

7161

& ADD. WK.

7161 & ADD. WK.

Diag. Cht. No. 8551-3

<p>Form 504</p> <p>U. S. COAST AND GEODETIC SURVEY</p> <p>DEPARTMENT OF COMMERCE</p> <p>DESCRIPTIVE REPORT</p>	
Type of Survey	HYDROGRAPHIC
Field No. DER-1248	Office No. H-7161 Add'l WK. 1949.
<p>LOCALITY</p>	
State	ALASKA
General locality	PRINCE WILLIAM SOUND
Locality	PASSAGE CANAL - WESTERN PART
<p><u>194 8</u></p> <p>CHIEF OF PARTY</p> <p>H. A. Karo</p>	
<p>LIBRARY & ARCHIVES</p>	
DATE	October 14, 1949.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. H-7161

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.

REGISTER NO. **7161**

Field No. ~~122-1248~~

State Alaska

General locality Prince William Sound

Locality Passage Canal - Western part.

Scale 1:10,000 Date of survey 23 June - 7 August 1948

Instructions dated 9 February 1942 - Supplemental Instructions - 5 February 1948

Vessel BERGSON

Chief of party H. Arnold Duro

Surveyed by H. Arnold Duro, H. F. Garbar

Soundings taken by fathometer, graphic recorder, hand lead, wire All

Protracted by James R. Wheeler

Soundings penciled by James R. Wheeler

Soundings in fathoms ~~1000~~ at ~~1000~~ MLLW

REMARKS:
.....
.....
.....
.....
.....
.....

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H-7161 Add. Wk. 1951.

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

REGISTER No. H-7161 Add. Wk. 1951

Field No. _____

State Alaska

General locality Prince William Sound

Locality Passage Canal

Scale 1 : 10,000 Date of survey 10 August, 1951

Instructions dated 20 July, 1951

Vessel LESTER JONES

Chief of party G. A. Nelson

Surveyed by R. A. Gilmore

Soundings taken by fathometer, graphic recorder, ~~EGG~~

Protracted by T. L. Janson

Soundings penciled by E. E. Thomas

Soundings in fathoms ~~FEET~~ at ~~MLLW~~ MLLW

REMARKS: The additional work was plotted in the Washington Office.

XWW 3/4/51

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: Ship LESTER JONES
705 Federal Office Bldg.,
Seattle 4, Washington

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

14 August 1951

To: The Director
U. S. Coast & Geodetic Survey
Washington, D. C.

Subject: Investigation of reported shoal off Whittier, Alaska


An investigation of the reported shoaling off Whittier Harbor Buoy No. 1 was made on 10 August 1951, in accordance with instructions received in the letter dated 20 July 1951, ref. 221-sro, S-1-LJ.

The investigation was made in a large skiff borrowed from the Columbia Lumber Company, in which an 808 fathometer was installed. An outboard motor was used for propulsion. Standard methods were used in developing the area. The work was done on 1:10,000 scale and treated as an addition to Hydrographic Sheet H-7161, (1948.)

A tide staff was installed and readings taken during the period of hydrography. The staff was connected to two 1948 bench marks. The soundings were not reduced with reference to the staff readings since the data for the bench marks was not available.

The soundings on the boat sheet were reduced with predicted tides.

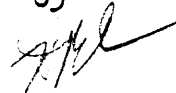
No evidence of shoaling was found. The location of the buoy is inshore from that given in Notices to Mariners No. 24, June 16, 1951. The present location of the buoy was furnished Commander J. D. Eicher, MSTS Representative, and Lieutenant Welch of the Harbormasters Office.


George A. Nelson
CDR, C&GS
Comdg., Ship LESTER JONES

cc: Supervisor, NW District

AIR MAIL

83



#15

221-sro
8-1-LW

AIR MAIL

20 July 1951

To: The Commanding Officer
USCGC Ship LESTER JONES
705 Federal Office Building
Seattle 4, Washington

Via: Supervisor, Northwestern District

Subject: Investigation of shoal off Whittier, Alaska.

A charted 2½-fathom shoal in the vicinity of Whittier, Alaska, is reported to be almost exposed at mean lower low water.

New Chart No. 8521, two copies of which are being furnished, has been printed showing the position of Whittier Harbor Buoy No. 1 and the note "Shoaling Reported." This note originated with Notice to Mariners No. 24, June 16, 1951. A copy of the Notice is being furnished.

It is requested that you make a hydrographic investigation of the area just inside the Whittier Harbor Buoy No. 1 as soon as practicable and submit your report to this office immediately.

A photostatic copy of the most recent hydrographic survey of this area, H-7161 (1948 1:10,000), together with geographic positions and descriptions is being furnished.

((Signed) W. M. Sears

Acting Director

CC: Supervisor, Northwestern District
83

8021
83218

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Ship Lester Jones
705 Federal Office Bldg.,
Seattle 4, Washington

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

18 August 1951

To: The Director
U. S. Coast and Geodetic Survey
Washington, D. C.

Subject: Monthly Report, 22 July to 18 August.

Photo inspection of shoreline in Prince William Sound continued throughout the period, Priority "A", comprising the north shore from Point Esthat to Point Freemantle, including Perry Island, Lone Island, and the Naked Island group was completed on 17 August.

On 10 and 11 August the investigation of the reported shoaling off Harbor Buoy # 1 in Whittier was made in accordance with instructions contained in the letter of 20 July 1951 ref. 221-ero, S-1-LJ. No evidence of shoaling was found. The field data is being forwarded air mail.

83

The additional photographs required for Priority "B" were received on 3 August.

George A. Nelson
CDR, USCG
Comdg., Ship LESTER JONES

cc:
Supervisor, NW District

DESCRIPTIVE REPORT

To Accompany Sheets ~~DER-1148~~ and ~~DER-1248~~
(H-6981) *(H-7161)*
Passage Canal, Prince William Sound
Alaska

Scale 1 - 10,000

Ship DERICKSON H. Arnold Karo, Comdg.

June - August 1948

1. AUTHORITY

Hydrography was executed in accordance with instructions dated 9 February 1942 and paragraph 3 of supplemental instructions dated 5 February 1948, project CS-277.

2. SURVEY LIMITS AND DATES

The area covered by the two sheets includes all of Passage Canal from one and a half miles eastward of Pt. Pigot and one half mile southward of Pt. Cochrane, to its head. Sheet DER-1148 is joined on the north and east by Sheet ~~DER-2147~~ *(H-7161)* and on the south by ~~Sheet DER-2548~~ *(H-6981)*. Sheet ~~DER-1248~~ *(H-7161)* is a continuation of Sheet DER-1148 in Passage Canal making conjuncture at the vicinity of Shotgun Cove. Sounding was done between 23 June and 12 August 1948.

These sheets cover the same area as H-3538 (1913), H-3694 (1914) and the western portion of Sheet H-3689; (1914). *cover H-7161*

3. VESSEL AND EQUIPMENT

The center part of Passage Canal was sounded with the Ship DERICKSON operating as close to the beach as safety permitted. An NMC-4 Fathometer No. 57 calibrated at 800 fms/sec was used for all ship sounding. Some wire soundings were taken on the very steep slopes. A motor whale boat operating from the ship was used for sounding the inshore area including the small inlets. Two 808 Depth Recorders, Nos. 56 and 128, calibrated at 820 fms/sec were used in the motor whale boat. Hand lead soundings were taken in the very shoal water.

4. TIDE STATION

A portable tide gage was maintained at the wharf at Whittier, Alaska for the reduction of soundings. No time or height corrections were applied.

5. CONTROL STATIONS

The triangulation is on the Valdez Datum, based on the triangulation carried from Valdez across the north end of Prince William Sound by the Ship DERICKSON in 1947. The 1947 Position of the line Port - Split in Wells Passage was used in extending the control in Passage Canal in 1948. The 1948 values of the recovered triangulation

stations differ somewhat from the 1914 values. (See Descriptive Report of signal location sheets of this area.) Additional control stations were located by graphic control methods on sheets DE-A, DE-B and DE-C, 1948. *CT-70734+6(1948)*

6. SHORELINE AND TOPOGRAPHY

The shoreline is to be determined from aerial photographs and no determination was made in 1948 other than short sections at control stations. The 1913 - 1914 shoreline is in agreement, after shifting the datum. *air-photo shoreline not compiled 2-14-51*

7. SOUNDINGS

All soundings taken with the Ship DERICKSON were obtained with the NMC-X, No. 57 fathometer and vertical wire soundings along steep slopes. The NMC is calibrated at 800 fms/sec. which is nearly the correct velocity for this area. The velocity correction derived from serial temperature and salinity observations proved to be negligible. The oscillator has a draft setting of 6.4 feet, so an index correction of 1.0 fm. has to be applied to all soundings. Soundings were obtained on the 100 and 200 scale, except between depths of 200 and 225 fathoms where the 2000 scale was used. The graph cannot be read closer than 5 fathoms within this range, and even those readings are an estimation. This must be borne in mind in plotting and reviewing the smooth sheet in examining crossings. In some instances the fathograms will have to be referred to, and possibly new values selected. It was noted both during the 1947 and 1948 seasons, that the stylus marked ahead of the zero line on the 2000 scale.

By inspection of the fathograms over a period of two seasons, this value appears to be 7 fathoms, which is additive.. Combining this 7 fathoms with a draft setting of 1 fathom gives a value of 8 fathoms to be added to all soundings taken on the 2000 scale.

Two 808 fathometers, Nos. 56 and 128 were used on the inshore work. These are calibrated for velocities of 820 fms/sec. where and velocity corrections are appreciable. There is an appreciable phase correction on 808 No. 56 when shifting between the various scales. These phase corrections were combined with the velocity corrections so that only one fathometer correction need be applied in the sounding volumes. Tests showed that there were no phase corrections on 808 No. 128 when scales were shifted; velocity corrections only were applied. The motor whale boat in which the sounding was done, has an exceedingly shallow draft. The transmitter and receiving units were placed inboard directly above the keel, and only a few inches below the water line. Bar checks revealed that there was no index correction apparent when the stylus was kept on a zero initial. (See special fathometer report for further details and computations.) As the depths fell off rapidly, when leaving the beach, no attempt was made to use the foot scale on the fathometers. To have done so, would have caused continual shifting with resulting confusion, misses, and uncertainties.

As the bottom is quite broken, with steep slopes, fathometer and tide corrections were entered to 0.2 fms. up to 50 fms. and 0.5 fms. thereafter.

8. CONTROL OF HYDROGRAPHY

All positions were determined by three point fixes, observed by sextant angles.

9. ADEQUACY OF SURVEY

The survey adequately covers the area surveyed. Junctions with adjacent sheets are satisfactory and the depth curves can be adequately drawn at the junctions.

10. COMPARISON WITH PRIOR SURVEYS

The inshore hydrography is in agreement with Sheets H-3538, H-3694 and H-3689. All offlying rocks and shoals were verified on the present survey. A least depth of ~~4.7~~ ^{4.7} fms. was found on the rocky shoal at Lat. 60° 47.71', Long. 148° 36.95', while a least depth of 9 fathoms is shown on Sheet H-3538. This 4.7 fm. sounding is in agreement with the 4 3/4 fm. sounding on Chart 8517. Soundings over 150 fms. are generally shoaler by one to ~~five~~ ^{five} fathoms on the present survey than on the 1913 - 1914 surveys. The fathometer soundings were in agreement with the wire soundings taken this year. ~~This same discrepancy was noted in 1947 in Wells Passage, the area adjoining this season's work.~~ ^{This similar differences were} *See P.S. of Review*
**smooth sheet depth*

11. COMPARISON WITH CHART 8517

The survey is in agreement with Chart 8517, except the deeper soundings as noted in the preceding paragraph.

12. DANGERS AND SHOALS

See paragraph No. 10 this report.

13. COAST PILOT INFORMATION

See Coast Pilot Notes, Ship DERICKSON, season of 1948.

Anchorage are extremely limited in Passage Canal. The bottom drops abruptly at the head of the bay, permitting no anchorages for large vessels. Fair anchorage may be obtained in Shotgun Cove on the 15 fathom shelf making out from the west shore at Lat. 60° 47.55' Long. 148° 33.4'. The bight on the eastern side of Shotgun Cove with depths around 14 fms. is generally filled with barges moored to buoys. Suitable depths at the head of Shotgun Cove is also used for the mooring of barges. This anchorage is exposed to strong winds blowing through the draw at the head of the bay.

The best anchorage for large vessels is on the 15 fathom shoal 0.9 miles WSW of Emerald Isle, Lat. 60° 47.95', Long. 148° 36.35'. It has fair holding ground as the layer of glacial silt is apparently quite thick over the rock formation. This gives a sticky bottom of blue clay.

14. AIDS TO NAVIGATION

There are three fixed aids to navigation within the limits of the sheets, Point Pigot Light, Decision Point Light and Trinity Point Light. (See special report of lights listed on Form 567.)

On H-6981(1948)

On H-7161(1948)

Positions of two floating aids to navigation were determined:

(a) Shotgun Cove Shoal Buoy, red and black horizontal bands, 1st class can. Located by hydrographic party with motor whale boat on 25 July 1948, pos. 81f, in 21 fathoms of water, grey mud bottom. Lat. $60^{\circ} 47.60'$, Long. $148^{\circ} 33.05'$

(b) Whittier Harbor Buoy, 1, Black, 1st class can. Located by hydrographic party in motor whale boat on 22 July 1948, pos. 172e. Located in 7.4 fms. grey mud bottom, Lat. $60^{\circ} 46.76'$, Long. $148^{\circ} 39.70'$.

15. LANDMARKS FOR CHARTS

Landmarks for Charts are being submitted separately on Form 567. Three landmarks at Whittier are within the limits of Sheet DER-1248, namely: -

- (a) Red Tank, (elevated)
- (b) West Twin Stack, (at sawmill)
- (c) Red Derrick, (east end of Army wharf) *(not listed on Form 567)*

16. GEOGRAPHIC NAMES 214

All features within the limits of the sheets are named on Chart 8517. No new names are recommended.

Respectfully submitted

H. F. Garber

H. F. Garber
Lt. Comdr., USC&GS

Approved and Forwarded:

H. Arnold Karo
H. Arnold Karo
Comdr., USC&GS
Chief of Party

Tidal Note to Accompany Sheets DER-1148 and {DER-1248:
} 7161

Hourly heights obtained from the portable automatic tide gage located on the wharf at Whittier, Alaska were used for the reduction of soundings on Sheets DER-1148 and DER-1248. No time or height corrections were applied. Location of gage: Lat. $60^{\circ} 46.65'$, Long. $148^{\circ} 40.15'$.

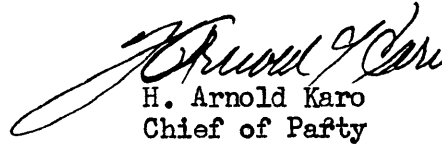
MLLW on tide staff as furnished by the Washington Office is 3.8 feet.

Approval Sheet

The boat sheets, Nos. ^{SH-6981(1948) SH-7161(1948)} DER-1148 and DER-1248, the accompanying sounding volumes and fathograms have been examined and approved by me.

The ship hydrography was executed under my direct supervision. The motor whale boat hydrography was examined at the close of each day's work.

The survey is considered quite adequate, and no further hydrography recommended for the area.


H. Arnold Karo
Chief of Party

List of Stations on Sheet DM-1248 H-7161

Name Used in Hydrographic Survey.	Origin of Station
Base	Whittier East Base 1948
Bur	Bur 1914-1948
Dab	Dab 1914-1918
Delta	Delta 1914-1948
Der	Derrick 1948
Dug	Dug-2 1948
Dusty	Dusty 1948
Fall	Fall 1914-1948
Gilt	Gilt 1948
Jill	Jill 1948
Keep	Keep 1948
Lemac	Lemac 1948
Limb	Limb 1948
Neat	Neat 1948
Oil	Oil Dock Dock E. Gable 1948
Oven	Oven 1948
Pump	Pump House Stack 1948
Punt	Punt 1948
Rail	R.R. Station E. End 1948
Red	Red Tank 1948
Ref	Sharp Ref. Mk. 1948
Saw	Saw-2 1948
Tag	Tag 1914-1948

List of Stations on Sheet DE-1248 (Cont) H-7161

Name Used in Hydrographic Survey.	Origin of Station
Tank	Water Tank Green 1948
Tomb	Tomb-2 1948
Treat	Treat 1914-1948
Tri	Trinity Pt. Lt. 1948
Trip	Trip 1914-1948
Union	Union 1948
West	Sawmill West Stack 1948
Whit	Whittier West Base 1948

H. 7161

List of Stations on Sheet DE-1248 Located on
Topographic Sheet DE-A-48 (7073 a), 1948.

Add		Log
Art		Moo
Bah		Nig
Bib		Nix
Cam		Ohm
Cow		Orb
Deb	Pal	Pal
Dud		Pie
Egg		Pin
Eng		Rot
Fav		Ski
Foz		Tub
Gam		wad
Gas		Yea
Haw		
Hid		
Hug		
Ion		
Its		
Jar		
Jib		
Jut		
Ked		
Lam		
Lip		

H-7161

List of Stations on Sheet DE-1248 Located on
Topographic Sheet DE-B-48 (7-707) b, 1948

Aha	Hod	Van
Amp	Hop	Via
Arm	Ida	Vim
Bat	Jap	Wan
Bon	Joy	War
Bum	Log	Wax
Cat	Lug	Wed
Coo	Mag	Wig
Doc	Mal	Yan
Don	Nil	
Dun	Out	
Duo	Pad	
Eel	Pet	
Eon	Ram	
Few	Rim	
Fin	Rio	
Fly	Rip	
Gad	Sag	
Gin	Sic	
Gob	Sly	
Gum	Sty	
Guy	Tan	
Hag	Tap	
Hat	Thy	
Hex	Toy	

7161

De 1248

Alaska

Prince William Sound.

Passage Canal - Western Part.

Geographic names penciled on smooth sheet.

Passage Canal

Kenai Peninsula

Shotgun Cove

Whittier

Emerald Island.

Trinity Point

Bur Point

Neptune Point

Gradual Point

De 1148 (H-6981)
&
De 1248 (H7161)

Passage Canal

Prince William Sound

Tidal Note

Hourly heights from the portable automatic tide gage located on the wharf at Whittier, Alaska, were used for the reduction of soundings. No time or height corrections were applied.

Location of gage:-

Lat. 60 46.65

Long. 148 40.15

MLLW on tide staff as furnished by the Washington office is 3.8 feet.

7161

STATISTICS FOR HYDROGRAPHIC SURVEY DE-1248

Ship DERICKSON

Project CS-277

Ship Hydrography

Vol. No.	Day Ltr.	Date	No. of H.L. Sdgs.	No. of Wire Sdgs.	No. of Pos.	Sta. Mi. Sdg. Line
I	A	23 June	- -	2	162	50.0
I & II	B	28 July	- -	1	145	43.0
II	C	29 July	- -	- -	40	9.0
TOTAL			0	3	347	102.0

Motor Whale Boat Hydrography

III	a	17 July	35	- -	196	33.2
IV	b	19 July	9	- -	125	21.3
IV & V	c	20 July	93	- -	234	34.2
V & VI	d	21 July	8	- -	203	27.0
VII	e	22 July	3	- -	174	26.5
VII	e	22 July	57	- -	11	Sdg. along face of Whittier Dock
VII & VIII	f	25 July	5	- -	196	29.1
VIII	g	27 July	- -	- -	25	4.8
VI	h	7 Aug.	1	- -	8	0.0
TOTAL			211		1172	176.1
GRAND TOTAL			211	3	1519	253.8

Area Sq. Sta. Miles 10.5

7161

De 1248

Passage Canal-Western Part.

Processing Office Notes.

Smooth Sheet.

The projection is hand made on Whatman paper. Datum is Valdez. Triangulation is from work of Rude 1914 and Karo 1948. Topographic signals are from De-A-48 and De-B-48.
T-7073a T-7073b

Pathograms.

When the sounding vessel passed close to the side walls of the glacial trough returns from the steep slope confused the profile and the proper depth is sometimes uncertain. See the profile for 83 to 86 B (Vol.4) Apparently side wall echoes overlay returns from the flat fiord floor. Positions 82 to 83 b show this possibility. See also 72 to 73 A and 107 to 108 B (both Vol. I). Obviously, as the vessel passes over the steep slope the profile on each stroke of the stylus arm records echoes from both the high and the low sides of the cone of dispersion, and the proper depth is probably below the top edge of the profile. When the cone of dispersion covers both side slope and flat floor the indication for the slope seems to overlay the indication for the floor; the depth may be the floor reading or some point between it and the top edge of the profile. See also profiles for sheet De 1148. Positions 1-25 H day and 97-102 F day in Vol.3. The ship made casts with the lead which showed depths considerably below the top edge of the profile.

As gradient was shown by adjacent sdg lines sdgs were read for depths under vessel

It is suggested that additional experiments be made to re-determine the cone of dispersion of the transmitted signal.

Shoal soundings.

In addition to the soundings pointed out on the face of the smooth sheet, see also the following:-

Lat.	Long.	Position.	Fathoms.	Volume.
60 47.72	148 37.23	12½ f	13.5	7
47.98	36.38	104 b	14	4
47.99	36.31	24-25 f	14	7
48.08	36.24	27-28 e	14	7

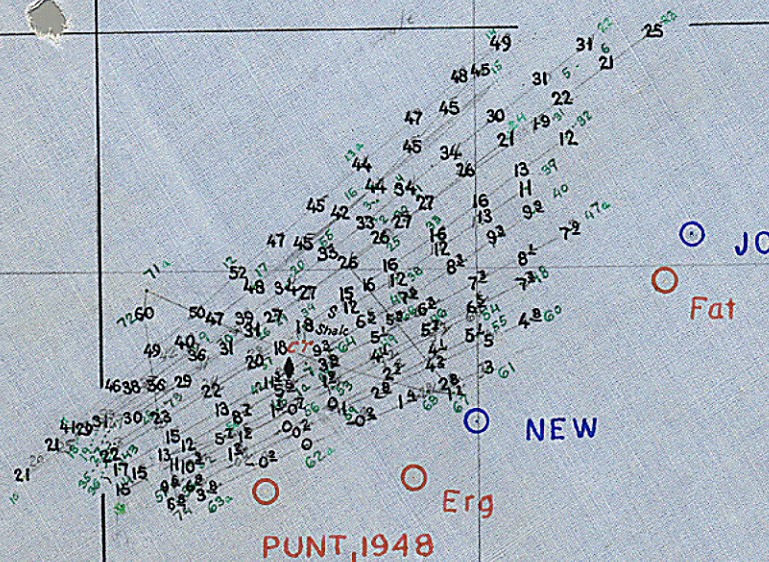
Landmarks.

See paragraph 15. As a copy of Form 567 is not among our records the points presumed to be the landmarks reported have been marked in pencil. It is requested that these points be verified from the Report on Landmarks for Charts and that the legend then be inked.

Edgar E. Smith
Edgar E. Smith Cart. Engr. 8/25/49

39'

TOMB 2, 1948



Gas

JOE

Fat

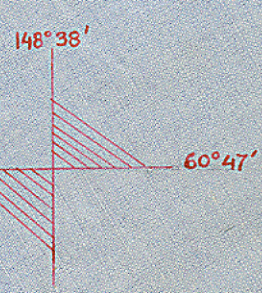
NEW

Erg

PUNT, 1948

Log

DERRICK, 1948



N.A. DATUM OF 1927

ADDITIONAL WORK (1951) FOR HYDRO SHEET H-7161
 SHIP LESTER JONES G. A. NELSON CMDG.
 DATUM N. A. 1927 SCALE 1:10,000

Sdgs from this survey have been selected & transfered to H-7161 (1948)

148° 40'

39'

60° 46'

applied to chit 8521

RAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

September 22, 1949

~~Division of Hydrography and Topography:~~

Division of Charts: R. H. Carstens

Plane of reference approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET 7161

Locality Passage Canal, Prince William Sound, Alaska

Chief of Party: H. A. Karo in 1948
Plane of reference is mean lower low water, reading
3.3 ft. on tide staff at Whittier
16.3 ft. below B. M. 1 (1948)

Height of mean high water above plane of reference is 11.1 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents.~~

839

RH C

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

4 September 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 1
volumes of sounding records for

HYDROGRAPHIC SHEET 7161 Add. Wk.

Locality Whittier, Prince William Sound, Alaska

Chief of Party: G. A. Nelson in 1951
Plane of reference is mean lower low water, reading
-2.6 ft. on tide staff at Whittier
16.2 ft. below B. M. 1 (1948)

Height of mean high water above plane of reference is 11.1 feet.

NOTE: Tide reducers based on observations at Whittier, have
been entered. These tide reducers have been verified.

Condition of records satisfactory except as noted below:

E.C. McKay

Section

Chief, ~~Division~~ of Tides and Currents.

GEOGRAPHIC NAMES

Survey No. H-7161

Name on Survey	Source											
	A	B	C	D	E	F	G	H	K			
<u>Alaska</u>			(see title)									1
<u>Prince William Sound</u>			(")							USWB		2
												3
<u>Kenai Peninsula</u>										USWB		4
<u>Passage Canal</u>										"		5
<u>Gradual Point</u>										"		6
<u>Neptune Point</u>										"		7
<u>Shotgun Cove</u>										"		8
<u>Bur Point</u>										"		9
<u>Trinity Point</u>										"		10
<u>Emerald Island</u>										"		11
<u>Whittier</u>			(location of tide gauge)									12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25
												26
												27

Names underlined in red are approved
 10-11-49 L Heck
 (consult chart 8517 for placement of names)

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ^{H-7161}.....

Records accompanying survey:

Boat sheets ¹.....; sounding vols. ⁸.....; 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	.....	1519.
Number of positions checked	.....	16.
Number of positions revised	.....	3.
Number of soundings revised (refers to depth only)	.....	28.
Number of soundings erroneously spaced	.....	.....
Number of signals erroneously plotted or transferred	.....	.....
Topographic details	Time	10.
Junctions	Time	24.
Verification of soundings from graphic record	Time	8.

Verification by *E. S. Searley*..... Total time 166. Date *Mar. 9, 1951*
 Reviewed by *W. J. Ziskind*..... Time 23. Date *Mar. 19, 1951*

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7161 Ad. Wk.
1951

Records accompanying survey:

Boat sheets ...1.; sounding vols. .1...; wire drag vols.;
bomb vols.; graphic recorder rolls 1.enx;
special reports, etc. .1.Section of Chart. 8521.....
.....

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

Number of positions on sheet		..74...
Number of positions checked (by Yearly)		.....
Number of positions revised		..1....
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	.....
<i>Plotted by F.L. Janson</i>	<i>28 hrs</i>	
Verification by <i>Ernest James</i>	Total time	..7 hrs Date 2-6-52.
Reviewed by <i>Lu Jaskind</i>	Time	..... Date 2-25-52

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7161

FIELD NO. DE-1248

Alaska, Prince William Sound, Passage Canal - Western Part
Surveyed in June - August, 1948 Scale 1:10,000
Project No. CS-277

Soundings:

Control:

808 Fathometer
NMC Fathometer
Hand lead

Sextant fixes on shore signals

Chief of Party - H. A. Karo
Surveyed by - H. A. Karo and H. F. Garber
Protracted by - J. R. Wheeler
Soundings plotted by - J. R. Wheeler
Verified and inked by - E. G. Yearley
Reviewed by - I. M. Zeskind, 17 March 1951
Inspected by - R. H. Carstens

1. Shoreline and Control

The short sections of shoreline and the piers in the western end of Passage Canal originate with graphic control survey T-7073a and b (1948). Completion of the shoreline is deferred until the air-photographic compilation of this area is available.

The source of the control is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated.

Except for some inshore irregularity, the bottom is generally smooth and drops abruptly from shore to depths of 50-100 fms.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-6981 (1948) on the east.

5. Comparison with Prior Surveys

H-3538 (1913) 1:10,000

H-3694 (1914) 1:10,000

These surveys cover the area of the present survey. A comparison between the prior and present surveys shows no appreciable changes in inshore depths. However, differences of 2-15 fms. are noted in offshore areas. These differences in depth are attributed to silt deposits from glaciers and streams emptying into the Canal.

The present survey is adequately developed to reveal all the hydrographic information necessary to supersede the prior surveys within the common area.

6. Comparison with Chart 8517 (Latest print date 9/4/50)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys which need no further consideration. Supplementary soundings and a rock awash are charted from the present survey before verification and review and are in agreement with the verified smooth sheet.

The present survey supersedes the charted information.

B. Aids to Navigation

The present survey positions of the aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended.

7. Condition of Survey

a. The sounding records are complete; the Descriptive Report covers all matters of importance.

b. The smooth plotting was satisfactory.

c. Few bottom characteristics were obtained.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is recommended. As a matter of record attention is directed to the lack of bottom characteristics.

Examined and approved:



H. R. Edmonston

Chief, Nautical Chart Branch Acting Chief, Division of Charts



H. Arnold Karo



L. S. Hubbard

Chief, Section of Hydrography



W. M. Scaife

Chief, Division of Coastal Surveys

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7161 Ad. Wk.

FIELD NO.-----

Alaska, Prince William Sound, Passage Canal, Western Part

Project No. CS-277

Surveyed in 10 August 1951

Scale 1:10,000

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - G. A. Nelson

Surveyed by - R. A. Gilmore

Protracted by - T. L. Janson

Soundings plotted by - T. L. Janson

Verified and inked by - E. G. Yearley and E. E. Thomas

Reviewed by - I. M. Zeskind, 25 February 1952

Inspected by - R. H. Carstens

1. Instructions

The additional work was accomplished in compliance with the Director's Instructions dated 20 July 1951.

2. Scope and Results

The additional work consists of the investigation of the "shoaling reported" in the vicinity of the Whittier Buoy No. 1, in lat. $60^{\circ} 46.76'$, long. $148^{\circ} 39.70'$. The note "shoaling reported" originates with H. O. Notice to Mariners No. 24, 1951.

No evidence of shoaling was found.

The additional work has been plotted on the tracing inserted in the Descriptive Report and supplementary soundings have been applied to the smooth sheet of H-7161 (1948).

It was noted on the boat sheet that the tank charted in lat. $60^{\circ} 46.64'$, long. $148^{\circ} 40.17'$, was a poor landmark and should be deleted from the chart.

*Tank deleted from
CH 2521 10-15-57 RKD*

3. Additional Work Recommended

No additional work is recommended.

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7161 Ad. Wk.
1951

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
12/12/51	8551	Risegani	Before After Verification and Review <i>No correction.</i>
3-17-55	8502	<i>M. Andre</i>	Before After Verification and Review " "
6-23-55	8517	<i>Zm. Albert</i>	Before After Verification and Review " "
10-17-57	8521	R.K.D.	<i>no corr. superseded by H. 8310</i> Before After Verification and Review <i>3742</i>
1-26-63	8551	<i>E. P. Progoj</i>	Before After Verification and Review <i>Comp appl</i> <i>+ this chart 8517</i>
6-5-62	8517	<i>O. Svendsen</i>	Before After Verification and Review <i>Comp appl + this chart 8521 Drg #2</i> Before After Verification and Review
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			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.