

7763

Diag. Cht. No. 8551-3

CS-277

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. DE-1249 Office No. H-7763

LOCALITY

State Alaska

General locality Prince William Sound

Locality West Side Naked Island Group

194 9

CHIEF OF PARTY

G.E. Boothe

LIBRARY & ARCHIVES

DATE Nov 28-1950

7763

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

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

Field No. DE-1249

REGISTER NO. H-7763

State ALASKA

General locality PRINCE WILLIAM SOUND

Locality WEST SIDE NAKED ISLAND GROUP

Scale 1:10,000 Date of survey 25 Aug. - 16 Sept., 19 49

Vessel Motor Whaleboat (Ship DERICKSON)

Chief of Party Glendon E. Boothe

Surveyed by H.F. Garber

Protracted by Christine N. Hillman

Soundings penciled by Christine N. Hillman

Soundings in fathoms FOOT

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated 9 Feb. 1942, Supplemental; 5 Feb. 1948

13 April 1949

Remarks: Survey not complete

Sounded with graphic recorder and hand lead.

X.W.W. 3/7/49

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY H-7763
(Field No. DE-1249)

Prince William Sound, Alaska; Naked Island Group
Scale: 1:10,000

USC&GSS DERICKSON
Glendon E. Boothe, Chief of Party

1949

A. PROJECT:-

CS-277, Instructions dated:
Original; 9 Feb. 1942
Supplemental; 5 Jan. 1943
6 Mar. 1947
5 Feb. 1948
13 Apr. 1949
28 June 1949 (ph-39(48))

B. SURVEY LIMITS AND DATES:-

This is an incomplete survey, limited to the development of several shoal areas off the west coast of Naked Island. Field work on this survey was from 25 August to 16 September 1949.

Prior surveys in this area are as follows:-

Hydrographic survey, register No. 3321, Scale: 1:20,000, Date: 1911	"	"	"	3315	"	"	"	"
Topographic	"	"	"	3230	"	"	"	"
"	"	"	"	3231	"	"	"	"

This partial survey falls within the area of contemporary survey No. H-7765. When completed this survey will make a junction with survey No. H-7762 (east portion of Naked Island Group) and survey No. H-7765 (off-shore area of Naked Island Group). *Another sheet should be used*

C. VESSEL AND EQUIPMENT:-

All sounding during the 1949 season on this survey was done with the motor whaleboat from the Ship DERICKSON.

An 808 model fathometer (No. 66) was used for obtaining all echo soundings on this survey during 1949. The shoaler soundings were verified by hand lead. *Fath Report filed with H-7161*

D. TIDE AND CURRENT STATIONS:-

A portable automatic tide gage was operated in McPherson Passage, Naked Island Group during the 1949 period of this survey. No time or range correction was applied for reducing soundings. No current stations were occupied.

E. SMOOTH SHEET:-

The smooth sheet projection was made in the Washington Office by ruling machine on 3 November 1949.

F. CONTROL STATIONS:-

Triangulation is on the Valdez datum. The scheme was carried westward from Valdez across the north side of Prince William Sound, then south through Perry Passage by H. Arnold Karo, Chief of Party during 1947 and 1948. The scheme was carried from Perry Passage, eastward to the Naked Island Group by Glendon E. Boothe, Chief of Party during 1949.

Only one signal used on this survey during the 1949 season was located by topography (signal "pal", located on survey No. T-7082).

I. CONTROL OF HYDROGRAPHY:-

All control of soundings for the 1949 portion of this survey was by the three point fix method. Sextant angles were observed by experienced anglemen.

L. COMPARISON WITH PRIOR SURVEYS:-

The 1949 portion of this survey was for the development of the off-shore shoal areas west of Naked Island. Shoaler soundings were obtained in 1949 than were shown on prior surveys. The most critical of the shoaler soundings are as follows:- *Lat sheet values of Valdez Datum*

Latitude	Longitude	Depth in Fathoms
60 - 41.23'	147 - 30.84'	9.5
60 - 40.76'	147 - 30.76'	7.4
60 - 39.85'	147 - 32.65'	6.0
60 - 39.68'	147 - 32.56'	7.2
60 - 39.66'	147 - 32.38'	5.5
60 - 39.48'	147 - 31.94'	3.2
60 - 39.10'	147 - 32.23'	5.2
60 - 39.05'	147 - 31.97'	4.9
60 - 38.66'	147 - 32.05'	7.4
60 - 38.87'	147 - 31.91'	6.5
60 - 39.07'	147 - 31.78'	6.3
60 - 38.97'	147 - 31.12'	7.6
60 - 39.77'	147 - 30.86'	8.1

X. RECOMMENDATION:-

It is recommended that the portion of survey No. H-7765 that falls within the limits of this survey be plotted on the smooth sheet for this survey.

*only the
junction
5695*

Respectfully submitted

John C. Tribble
John C. Tribble

Lt. Comdr. C. & G. Survey

LIST OF SIGNALS
used on survey H-7763
(1949)

Name used on survey sheet	Origin of station
Beg	BEG 1911-49
Elmer	ELMER 1949
Gipsy	GIPSY 1949
Pal	T-7082 (register No.)
Row	ROW 1911 (1947 location used)
Tall	TALL 1911-47

APPROVAL SHEET

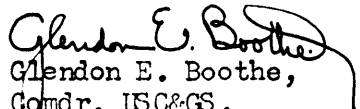
To Accompany
Descriptive Report for Hydrographic Sheet DER-1249
Register No. H-7763.
1949.

The boat sheet, DER-1249, the accompanying sounding volumes, and fathograms have been examined and approved by me.

The motorwhaleboat hydrography boat sheet for shoal investigation was examined by me at the end of each day's work.

The survey is incomplete as the sheet has not been started, since the work performed was only shoal investigation of spots located by the USC&GS DERICKSON.

It is recommended that the survey by the ship on sheet DER-2449, Register No. H-7765, that falls within the area of this sheet be plotted on it. See paragraph 4 of Approval Sheet for DER- 2449.


Glendon E. Boothe,
Comdr. USC&GS,
Comdg. USC&GS DERICKSON.

H 7763
De 1249

Prince William Sound.
West side Naked Island Group.

Processing Office Notes.

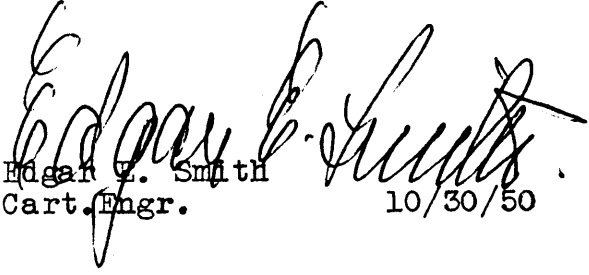
Smooth sheet.

The projection was ruled on the machine in Washington. The datum is NA 1927. The field computations of 1949 were on Valdez datum. The means of the datum differences of four stations in the Naked Island group were obtained and applied to the field computations. The differences in meters applied to Valdez datum are $\phi -315.6$ $\lambda + 426.5$.

The short stretches of shoreline now on the smooth sheet was transferred from graphic control sheets T 7081 & T 7082. *(detailed)*
The rest of the shoreline will come from T 8608 when the photo compilation is finished.

Unfinished sheet.

This sheet was laid out in 1949. It was expected that the sheet would be finished in 1950. While the party was diverted to the Aleutian group they took the boat sheet back into the field because of contingent orders which might have returned them to Prince William Sound. The contingency did not occur. On consultation the Supervisor instructed that the sheet, with boat sheet, be sent to Washington with the request that the boat sheet be returned to the processing office in time for use in the field when the party returns to work in Prince William Sound.


Edgar E. Smith
Cart. Engr.

10/30/50

H 7763
De 1249

Prince William Sound
West side Naked Island Group.

List of geographic names
penciled on smooth sheet.

Prince William Sound

Naked Island

Cabin Bay

TIDE NOTE

A portable automatic tide gage was maintained in McPherson Passage, Naked Island Group during the entire period of this survey. (Report of station mailed 16 July 1949.)
Location of tide gage; Lat. $60^{\circ}-40'.55$, Long. $147^{\circ}-24'.33$.

All soundings on this survey were reduced without correction for time or height, from hourly heights scaled directly from the marigrams of the above gage.

The plane of reference (MLLW) Corresponds to a reading of 1.7 feet on the tide staff. (see act. Directors letter dated 20 Sept. 1949, Ref. No. 36-rcb.)

The tide reducer for each hour during the periods of hydrography was plotted on "Graph For Tide Reducers" and a tabulated list of reducers made for each days work by the field party.

Marigrams of this station were mailed to the Washington Office on 2 Sept. and 19 Nov. 1949.

High and Low Waters, Hourly Heights, Reducer Curves and Tabulation of Reducers as scaled and compiled by the field party will be submitted via the Seattle Processing Office along with other records on hand that pertain to this survey.

The above tide note applies to all hydrography executed on Project CS-277 during the 1949 season, except for 23 and 27 Sept., for these two days the tide data was furnished by the Washington Office, based on observed tides at Cordova and Seward. See acting Directors letter No. 36-rcb. dated 28 Oct. 1949. This data concerns Survey No. H-7764 only.

Register and Field numbers of Hydrographic Surveys executed during 1949 follows:

<u>Register No.</u>	<u>Field No.</u>
H-7678	DE-2248-49
H-7762	DE-1149
H-7763	DE-1249
H-7764	DE-2349
H-7765	DE-2449
H-7766	DE-4148-49

7763

STATISTICS FOR HYDROGRAPHIC SURVEY NO. H-7763 (1949)
USC&GS Ship DERICKSON, Project No. CS-277

Date 1949	Vol. No.	Day Ltr.	No. of Positions	Hand Ld. Sdgs.	Miles of Sdg. Line Statute	Nautical
Aug. 25	1	a	51	2	4.8	4.2
Sept. 14	1	b	136	5	20.0	17.5
16	1&2	c	94	-	11.7	10.3
TOTALS	2		281	7	36.5	32.0

abstract of Velocity Corr.
Front Page of Vol. 1

GEOGRAPHIC NAMES

Survey No. H-7763

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		
<u>Alaska</u>										1
<u>Prince William Sound</u>								U.S. LB		2
<u>Naked Island</u>										3
<u>Cabin Bay</u>										4
										5
										6
										7
					Names underlined in red are approved 12-5-50. L. Heck					8
										9
										10
<u>McPherson Passage</u>				(location of tide gage)						11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ^{H-7763}

Records accompanying survey:

Boat sheets ¹.....; sounding vols. ².....; wire drag vols.;
bomb vols.; graphic recorder rolls ¹envel.....;
special reports, etc.
.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet
Number of positions checked
Number of positions revised
Number of soundings revised (refers to depth only)
Number of soundings erroneously spaced
Number of signals erroneously plotted or transferred
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time

Verification by.....Total time Date

Reviewed by..... Time Date

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- H-7763

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.
3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.
4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.
5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.
6. All positions verified instrumentally were check marked in the sounding records.
7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.
8. The metal protractor has been checked within the last three months.
9. The protracting and plotting of all bad crossings were verified.
10. All detached positions locating critical soundings, rocks or buoys were verified.
11. The boat sheet was compared with the smooth sheet.

12. The spacing of soundings as recorded in the records was closely followed.
13. The bottom characteristics were shown on outstanding shoals.
14. The reduction and plotting of doubtful soundings were checked.
15. The transfer of contemporary topographic information was carefully examined.
16. All junctions were transferred and overlapping curves made identical.
17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.
18. The depth curves have been inspected before inking.
19. All triangulation stations and transfer of topographic and hydrographic signals were checked.
20. Heights of rocks were checked against range of tide.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
22. Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
24. The low water line and delineation of shoal areas have been properly shown.
25. Degree and minutes values and symbols have been checked.
26. Questionable soundings have been checked on the fathograms.

27. Source of shoreline and signals (when not given in report).
28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.
29. All aids located, with those on contemporary topographic sheets, have been shown on survey.
30. Depth curves were satisfactory except as follows:
31. Sounding line crossings were satisfactory except as follows:
32. Junctions with contemporary surveys were satisfactory except as follows:
33. Condition of sounding records was satisfactory except as follows:
34. The protracting was satisfactory except as follows:
35. The field plotting of soundings was satisfactory except as follows:
36. Notes to reviewer:

Verified by

Date

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

11 December 1950

Division of Charts: R. H. Carstens

Plane of reference approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 7763

Locality Naked Island, Prince William Sound, Alaska

Chief of Party: G. E. Boothe in 1949
Plane of reference is mean lower low water, reading
1.7 ft. on tide staff at Naked Island
13.5 ft. below B. M. 1 (1949)

Height of mean high water above plane of reference is 10.9 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section

Chief, ~~Division of Tides and Currents~~

