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Form 504 Rev. April 1935 DEPARTMENT OF COMMERCE U. s. coast and geodetic survey
DESCRIPTIVE REPORT
Topographic   Sheet No. "J" AND "J-J"   Hydrographic   Sheet No. "J" AND "J-J"   Hydrographic   U. S. COSECT & GEODETIC SURVEY   Hydrographic   Hydrographic
LIBRARY AND ARCHIVES  MAY 18 1937  AC. M.
State Washington  LOCALITY  Puget Sound  Totten Inlet — Fuget Sound
193 6 .
G. C. Jones.

# DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

# TOPOGRAPHIC TITLE SHEET

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

Field No. "J" & "J-J"

REGISTER NO. 76535 ab

State	Washington
General locality	Puget Sound
Locality	Totten Inlet
Scale 1:10,000	Date of survey August-Sept. , 1936.
Vessel U.S	.C. & G.S.S. EXPLORER
Chief of Party	G. C. Jones
Surveyed by	H. F. Garber
Inked by	H. F. Garber
Heights in feet above.	M.H.W. to ground textepsxofxtrees
Contour, Approximate o	ontour, Formatine interval 50 feet
Instructions dated	March 29, 19 34
Remarks: Pro	ect H-T-171.

# DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEETS "J" AND "J-J",

TOTTEN INLET - PUGET SOUND

SEASON OF 1936

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G. C. JONES, CHIEF OF PARTY, C. & G. S.

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#### DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEETS "J" AND "J-J",

TOTTEN INLET - PUGET SOUND

The greater part of Totten Inlet is shown on both sides of this sheet, sides "J" and "J-J", comprising the northern and southern portions, respectively. As this survey is treated as a unit, a single report is being submitted.

### AUTHORITY:

This survey was executed in accordance with the Director's Instructions dated March 29, 1934, Project HT-171.

### LIMITS:

The survey covers Totten Inlet, with the exception of the extreme northern part. The sheet joins sheet "B-1936", to the northward and joins sheet "L-1936" at the entrance to Skookum Inlet.

### SURVEY METHODS:

Standard plane table practices were followed.

Traverses were run between triangulation stations with the intermediate setups checked by resection. Due to lack of control in Skookum Inlet, a closed traverse was run from triangulation station "ROAD - 1936" on this sheet to station "SOLO - 1936" on Sheet "L". This traverse was carried along the highway to Skookum Creek and thence north along an old railroad bed to a point in Skookum Inlet. The end of the traverse on this sheet is marked by a black circle and the letters "T.P.". The traverse loop was closed on Sheet "L-1936". For closure see Sheet "L-1936". (T-6537) Error of closure was 5 m. for 7 mile traverse (7-6637)

### TOPOGRAPHIC SIGNALS:

Those topographic signals lying between the high and low water lines, other than piles so noted, are on logs or trees fallen across the beach. These obstructions are not of a permanent or chartable nature.

### CONTOURS:

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Owing to the wooded nature of the country, approximate contours only were drawn. See "Descriptive Report"for Sheet "H" for further discussion.

### CHARACTER OF COUNTRY:

With the exception of small areas under cultivation, the land is covered with second growth timber.

The land rises from the beach to elevations between / 150 to 250 feet where it becomes rolling.

Sand and gravel beaches with occasional small boulders extend from the entrance of the inlet to about Longitude 123°03'. The inlet bares at low water from this Longitude to its head with soft mud from high water line to high water line.

### OYSTER BEDS:

A great portion of the beaches south of the entrance to Skookum Inlet is utilized for oyster culture. The oysters grown are the small native variety commercially known as Olympia Oysters, originally found only in the upper reaches of Puget Sound. The commercial growing is now concentrated in this particular inlet, the other inlets having been stripped of the native supply. These oysters are far superior in quality and flavor to the larger and faster growing Japanese oysters recently introduced into this State. The oyster beds are located between the low and high water lines. Two types of 9 inch walls form the beds, namely concrete, and planks set on edge. These walls keep the oysters in place and covered with 9" of water at the low tides. The limits of the fartherest offshore walls were located by both the topographic and hydrographic parties. They are shown on the sheets with the following symbol (000000000000).

With the exception of a 40 meter stream bed, the beds extend across the entire Inlet at the vicinity of Longitude 123°03'. (7-6535b(1936))

Launches should keep away from this area except on business. Should a wall be touched and opened, the water will drain from the bed at low tide, leaving the oysters to die in the sun. In addition, the propeller's disturbance of the bottom will cause the oysters to be buried and smothered. New beds are being made in the muddy tide flats nearer the head of the inlet. The area is covered with plywood on which is placed sand and gravel. The plywood keeps the sand and gravel from sinking into the mud.

The double piling around the edges of the beds are for mooring houseboats. The beds are tended by Japanese who live aboard these boats with their families.

A bed is harvested about every four years and then seeded.

### LOW WATER LINE:

The low water line was transferred directly from the hydrographic sheets of this area. H-4203

# COMPARISON WITH CHART 6460:

The general trend of the shoreline and contours agrees Discussed in pars. 4a(t) and (2), in the review. with the chart.

Kennedy Creek, is shown emptying into the wrong slough on the chart. It is correctly shown on the present survey. review. A sign with Kennedy Creek printed on it, is placed on the highway bridge over the Creek.

See par 8 this

# GEOGRAPHIC NAMES:

# Charted Name

Totten Inlet √ Windy Point Burns Point Burns Cove Schneider Creek /Kennedy Creek / Skookum Creek

### Local Name

Oyster Bay Windy Point Burns Point Burns Cove Schneider Creek Kennedy Creek Skookum Creek

The local people know this Inlet as "Oyster Bay" due to the large quantities of oysters grown at its head.

Respectfully submitted,

Harry F. Jarber Harry F. Garber,

Jr. H. & G. Engr.,

U.S.C. & G.S.S. EXPLORER.

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APPROVED & FORWARDED:

C. Sohes. Commanding Officer,

U.S.C. & G.S.S. EXPLORER.

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Statute miles of shoreline	27.2	
Area, square statute miles	10.0	
Statute miles of roads	3.6	
Statute miles of railroads	0.3	
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Remarks.

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Remarks.

Decisions

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8	At head of Totten Inlet	For Head of Totten Inlet only
9	P.O. Map disagrees in location with Rand M Nolly & Prag. Mil. Map.	Not on this sheet
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# MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT No. T-6535ab	received May 18, 1937 registered May 20, 1937 verified reviewed approved
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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.

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### Section of Field Records

# REVIEW OF TOPOGRAPHIC SURVEY NO. 6535a (1936) FIELD NO. J.

Totten Inlet, Puget Sound, Washington Surveyed in August - September 1936, Scale 1:10,000 Instructions dated March 29, 1934 (EXPLORER)

# Planetable Survey.

Aluminum Mounted.

Chief of Party - G. C. Jones Surveyed by - H. F. Garber Inked by - " "

### 1. Condition of Records.

The records are neat and legible and conform to the requirements of the Topographic Manual except as follows:

- a. There is no evidence that the declinatoire was checked at a station of known declination during the season's work (paragraph 17).
- b. The low water line shown on this survey was transferred from H-6198 (1936) and H-6203 (1936). It is not the accepted practice to transfer the low water line from hydrographic surveys to contemporary topographic surveys. The low water line on hydrographic surveys is subject to office revision and changes cause differences with the transferred low water line on topographic surveys. (paragraph 16(a), Topographic Manual).

The Descriptive Report satisfactorily covers all items of importance except the following:

- c. No information relative to the existence or non-existence of charted roads, portions of which fall on the present survey, was mentioned. (See paragraph 5a (1), this review).
- d. It is desirable that the Descriptive Report contain an alphabetical list of all planetable stations determined and all triangulation stations outside the high water line accompanied by a brief description of each and a statement as to which planetable stations are recoverable.

# 2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the Instructions for the Project.

### 3. Junctions with Contemporary Surveys.

The junctions with T-6529 (1936) on the northeast, T-6535b (1936) on the southwest, and T-6537 (1936) on the west, are satisfactory.

# 4. Comparison with Prior Surveys.

# a. T-1672 (1878), Scale 1:20,000.

A small portion of this survey covers the present survey in the area northward of Windy Point on the north. The agreement in shoreline and contours of both surveys is fairly good. Because of the larger scale, more detail, and better control, the present survey should supersede T-1672 (1878) for charting purposes.

# b. T-1673 (1879), Scale 1:10,000.

This survey covers practically the entire area of the present survey.

# (1) Shoreline and Associated Details.

The comparison of the old shoreline with the present shows a good agreement, except in several places where small changes have occurred. These consist of spits (charted), in latitude 47° 09.1', longitude 122° 57.8'; latitude 47° 08.05', longitude 123° 00'; and the spit (uncharted) in latitude 47° 07.8', longitude 123° 00.1' which have eroded away.

# (2) Contours.

Agreement of contours is generally poor, the corresponding contours on either survey showing displacements of varying amounts up to 200 m. although the general contour pattern is about the same. Only one elevation is shown on the old survey but since a number of these are shown on the present survey, the contours shown thereon are considered/more accurate representation of the area.

The present survey with its greater detail should supersede this survey in future charting.

# Comparison with Chart 6460 (New Print dated July 26, 1937). Chart 6462 (New Print dated April 8, 1937).

### a. Topography.

Within the area of the present survey the charts are based on surveys discussed in the foregoing paragraphs and the following additional information:

(1) The charted roads that fall just within or outside the interior limits of the present survey originate with a Progressive Military Map of the U.S. Army Engineers (Shelton, Wash. Quad.-1909-21). Since the present survey is primarily a graphic control survey, it is assumed that the survey of roads in the heavily wooded country was intentionally not undertaken. In the absence of any

information to the contrary, they are considered to exist as charted and should be retained.

- (2) The charted 100 foot contour in latitude 47° 10.4', longitude 122° 58.4' originates with a Progressive Military Map of the U. S. Army Engineers' (Olympia, Wash. Quad.-1914). Portions of the contour fall just within or outside the interior limits of the present survey and is evidently quite generalized since it disagrees by as much as 500 m. with the present survey delineation. It should be superseded by the present survey in future charting.
- (3) The land elevations shown on the chart are not actual elevations but merely values of contours which originate with T-1673 (1879) discussed in paragraph 4b, this review. They should be superseded by the present survey information.

# b. Magnetic Declination.

The magnetic declinations determined with the declinatoire at triangulation stations Chet in latitude 47°08.9', longitude 123° 01.0' and Von in latitude 47° 10.7', longitude 122° 57.2' are approximately 3-1/4 degrees East and 4-1/4 degrees East respectively, of the charted value. The magnetic declination at station Chet was also determined on T-6537 and this value agrees closely with that charted. It is evident that if two different declinatoires were used, one of them is out of adjustment. This matter has been referred to the Division of Magnetism.

# c. Aids to Navigation.

There are no aids to navigation in this area.

### 6. Field Drafting.

The quality of the field drafting is very good, however a mechanical lettering set should be used for all lettering whenever practicable.

### 7. Additional Field Work Recommended.

The survey is complete and no additional field work is required.

### 8. Note to Compiler.

. The compiler's attention is called to the following:

a. Paragraphs 5a(1), (2) and (3) of this review relative to the disposition of charted roads, contour, and land elevations.

- b. Triangulation stations Lamp, Joel, Wind, Nina, Dune and Crew are shown outside the high water line. These are not located on any topographic features but are standard triangulation marks established between the high and low water line.
- 9. Superseded Old Surveys.

In so far as the topography actually included on the present survey is concerned, the present survey supersedes the following surveys for charting purposes:

> T-1672 (1878) in part. T-1673 (1879) " "

10. Reviewed by - G. Risegari, December 20, 1937.

Inspected by - Harold W. Murray.

Examined and approved:

T. B. Reed,

Chief, Field Records Section.

Ined. L. Veccock Chief, Section of Field Work. Chief, Division of Charts.

Chief, Division of H. & T.

#### Section of Field Records

# REVIEW OF TOPOGRAPHIC SURVEY NO. 6535b (1936) FIELD NO. J-J.

Totten Inlet, Puget Sound, Washington Surveyed in August-September 1936, Scale 1:10,000 Instructions dated March 29, 1934 (EXPLORER)

### Planetable Survey.

Aluminum Mounted.

Chief of Party - G. C. Jones Surveyed by - H. F. Garber Inked by - " " "

### 1. Condition of Records.

The records are neat and legible and conform to the requirements of the Topographic Manual except as follows:

- a. There is no evidence that the declinatoire was checked at a station of known declination during the season's work. (paragraph 17).
- b. The low water line shown on this survey was transferred from H-6203 (1936). It is not the accepted practice to transfer the low water line from hydrographic surveys to contemporary topographic surveys. The low water on hydrographic surveys is subject to office revision and changes cause differences with the transferred low water line on topographic surveys. (paragraph 16(a) Topographic Manual).

The Descriptive Report is clear and satisfactorily covers all items of importance except as follows:

- c. No mention or disposition was made of the present status of charted information not verified on the present survey. (See paragraph 5a (1)).
- d. It is desirable that the Descriptive Report contain an alphabetical list of all planetable stations determined and all triangulation stations outside the high water line accompanied by a brief description of each and a statement as to which planetable stations are recoverable.

## 2. Compliance with Instructions for the Project.

The plan, character and extent of the development satisfy the instructions for the project.

### 3. Junctions with Contemporary Surveys.

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The junction with T-6535a (1936) on the northeast is satisfactory.

# 4. Comparison with Prior Surveys. T-1673 (1879), scale 1:10,000.

## a. Shoreline and Associated Details.

Agreement of shoreline is generally good. Several changes in small details, however, are noted in the flat swampy area at the head of Totten Inlet, the more important being the islet in latitude 47° 06.1', longitude 123° 04.95' which has disappeared.

### b. Contours and Inland Details.

- (1) The contours along the south shore are in fairly good agreement with the present survey delineation but those along the north shore show a number of displacements of varying amounts as well as differences in general patterns. An example is the 100 foot contour between longitude 123° 02' and longitude 123° 05' which agrees in position in some places but is displaced as much as 130 meters in others as in latitude 47° 07.4', longitude 123° 02.2'. In this connection, the ridge pattern shown here on the present survey is considerably wider than that shown on the 1879 survey. Since no elevations are shown on the 1879 survey whereas numerous elevations are shown on the present survey, the contours shown thereon are probably a more accurate representation of the area.
- (2) The old survey shows several houses (not charted) and minor roads or trails (in general, not charted) extending from the shoreline into the interior or branching off from a main road that are not shown on the present survey. Since other houses and roads were located on the present survey, it is assumed that those on the old survey would have been located if existing. (See also paragraph 5a (1), this review.)

The present survey bears out the essential topographic features and should supersede this survey in future charting.

# 5. Comparison with Chart 6460 (New Print dated July 26, 1937).

### a. Topography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and the following additional information:

(1) Several charted roads which fall within or outside the interior limits of the present survey originate with a Progressive Military Map of the U. S. Army Engineers (Shelton, Wash. Quad., 1909-21). Since the present survey is primarily a graphic control survey, it is assumed that the survey of roads in the heavily wooded country was intentionally not undertaken.

In the absence of any information to the contrary, they are considered to exist as charted and should be retained. In this connection, KENNEDY CREEK is shown on the Engineers' Map as emptying into the eastern inlet whereas the present survey shows it emptying into the western inlet. The latter representation also agrees with that shown on T-1673 (1879).

(2) The land elevations shown on the chart are not actual elevations but merely contour values which originate with T-1673 (1879) discussed in paragraph 4, this review. They should be superseded by the present survey information.

# b. Aids to Navigation.

There are no aids to Navigation within the area of the present survey.

# c. Magnetic Meridian.

The values of the magnetic declination observed with the declinatoire agree closely with the charted value.

# 6. Field Drafting.

The quality of the field drafting is very good. A mechanical lettering set should be used wherever practicable.

### 7. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

### 8. Note to Compiler.

The compiler's attention is called to the following:

- a. The treatment of charted roads, land elevations and Kennedy Creek discussed in paragraph 5, this review.
- b. Triangulation stations BELT, LAMP, GENE, SAFER and SWAN are shown outside the high water line. These are not located on any topographic features but are standard triangulation marks established between the high and low water line.

# 9. Superseding Old Surveys.

In so far as the topography actually included on the present survey is concerned, the present survey supersedes the following survey for charting purposes:

T-1673 (1879) in part.

## T-6535b - 4

10. Reviewed by - G. Risegari, December 21, 1937.

Inspected by - Harold W. Murray

Examined and approved:

T. B. Reed,

Chief, Field Records Section

K.T. Adams

Chief, Division of Charts.

Thief. Section of Field Work.

Chief, Division of H. & T.