter season lay low the tules of the marshy ground and from then until spring the high tides cover every vestige of these islands. In the late summer and fall, however, the height and denseness of the tule growth give the marshy ground the appearance of true islands.

In many places the determination of the mean high water line is an almost impossible task with this Bureau's standard survey methods; predicted tides were found to be of little value even though corrected for distance from the standard tide gage; the ground is so marshy that with the recession of the tide no distinct line is left as is the case in the majority of places; there is a big difference in the mean high water line during the period of the spring freshlets, which reach their maximum in June, and during the period of low stages of the River. The Topographic Manual states that the outer edge of typical marsh, although sometimes covered by high water, should be indicated as the high water line. In many places, however, this was distinctly not the high water line.

Further discussion of this feature of the several sheets will be found later in this report.

In order to make the sheets complete, the mean lower low water line was transferred to them from the smooth hydrographic sheet and the mud flats or marshy portions, as the case might be, were inked with the proper symbols, the data for which was obtained from notes of the topographer, hydrographer and from bottom specimens as noted in the sounding volumes. Portions of the topographer's conception of the low water line may be found on the smooth hydrographic sheet, 6-13, where it had been transferred, along with other topographic detail. The buoys appearing on the topographic sheets will be found to be identical with their hydrographic location.

CONTROL: The control used for the survey of this area is from the triangulation scheme executed by this party during the past season. No old stations were used whose positions had not been re-determined.

SURVEY METHODS: Standard survey methods were used. Before field work was begun the instrument was adjusted, the rods were tested on a measured base and several 4-meter rods were graduated so that longer half-interval sights might be taken along the traverse.

Plane-table traverses were run between triangulation stations and three point fixes. On sheets C and CC there was sufficient triangulation to obviate the necessity of long traverses. On sheet D the nature of the topography and the density of the brush limited the amount of triangulation that could be accomplished with reasonable cost and as a consequence the plane-table traverses were of greater length. No record of traverse closing errors could be found, but the topographer, Mr. R. A. Philleo, periodically reported to the writer that - with the exception of one case in which the traverse was re-run - closures were neglectable.

The U. S. Engineers plane coordinate grid system was overlaid on the sheets as it appears as if that Bureau will make a continued use of the sheets in their periodic surveys of the channels. The position of the grid with respect to the geographic system was computed from at least three triangulation stations on each sheet, and in addition the most central intersection of a meridian and parallel was reduced to the plane system and used as a check.

NOTES ON INDIVIDUAL SHEETS: The following part of this report covers notes on each sheet and deals with specific items that are not of a general nature. The notes on each sheet have been typed separately.

SHEET C

Previous surveys in this area were covered by sheets registry Nos. 1123 and 1234, surveyed in 1868 and 1870, respectively. A comparison between the two surveys shows slight differences, almost all of which can be accounted for as being caused by artificial operations such as quarrying and railroad construction.

Important differences follow:

- a) The old survey shows a small islet about 20 meters off the beach and about 250 meters north of the present location of the Tongue Point Lighthouse Depot; the present survey shows this as a small point.
- b) There is a maximum difference of about 50 meters between the two surveys on the northwest side of Tongue Point. This can readily be accounted for by the disposition of the waste material from the rock quarry at that place.
- c) There is a big change in the high water line in the vicinity of the Submarine and Destroyer Base due, no doubt, to the fill made there during the course of construction.
- d) Apparently no reason can be assigned to the difference in width of the small point upon which O Hil is located. The point is rocky and fairly steep-to.
- e) The construction of the Spokane, Portland and Seattle Railroad roadbed altered the highwater line from about this point to the end of sheet 1125, with the exception of John Day Point, where the two surveys check fairly well.
- f) The small bight between O Los and A Milepost 95 was found to be about 80 meters less than formerly and the small point in that bight about the same amount westward of its 1868 location.
- g) There is little relationship between the mud flats shown on the two sheets, except in one portion where a similarity may be detected.

The tidal flats shown on sheet C are muddy in character and are covered with a rather thin growth of tules and grass during the warmer seasons. These flats are completely flooded at all but zero stages of the tide, except a portion of the flats about one mile northwest of A Milepost 95 where they cover at a 3 foot tide. Hydrographic sheet No. 0-13 may be consulted for detailed information concerning these flats.

Prairie Channel Light was displaced from the location it occupied when its position was computed. The position of this light at the present time is not that as shown on the topographic sheet.

Geographic names are correct as they appear on the chart with one addition; John Day Channel and Burnside Slough - not particularly well established.

53
63

SHEET CC

a) The previous survey of this area is covered by sheet register No. 1234, surveyed in 1870. The important changes in the shore line may be attributed to the construction of the S. P. & S. Ry road-bed which forms a dike across the low areas shown on the original sheet.

b) Svensen Island has been diked and is now used as grazing land for dairy herds. There are several large ponds on the Island, corresponding roughly to the water areas between the several islands that make up what is now Svensen Island and as shown on the original survey.

c) The current survey shows a small islet about 500 meters north-northwest of Δ Bear, not shown on the 1870 survey. While this islet unquestionably floods during high tide at the time of the spring freshets, it is distinctive in appearance as compared with the surrounding flats and has been shown as an island.

d) Seal Island has the same general outline as in 1870, but no corresponding shoal of the same character as Green Island is shown on the early topographic sheet. The shoaling of this area is undoubtedly due to the construction of the nearby jetty.

e) McGregor Island appears considerably smaller than originally shown, and the accompanying shoal has drifted to the westward.

f) Snag Island is now of an entirely different size and shape, due to the construction of the Snag Island Jetty.

Seal and Green Islands are covered, during the warmer seasons, with a dense growth of tules and coarse grass; brush was observed at but one place and then in a very limited amount. From observations of the hydrographic party, it was estimated that the Islands would entirely cover at a six-foot tide.

Geographic names: In addition to the well established names appearing on the charts the following are listed:

- a) Svensen Island - a well established local name
- b) Green Island - do
- c) Russian Island - the name by which the southern portion of the island appearing as Seal Island on the charts is known, apparently well established.
- d) Seal Island - the name applied to the island north of Seal Island, or the central portion of the island called Seal Island on the charts. Neither the name nor limits are well established.
- e) North Island - a well established local name for the island north of Seal and Russian Islands.
- f) Snag Island - a well established local name.

SHEET D

The previous survey of this area is covered by sheets registerNo. 1234, to longitude 123° 35', and 1235 from there eastward. A photostat of the latter sheet was not furnished the party and a comparison of the eastern portion of sheet D with the original survey is therefore not possible.

a) The two surveys show a considerable difference both in the position of certain portions of the high water line and in the character of vegetation on the islands. As in the case of the previous sheets, construction incident to the building of the road-bed of the S. P. & S. Ry formed a dike materially changing the location of the high water line in the vicinity of Knappa, where that line now corresponds with the old low water line. The latter situation exists west of Δ Eddy, but the change is apparently not due to the railroad construction.

b) The agreement between the two surveys in the shore line of Carlson, Marsh and Long Islands is rather close, as is that of Columbia Slough

c) The early survey shows the above named islands to be marshy, whereas the present topographer classed the land covered by thick brush. The brush was so thick, in fact, that each instrument set-up had to be brushed out before it could be occupied.

The high water line as shown on this sheet is the outer vertical edge of the islands. It is known, however, that the high tides at times of spring freshets will sometimes cover large portions of the islands. The mean high water line at normal stages of the River is thought to be this vertical edge.

The area covered by this sheet has not a yet been sounded out and in order to preserve the signals and thus obviate the necessity of additional topography, practically all the hydrographic signals were marked. A list of such signals and the manner in which they have been marked is included with this report.

A smooth hydrographic sheet has also been constructed for use when and if the surveys are continued.

Geographic Names: In addition to the well established geographic names appearing on the charts, the following are listed:

- a) Carlson Island - a well established local name
- b) Grizzly Slough - do
- c) Columbia Slough - do

If and when surveys are continued eastward it is recommended that an investigation be made of the high water line of the island northeast of Marsh Island. When the hydrographic signals were marked - after the field work was discontinued - it was observed that there was apparently little difference in the character of this marsh and of the two islands shown on either side of it.

Plane-table Positions
Sheet C

Object or name of signal	Latitude ° ' m	Longitude ° ' m	Remarks
Tongue Pt Light	46 12 880'	123 46 102'	F.R. On corner of Lighthouse Depot Wharf
Gru	46 12 1423'	123 45 712'	Center of highest portion of rock crusher, Tongue Pt
Dol	46 12 612'	123 45 814'	SE corner of northerly pier, Naval Base, Tongue Pt
Pine	46 11 1521'	123 45 857'	Tall hemlock on small islet
Yel	46 11 237'	123 44 1254'	Chimney on yellow building
Nut	46 10 608'	123 43 981'	Center of small square bldg
Tan	46 10 590'	123 41 572'	Small green tank on piling
X	46 12 665'	123 45 893'	Old tripod, probably used in connection with naval base imp.

scaled by RWK
ck by KMcB

Plane-table Positions - Sheet D

Object or name of signal	°	'	Latitnde m	°	'	Longitnde m	Remarks
Roof	46	12	142'	123	36	143'	Northwest gable, red & white / barn
Aqua	46	11	426'	123	35	227'	Water tank near Knappa
Pine	46	12	1201'	123	35	185'	Conspicuous pine tree on south side Marsh Island
Dome Tree	46	14	883'	123	33	278'	Dome shaped tree; USE signal
Yel	46	14	1081'	123	33	382'	River gable, yellow barn
Slo	46	13	1493'	123	36	1100'	River, or north gable, Snag Island fish-house
R R sign	46	11	47'	123	36	955'	"Station 1 mile"
B M No. 1	46	12	448'	123	35	383'	Std brass disk set in concrete on NE corner of Carlson I.

scaled by RWK
ck by KMcB

Respectfully submitted:

Robert W. Knox
Robert W. Knox,
Chief of Party.

Descriptions of Topographic Signals
Sheet D

Name	Description	Name	Description	Name	Description
Ka	ww dolphin m	It	ww dolphin m	Cre	ww dolphin m
Pro	do m	Sac	do m	Blo	do m
Hus	do m	Ox	do m	Pul	ww pile m
Car	do m	Ben	do m	TG	ww dolphin nm
Tub	do m	Par	ww pile nm	Spi	do m
Tol	do m	Luc	ww dolphin m	Dub	do m
Tal	end pile nm	We	ww pile m	Pot	ww roof shack nm
Lar	Larson m	Sen	ww driftwd nm	El	tall lone pile nm
Boy	ww drifted nm	Mud	ww snag nm	Arm	center of 3 piles nm
Art	signal s	Wal	signal s	Arn	R/G red & white barn
Rod	signal s	Fal	signal s	Roof	NW gable do
Pine	pine tree nm	Rate	ww dolphin m	Hi	tall pole & ww dft-wd
Tuf	dolphin nm	Tip	dolphin nm	Rex	ww pile near wreck m
End	ww dolphin m	Eno	ww dolphin m	Ore	ww dolphin m
kin	do m	Der	do m	Bru	signal s
Mat	signal s	Dome	T large tree nm	Yel	R/G yellow barn nm
Node	signal s	Les	signal nm	Tra	banner end of fish-tp
Tru	sig on stump nm	Poi	signal s	Mor	signal s
Bare	bare tree nm	Hop	ww stump m	Low	ww snag in water m
Col	white snag nm	Sin	ww dolphin m	Pec	ww dolphin m
Sel	ww dolphin m	Gla	do m	Cap	do m
Nex	do m	Rip	do m	Ski	do m
Ana	do m	Gra	do m	Ace	do m
Bli	ww pile m	Tank	pole on WT nm	Kro	do nm
Ody	ww dolphin m	Ike	ww dolphin m	Gag	do m
Pul	ww pile m	Iro	ww pile m	Rot	sig on tall stump nm
Sto	cloth on tr m	Su	signal s	Tra	ww board on stump nm
Eze	ww end of fallen re nm	Riz	ww small tr trunk m	Slu	ww pile m
Key	ww signal nm	Jan	W gable bn nm	Bb	do m
Pil	ww pile m	Ten	ww pile m	SP	ww, W. end bridge cribng
Tin	do m	Ren	do m	RR	ww, E. end do nm
Lig	ww dolphin m	Kul	do m	Tic	R/G shack(?) nm
Lid	flag s	Mix	ww dolphin m	Tar	ww pile m
Kid	ww dolphin m	Lim	do m	Tel	ww dolphin m
B	ww pile m	C	ww pile m	A	do m
E	ww on bank m	F	ww tree rt m	D	ww pile m
H	wh clof tr m	J	ww stake m	G	ww tree stump m
L	ww tel pole m	M	ww on tree m	K	ww end fallen tr m
P	ww tree m	Q	ww pile m	N	ww pile m
Nap	corner pile nm			Aqua	water tank nm

Abbreviations

ww = white wash	tr = tree	wh = white
clo = cloth	sig = signal	R/G = river gable
tel = telephone	stu = stump	dft = drift
wd = wood	bn = barn	nm = not marked

m = marked by square piece galvanized iron ground
s = marked by stake (2" x 4") projecting about 18" above /

Plane-table Positions
Sheet CC

Object or name of signal	Latitude			Longitude			Remarks
	°	'	m	°	'	m	
Mile	46	10	1025'	123	40	620'	R R sign "Station 1 mile"
W T	46	10	1011'	123	40	323'	Water tank on Settlers Pt
Ded	46	10	579'	123	39	98'	Prominent dead tree east of Svensen
Barn	46	10	777'	123	39	619'	North gable, west of two barns on Svensen Island
Red	46	10	1702'	123	37	298'	West gable, red dock house
Od	46	10	1513'	123	39	25'	Dolphin off north side of Svensen Island
Pol	46	11	106'	123	39	961'	Lone alder tree growing in water off SW tangent Seal I.
X	46	11	1587'	123	39	979'	Stump on seal Island
Y	46	11	1347'	123	40	60'	Stump on Seal Island
Nu	46	13	1182'	123	38	573'	Old light dolphin, southwest of Snag Island Jetty
H	46	12	0'	123	37	503'	Large snag
End	46	11	1205'	123	37	788'	End dolphin
Lit	46	11	1393'	123	37	489'	End dolphin
J	46	10	1148'	123	38	362'	R R sign " Station 1 mile"
Stu	46	11	933'	123	38	617'	Stump
Rot	46	12	510'	123	41	115'	Highest part up-ended roots of large sanded-in log, McGregor I.
RW	46	10	1286'	123	38	873'	N gable large red & white barn
Chim	46	10	634'	123	39	429'	Largest chimney, new brown house, green roof, Svensen I.
DT	46	10	1097'	123	37	343'	Prominent dead tree about 0.4 mi south of Indian Point.

scaled by RWK
ck by KMcB

Statistics

Sheet C

Statute miles of shore line * 11.1

Sheet CC

Statute miles of shore line = 25.0

Sheet D

Statute miles of shore line = 39.3

APPROVAL OF CHIEF OF PARTY.

Topographic sheets number C, CC and D have been inspected and approved by me. The field work was done under my occasional supervision and the office work by myself. No additional work is considered necessary.

A handwritten signature in cursive script, reading "Robert W. Knox".

Robert W. Knox,
H & G Engr,
Chief of Party.

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. T6386

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K M. S. Light List	THUR
<u>Snag Island Jetty</u> ✓	6152									1
<u>Marsh Island</u> ✓	6152									2
<u>Prairie Channel</u> ✓	6152									3
<u>Long Island</u> ✓	6152									4
<u>Grizzly Slough</u> ✓				✓						5
<u>Blind Slough</u> ✓	6152									6
<u>Carlson Island</u> ✓				✓						7
<u>S.P. & S. Ry.</u> ✓	6152									8
<u>Columbia Slough</u> ✓				✓						9
<u>Xnappa</u> ✓	6152					✓	✓		✓	10
										11
										12
Names underlined in red approved										13
by <i>[Signature]</i> on 1-25-36										14
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Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. T6387a&b

Name on Survey	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	<i>W. S. Light List</i>	
<u>Tongue Point</u> ✓	6151								✓	1
<u>Tongue Pt. L.H. Depot</u> ✓	U.S.C.P.			✓						2
<u>Cathlamet Bay</u> ✓	6151									3
<u>John Day Channel</u> ✓				✓	<i>Estab. local name.</i>					4
<u>Prairie Channel</u> ✓	6151									5
<u>Oregon</u> ✓	6151								✓	6
<u>S.P. & S.Ry.</u> ✓	6151									7
<u>Highway U.S. 30</u> ✓	6151									8
<u>John Day River</u> ✓	6151								✓	9
<u>John Day Point</u> ✓	6151								✓	10
<u>Burnside Slough</u>					<i>not well established</i>					11
										12
<u>Snag Island Jetty</u> ✓	6152 6151									13
<u>McGregor Island</u>				✓	<i>not well established.</i>					14
<u>Green Island</u> ✓				✓	<i>well estab. locally.</i>					15
<u>Seal Island</u> ✓				✓	<i>not well established.</i>					16
<u>Settler Point</u> ✓	6151									17
<u>Svensen</u> ✓	6151					✓			✓	18
<u>Svensen Island</u> ✓				✓	<i>well estab. locally.</i>					19
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Names underlined in red approved

by *W. S. Light List* on 1-25-36

MEMORANDUM

IMMEDIATE ATTENTION

83 ✓
82

~~SURVEY~~
DESCRIPTIVE REPORT } NO. ~~111~~
~~PHOTOSTAT OF~~ } No. T 6386
6387a&b

{ received Dec. 28, 1935
registered Jan. 20, 1936
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
✓ 22	France -	BB	# 6, page 5
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RETURN TO

82	
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Jan 21, 1936

C. K. Green

REVIEW OF TOPOGRAPHIC SURVEY No. 6386

Title (Par. 56) *Marsh Island & Vicinity, Oregon*Chief of Party *R.W. Knox* Surveyed by *R.A. Philleo* Inked by *R.W. Knox*Ship *Field Party #9* Instructions dated *Feb. 26 1935* Surveyed in *June, 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. ~~The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~
5. ~~The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)~~
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None Submitted*
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, ~~reefs, coral reefs and rocks,~~ and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) *See Page 2 of the Descriptive Report for a discussion of the L. W. Line.*
9. ~~Rocks and~~ other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
See Reverse Side
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
Only vertical clearance shown and that referred to M.L.L.W.
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 9

T1235 (1870)

In general this survey is in fair agreement with the present survey. The island in the Northeast corner of the present survey is much smaller on the present survey than on T1235. On the present survey the passages do not go completely through Marsh Island as indicated on T1235. An area of this type could not be expected to check very close with the entire area marshy.

T1234 (1870)

A good comparison between this survey and the present survey is made on Page 5 of the Descriptive Report. This applies also to Chart 6152.

T6386 supersedes T1235 and T1234 in part.

Paragraph 19

The junction with T6385a shows a sanded area above Snag Island Jetty, whereas the present survey shows a marsh area.

The junction with T6387b shows a H.W. island complete on T6386 between 46° 11' and 46° - 12', whereas on T6387b this area is indicated as marsh. The area should be charted as shown on T6386.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *None Submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *None submitted*
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *Declination checks value shown on Chart - Declinatoire error + 53' (* Erased from sheet)* *Meridian on sheet corrected for declinatoire error. G.R. Mar. 2, 1938.*
Authority letter Feb. 17 1938 - R.W. Knox
Filed in Des. Rept. T-65216
(uncorrected)
Meridian shown in black instead of red*
18. The geographic datum of the sheet is *N.A. 1927 (Unadjusted)* and the reference station is correctly noted. (Par. 34.)
Values from field computations used.
19. Junctions with contemporary surveys are adequate.
Joins T63876(1935) on the West
See Reverse Side regarding junction with T6385a (1935)
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. ~~No additional surveying is recommended.~~ *Junction with T6385a North of Snag island jethy should be referred to the Field Party and also junction with T63876. The following signals should be cleared: 05ix, 07iv, 05in, 0E1. The heavy dashed line should be cleared.* *on pile (see H-6181).*
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by
24. Remarks:

Reviewed in office by

Chas R. Bush Jr June 22, 1936

Examined and approved:

C. H. Green.

Chief, Section of Field Records

L. O. Polbert

Chief, Division of Charts

Fred. L. Peacock

Chief, Section of Field Work

G. W. de

Chief, Division of Hyd. and Top.

Paragraph 19

The junction with T6385-a shows a sanded area above Snag Island Jetty whereas the present survey shows a marsh area.

The junction with T6387-b shows a H. W. island complete on T6386 between 46°-11' and 46°-12' whereas on T6387-b this area is indicated as marsh. The area should be charted as shown on T6386.

REVIEW OF TOPOGRAPHIC SURVEY No. 6387a

Title (Par. 56) *Tongue Point & Vicinity, Oregon*Chief of Party *R.W. Knox* Surveyed by *R.A. Philleo* Inked by *R.W. Knox*Ship *Field Party #9* Instructions dated *Feb 26, 1935* Surveyed in *April-May 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) —
4. ~~The amount of vertical control that the Manual specifies for contours-formlines was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~
5. ~~The delineation of contours-formlines is satisfactory. (Par. 49, 50.)~~
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None Submitted*
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
8. The representation of low water lines, ~~reefs, coral reefs and rocks,~~ and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) — *Low water line is, in part, from Hydro sheet.*
9. ~~Reefs and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)~~
A thorough comparison of T1123 (1868) and T1234 (1870) with the present survey is made on Page 3 of the Descriptive Report.
See Reverse Side
10. The span, draw and clearance of bridges are shown. (Par. 16c.)
Clearances of bridge over John Day River not shown
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 9

T4263 (1926)

This survey only covers that part of the present survey (T6387a) from Tongue Point to John Day Point. Details are a little different. An additional dock has been built on the West side of Tongue Point. T4263 shows 3 rocks East of Tongue Point, whereas T6387a shows one rodged rock. The detail on John Day Point is also slightly different. In general the two surveys are in good agreement.

T6387a supersedes T1123, T1234 and T4263 in part.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DP's, 68.) *None Submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *Declination error +53' * Declination checks value shown on chart (uncorrected) Authority letter Feb. 17, 1938 - R.W. Knox, Filed in Des. Rept. T-65 216* ** Meridian on sheet corrected for declination error. G.R. Mar. 2, 1938*
18. The geographic datum of the sheet is *N.A. 1927 (Unadjusted)* and the reference station is correctly noted. (Par. 34.) ✓ *(Erased from sheet)*
19. Junctions with contemporary surveys are adequate. —
Joins T 6387b (1935) on the East.
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report ~~after review by~~ ✓
24. Remarks:

Reviewed in office by *Chas. R. Bush Jr.* June 24, 1936.

Examined and approved:

E. K. Green
Chief, Section of Field Records

L. O. Dolbut
Chief, Division of Charts

Fred. R. Peacock
Chief, Section of Field Work

G. H. de
Chief, Division of Hyd. and Top.

REVIEW OF TOPOGRAPHIC SURVEY No. 63876

Title (Par. 56) *Seal Island & Vicinity, Oregon*Chief of Party *R.W. Knox* Surveyed by *R.A. Philleo* Inked by *R.W. Knox*Ship *Field Party #9* Instructions dated *Feb. 26, 1935* Surveyed in *May, 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. ~~The amount of vertical control that the Manual specifies for contours-formlines was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~
5. ~~The delineation of contours-formlines is satisfactory. (Par. 49, 50.)~~
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None Submitted*
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, ~~reefs, coral reefs and rocks,~~ and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)
9. ~~Rocks and~~ other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
A detailed and complete comparison between T1234(1870) and the present survey is given on page 4 of the Descriptive Report.
10. The span, draw and clearance of bridges are ^{not} shown. (Par. 16c.)
Only one small bridge indicated
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMS and DPs, 68.) *None submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *None submitted*
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *Declinaoire error +53' * (Authority letter Feb. 17, 1938 - R. W. Knox. Filed in Des. Rept. T-65216.)* ** Meridian on sheet corrected for declinaoire error. GR. Mar. 2, 1938.*
18. The geographic datum of the sheet is *N.A. 1927 (Unadjusted)* and the reference station is correctly noted. (Par. 34.) ✓
Values from field computations used
19. Junctions with contemporary surveys are adequate.
Joins T 6385a (1935) on the North Joins T 6387a on the West
Joins T 6386 (1935) on the East
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. *Several signals should be cleared up, namely: OLat, OTo, OAx, OBo and many others*
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by —
24. Remarks:

Reviewed in office by *Chas. O. Bush Jr.* June 23/1936.

Examined and approved:

E. H. Green
Chief, Section of Field Records

L. O. Dolbuit
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

G. H. Hude
Chief, Division of Hyd. and Top.