

7788

Diag. Cht. No. 8252-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PA-1219 Office No. H-7788

LOCALITY

State S. E. ALASKA

General locality SITKA SOUND

Locality NAKVASINA SOUND & NAKVASINA PASSAGE

1949

CHIEF OF PARTY

J. C. Partington

LIBRARY & ARCHIVES

DATE Jan. 30, 1951

B-1870-1 (1)

88212

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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. H-7788

Field No. PA-1219

State S. E. Alaska

General locality Sitka Sound

Locality Makwasina Sound and Makwasina Passage

Scale 1:10,000 Date of survey 9 June to 10 Sept. 1949

Instructions dated 5 August 1947

Vessel PATTON - Launch No. 92

Chief of party J. G. Partington

Surveyed by J. G. Partington & I. R. Rubottom

Soundings taken by fathometer, graphic recorder, hand lead, wire 808-A Depth Recorder  
Hand lead and Wire (Bottom Samples)

Fathograms scaled by P. T. P.

Fathograms checked by C. N. H.

Protracted by Christine N. Hillman

Soundings penciled by Christine N Hillman

Soundings in fathoms ~~feet~~ at MLW MLLW

REMARKS:

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.....  
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DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-7788(PA-1249)

NAKWASINA SOUND AND NAKWASINA PASSAGE, S. E. ALASKA

SCALE 1:10,000 - DATE 1949

U.S.C.& G.S.S. PATTON, J. C. PARTINGTON, COMDG.

\* \* \* \* \*

A. PROJECT:

This survey was accomplished under Instructions for Project CS-247, issued by The Director on 5 August 1947.

B. SURVEY LIMITS AND DATES:

This sheet covers all of Nakwasina Passage and the northern portion of Nakwasina Sound.

Junction was made on the south in Nakwasina Sound, with Sheet No. H-7787(PA-1119) and on the west at the junction of Nakwasina Passage and Olga Strait, with Sheet No. H-7674.<sup>(1944)</sup>(1948)

Field work was started on 9 June 1949 and was completed on 10 September 1949.

C. VESSEL AND EQUIPMENT:

All hydrography was done in Launch No. 92 operating from the PATTON. Soundings were taken with an 808-A recording fathometer (No. 51), supplemented by hand lead soundings on shoals and in kelp. Bottom samples were taken by wire with hand-sounding machine mounted on the launch, and in deeper portions by the PATTON using an electric, wire-sounding machine.

D. TIDE AND CURRENT STATIONS:

The records from the tide station at Sitka were used for the reduction of soundings for the entire area.

During the 1948 season four (4) current stations were occupied in Nakwasina Passage, using the Roberts Current Buoy. Refer to "Current Report" submitted by Comdr. G. E. Boothe at the end of the 1948 season.

E. SMOOTH SHEET:

The smooth sheet will be constructed and plotted by personnel of the Seattle Processing Office.

F. CONTROL STATIONS:

Second Order triangulation was extended through Nakwasina Passage and Nakwasina Sound from 1948 work to a strong tie with 1947 stations in the southern part of Nakwasina Sound. The records, computations and a special report have been forwarded to the Washington Office.

Topographic stations were located by graphic control methods on aluminum mounted sheets Nos. T-7130(PA-B-49) and T-7130(PA-C-49); T-7129(PA-A-49) (To be destroyed) Desc. Report for G.C. Sheets attached to D.R. of H-7789(1949)

G. SHORELINE AND TOPOGRAPHY: (to be transferred from T-8484 & T-8821 (1949))

The shoreline and topography will be compiled from air photographs of the area which were field inspected by this party. Short sections of shoreline were rodded in at the various plane table setups. Delineation of the shoreline will be difficult because of overhanging trees over most of the area.

Review,  
par.1.

The low water line could not be established by hydrography in most places, except where there are numerous tide flats through Nakwasina Passage. In most other places, the shoreline is very abrupt and rocky with overhanging trees. Sounding lines were run as close to the beach as circumstances would permit.

H. SOUNDINGS:

Soundings were taken with an 808-A type recording fathometer (No. 51), operated on the fathom scale. Hand lead soundings were taken in critical areas, on shoals and in kelp. Wire soundings were taken for obtaining bottom samples.

Velocity corrections to fathometer soundings were computed from serial temperature and salinity observations made in deep water in Nakwasina Sound.

I. CONTROL OF HYDROGRAPHY:

The hydrography was controlled by three point sextant fixes on signals ashore. No unusual or substandard methods were used for this purpose.

J. ADEQUACY OF SURVEY:

The survey is adequate and complete and should supersede previous surveys of the area. The junctions with surveys enumerated in "B" are good.

K. CROSSLINES:

The cross lines of this sheet, exclusive of development, constitute 10% of the total miles of sounding lines. The crossings are good.

I. COMPARISON WITH PREVIOUS SURVEYS: See Review, par. 5.

The previous survey of this area was made as follows:

- (1) Nakwasina Sound, 1897, at a scale of 1:20,000, Sheet H-2302;
- (2) Nakwasina Passage, narrow portion, 1896, at a scale of 1:5,000, Sheet H-2290;
- (3) Nakwasina Passage to Olga Strait, 1896, at a scale of 1:20,000, Sheet H-2287.

The sounding lines were widely spaced and only a limited development was made. The new survey is much more detailed and complete. In general the depths agree with previous surveys, but in most shoal areas, lesser depths were found.

Discrepancies:

1. Sheet H-2302 shows an isolated sounding of 31 fathoms in Latitude  $57^{\circ} 13'.3$ , Longitude  $135^{\circ} 22'.85$ . This sounding is undoubtedly erroneous. A series of closely spaced sounding lines was run over the area and no indication of any shoaling whatsoever is evident on the fathogram.

2. Sheet H-2287 shows an isolated sounding of 11 fathoms in Latitude  $57^{\circ} 14'.68$ , Longitude  $135^{\circ} 29'.85$ . It is believed that this sounding is erroneous. A series of closely spaced lines was run over the area and no indication of any shoaling is evident on the fathogram.

Review, par. 5

M. COMPARISON WITH CHART NO. 8281:

The comparisons drawn in "L" are applicable when comparison is made between the new survey and the latest edition of Chart No. 8281.

N. DANGERS AND SHOALS:

There are no dangers except in the proximity of the shoreline or near small islets, except through Nakwasina Passage where extensive tidal flats abound. The passage should not be negotiated except by small boats, then at low water when the outer limits of the tidal flats are discernible, or with special local knowledge.

Shoals in Nakwasina Sound:

1. A  $3\frac{9}{10}$  fathom shoal south of Allan Point in Latitude  $57^{\circ} 14'.15$ , Longitude  $135^{\circ} 23'.50$ .

2. A  $9\frac{2}{10}$  fathom shoal NE of Allan Point, in Latitude  $57^{\circ} 14'.87$ , Longitude  $135^{\circ} 22'.50$ .

Shoals in Nakwasina Passage:

1. A  $4\frac{1}{7}$  fathom shoal in channel north of Allan Point, in Latitude  $57^{\circ} 14'.84$ , Longitude  $135^{\circ} 23'.54$ .

2. A rock with least depth of  $6\frac{1}{10}$  fathom in mid-channel south of Limit Island in Latitude  $57^{\circ} 15'.22$ , Longitude  $135^{\circ} 28'.22$ .

-4-

3. A rock with least depth of  $6\frac{1}{10}$  fathom SE of triangulation station EDDIE 1948, in Latitude  $57^{\circ} 15' .23$ , Longitude  $135^{\circ} 29' .30$ . ✓ AM-7-51

4. A  $7\frac{2}{10}$  fathom shoal NE of Halleck Point, in Latitude  $57^{\circ} 14' .23$ , Longitude  $135^{\circ} 30' .50$ . ✓

5. A  $5\frac{6}{10}$  fathom shoal NE of Halleck Point, in Latitude  $57^{\circ} 14' .08$ , Longitude  $135^{\circ} 30' .62$ . ✓

6. A  $3\frac{7}{10}$  fathom shoal NE of Halleck Point, in Latitude  $57^{\circ} 14' .04$ , Longitude  $135^{\circ} 30' .74$ . ✓

O. COAST PILOT:

Coast Pilot information furnished in letter to Director dated 7 November 1949.

P. AIDS TO NAVIGATION:

There are no aids to navigation within the limits of this survey. ✓

Q. LANDMARKS FOR CHARTS:

See "Air Photo Inspection Report".

R. GEOGRAPHIC NAMES: *54*

There are no new names or changes in charted names of geographic features.

S. SILTED AREAS:

The area enclosed within the 50 fathom curve in Nakwasina Sound is heavily silted. There is a layer of soft mud and ooze over most of the area approximately 8 to 10 feet in thickness. Through Nakwasina Passage the area enclosed by the 10 fathom curve is heavily silted. ✓

Z. TABULATION OF APPLICABLE DATA:

The following listed Special Reports are pertinent to this survey and report:

1. Air Photo Inspection Report.
2. Descriptive Reports to Accompany Topographic Sheet T-7130 (PA-B-49) and T-7130 (PA-C-49). (Attached to D.R. of H-7789 (1949) (G.C. sheets destroyed) ✓
3. Temperature and Salinity Observations. *Filed with H-7787*
4. Triangulation Report.

Applicable Data Attached to this Report:

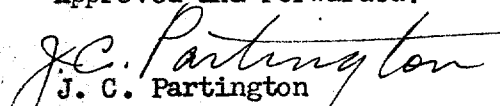
1. Table of Statistics.
2. Tide Note.
3. List of Signals.
4. Table of Velocity Corrections.

Submitted by



Ira R. Rubottom  
LCDR USC&GS  
USC&GSS PATTON

Approved and Forwarded:



J. C. Partington  
CDR USC&GS  
Cmdg., USC&GSS PATTON

H 7788  
Pa 1249

Nakwasina Passage and Nakwasina Sound.

Processing Office Notes.

Smooth Sheet.

The projection was ruled by hand on Whatman paper. Triangulation stations are from the field computations of Boothe 1948 and Partington 1949. Shoreline is to come from Photo Proj. Ph 49, sheets T 8475, T 8484, T 8821 and possibly T 8819, when available.

(1949)

All important soundings have been emphasized and pointed out with arrows.

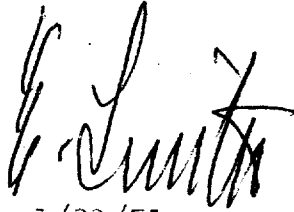
Subplan.

The narrowest part of Nakwasina Passage was blown up four times to scale 1/2,500 so that the channel can be shown adequately. On the subplan, at  $\phi 57^{\circ}14'56''$   $\lambda 135^{\circ}25'03''$  the crossing of lines 99-98 k and 71-72 c is not satisfactory.\* Soundings were shown to the margin of the box but were not extended to the position when the position fell without the box. \* Pos. 71c adjusted to bring about adequate crossing.

Name.

We note on the bottom line of Page 3 of this report the use of the name Limit Island which does not appear on the chart. It apparently applies to the islet at  $\phi 57 15.3$   $\lambda 135 28.3$ . The authority is not known.

  
Edgar E. Smith  
Cart. Engr.

  
1/20/51



## LIST OF HYDROGRAPHIC SIGNALS

SHEET H- 7788 (PA-1249)

NAKWASINA PASSAGE &amp; Nakwasina Sound, S. E. ALASKA

Hydrographic Name	Source	Hydrographic Name	Source
Abe	PA-C-49	Lan	Tri. Sta. ALLAN 1949
Able	PA-B-49	Lax	PA-C-49
Aid	Tri. Sta. AID 1896	Lec	Tri. Sta. <del>ALLEC</del> 1949
Akwa	Tri. Sta. AKWA 1949	Lep	Tri. Sta. LEPUS 1949
All	Tri. Sta. ALLEC 1949	Liz	PA-B-49
Alp	Tri. Sta. ALPHA 1948	Log	PA-A-49
Axe	PA-B-49	Mal	PA-C-49
Bag	PA-C-49	Med	Tri. Sta. MEDIA 1949
Bart	PA-C-49	Mum	PA-B-49
Box	PA-B-49	Ned	PA-C-49
Cam	PA-C-49	Nip	PA-B-49
Can	Tri. Sta. CANT 2 1948	Nof	Tri. Sta. RANOF 1949
Cat	PA-B-49	Nox	Tri. Sta. NOXON 1949
Cur	Tri. Sta. CURSA 1948	Oak	PA-C-49
Daw	PA-C-49	Olga	Tri. Sta. OLGA 1896
Del	Tri. Sta. DELTA 1948	One	Tri. Sta. OZONE 1949
Dix	PA-B-49	Pad	PA-C-49
Dub	PA-B-49	Par	PA-B-49
Dye	Tri. Sta. DYE 2 1948	Pass	Tri. Sta. PASS 1949
Ear	PA-C-49	Pile	Tri. Sta. PILE 1949
Edd	Tri. Sta. EDDIE 1948	Pos	Tri. Sta. POSER 1949
End	PA-B-49	Pug	PA-B-49
Fab	Tri. Sta. FABIA 1948	Quo	PA-C-49
Far	PA-C-49	Qui	Tri. Sta. QUIET 1949
Gal	PA-C-49	Ree	Tri. Sta. Neva Pt. Reef
Gin	PA-B-49		Light 1948
Gle	Tri. Sta. GLEAM 1949	Red	PA-B-49
Hag	Tri. Sta. HAGEN 1949	Sage	Tri. Sta. SAGE 1949
Ham	Tri. Sta. BAHAM 1948	Sal	PA-B-49
Hat	PA-C-49	Sax	Tri. Sta. SAXON 1949
Her	PA-B-49	Sina	Tri. Sta. SINA 1949
Ida	PA-C-49	Tree	PA-B-49
Ide	Tri. Sta. IDEAL 1949	Try	PA-B-49
Ivy	PA-B-49	Tuf	Tri. Sta. TUFFY 1949
Jan	Tri. Sta. JANAR 1949	Unc	Tri. Sta. UNCLE 1949
Jug	PA-B-49	Vel	Tri. Sta. VELMA 1949
Kel	Tri. Sta. YOKEL 1949	Vex	PA-B-49
Ken	PA-C-49	Wax	Tri. Sta. WAXEN 1949
Kit	Tri. Sta. KITAL 1949	Yel	PA-B-49
		Zig	PA-B-49
		Zin	Tri. Sta. ZINDA 1949

VELOCITY CORRECTIONS

U.S.C. & G.S. SHIP PATTON

J. C. PARTINGTON, COMMANDING

LOCALITY: NAKWASINA SOUND & PASSAGE, S. E. ALASKA

HYDROGRAPHIC SURVEYS NOS. PA-1149 and PA-1249

FOR USE BETWEEN 2 June and 24 June 1949

LAUNCH NO. 92

TABLE OF FATHOMETER CORRECTIONS

0.0 Fms.		to	5.0 Fms.
-0.1 "	from 5.1 Fms.	"	10.0 "
-0.2 "	" 10.1 "	"	15.0 "
-0.3 "	" 15.1 "	"	19.0 "
-0.4 "	" 19.1 "	"	23.0 "
-0.5 "	" 23.1 "	"	28.0 "
-0.6 "	" 28.1 "	"	32.0 "
-0.8 "	" 32.5 "	"	40.0 "
-1.0 "	" 40.5 "	"	48.0 "
-1.2 "	" 48.5 "	"	56.0 "
-1.4 "	" 56.5 "	"	64.0 "
-1.6 "	" 64.5 "	"	72.0 "
-1.8 "	" 72.5 "	"	80.0 "
-2.0 "	" 80.5 "	"	Above

STATISTICS FOR HYDROGRAPHIC SURVEY H-7788 (PA-1249)

U. S. C. & G. S. S. PATTON - PROJECT CS-247

Date 1949	Day Letter	Vol. No.	Hand Lead & Wire Soundings	Positions	Statute Miles Of soundings
9 June	a	1	--	114	22.3
10 June	b	1	--	199	26.8
11 June	A(Ship)	1	10	10	Bottom Spec.
14 June	c	2	--	241	32.9
15 June	d	2 & 3	2	230	32.2
16 June	e	3	3	246	35.9
17 June	f	4	43	165	18.9
21 June	g	4 & 5	5	251	31.3
22 June	h	5	--	243	29.0
23 June	j	5 & 6	--	167	24.4
24 June	k	6	43	229	13.8
10 Sept.	l	6	13	13	Bottom Spec.
Totals:			119	2095	267.5

Area: 6.4 square statute miles

H 7788  
Pa 1249

Nakwasina Passage and Nakwasina Sound.

List of geographic names  
penciled on smooth sheet.

Nakwasina Passage

Nakwasina Sound

Olga Strait

Baranof Island

Halleck Island

Allan Point

The name Limit Island is mentioned in the  
last line of Page 3 of the Descriptive Report  
For this hydrographic sheet, applying to the  
islet at  $\phi$  57° 15'.3  $\lambda$  135° 28'.3.

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- H-7788

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

7788

TIDE NOTE

Type of Gage: Standard Automatic

Location: Sitka, Baranof Island, S. E. Alaska  
Lat.  $57^{\circ} 02.9'$ ; Long.  $135^{\circ} 20.3'$

Plane of Reference: Mean Lower Low Water

The gage was operated and maintained by personnel of the Sitka Magnetic Observatory. The hourly heights of the tide were furnished by the Washington Office.



RAC

### TIDE NOTE FOR HYDROGRAPHIC SHEET

1 March 1951

~~Division of Hydrography and Topography:~~

Division of Charts: R. H. Carstens

Plane of reference approved in 6  
volumes of sounding records for

HYDROGRAPHIC SHEET 7788

Locality Nakwasina Sound, Southeast Alaska

Chief of Party: J. C. Partington in 1949  
Plane of reference is mean lower low water, reading  
5.0 ft. on tide staff at Sitka  
13.1 ft. below B. M. 8 (1924)

Height of mean high water above plane of reference is 9.1 feet.

Condition of records satisfactory except as noted below:

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

GEOGRAPHIC NAMES

Survey No. H-7788

Name on Survey											
	A	B	C	D	E	F	G	H	K		
<u>Southeastern Alaska</u>			(fort title)								1
<u>Sitka Sound</u>			( " " )								2
											3
<u>Baranof Island</u>									US&B		4
<u>Halleck Island</u>											5
<u>Olga Strait</u>											6
<u>Nakwasina Passage</u>									US&B		7
<u>Nakwasina Sound</u>									US&B		8
<u>Allan Point</u>											9
<u>Limit Island</u>											10
<u>Bart Island</u>											11
											12
											13
											14
											15
											16
											17
<u>Sitka</u>			(location of tide gage)						US&B		18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names underlined in red are approved.  
3-1-51 L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7788..

Records accompanying survey:

Boat sheets ..1...; sounding vols. .6...; wire drag vols. ....;
bomb vols. ....; graphic recorder rolls 1.eny.;
special reports, etc. ...Smooth Sheet.....
.....

The following statistics will be submitted with the cartog-
rapher'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 J.C. Chambers (Norfolk) Total time 17.6... Date 9/20/52...

Reviewed by J.A. Winsmore Time 35 hrs. Date 23 Sept. 1952

PRELIMINARY VERIFICATION - W. WERLIND - TIME { 41 hrs - Jan. 52
50 hrs Aug - 52
Stini 11-hrs

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7788

FIELD NO. PA-1249

S. E. Alaska, Sitka Sound, Nakwasina Sound and Passage

Project No. CS-247

Surveyed in June - September 1949

Scale 1:10,000

Soundings:

808 Fathometer  
Hand lead  
Wire

Control:

Sextant fixes on shore signals

Chief of Party - J. C. Partington  
Surveyed by - J. C. Partington and I. R. Rubottom  
Protracted by - C. N. Hillman  
Soundings plotted by - C. N. Hillman  
Preliminary Verification by - W. Werline  
Verified and inked by -  
Reviewed by - T. A. Dinsmore, 23 September 1952  
Inspected by - R. H. Carstens

1. Shoreline and signals

The application of shoreline has been deferred pending complete verification and inking of the smooth sheet. The short sections of inked shoreline originate with graphic control survey sheets PA-B and C (1949) which will be destroyed subsequent to the preliminary verification and review of the surveys in this area.

The signals also originate with the above-mentioned graphic control surveys.

2. Sounding Line Crossings

Depths at sounding line crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The low-water curve was determined where practicable.

Except for irregularities inshore and adjacent to the islets, the bottom is relatively smooth. The deeper areas of Nakwasina Passage and Sound are heavily silted. As much as 8 to 10 ft. of soft mud and ooze covers some areas.

*Ver. Rev. of  
see Rev. of  
7-8821*

4. Junctions with Contemporary Surveys

The present survey will junction adequately with H-7674 (1948) on the west and with H-7787 (1949) on the southeast in Nakwasina Sound. The transfer of junctional soundings will be made when these surveys are completely verified and inked.

5. Comparison with Prior Surveys

H-2287 (1896)	1:20,000	H-2302 (1897)	1:20,000
H-2290 (1896)	1:5,000		

These prior surveys taken together cover the area of the present survey. A comparison between the prior and present depths indicates that no appreciable changes in bottom have taken place. Prior depths in the deeper areas are generally slightly greater than present depths but such differences are usually found when comparing lead line and fathometer soundings in extremely soft bottom. The present survey obtained many shoal depths not revealed by the sparse development on the old surveys.

Specific mention is made of the following discrepancies:

- (1) The 11-fm. sounding charted in lat.  $57^{\circ} 14.66'$ , long.  $135^{\circ} 29.84'$ , from H-2287 falls in 16-fm. depths on the present survey. Closely spaced sounding lines on the present survey clearly indicates smooth bottom with no shoal indications. The prior sounding is probably 5 fms. in error and should be disregarded.
- (2) The 23-fm. sounding charted in lat.  $57^{\circ} 13.66'$ , long.  $135^{\circ} 22.48'$ , from H-2302 should be disregarded. Falling in present depths of 30 fms., the prior sounding was plotted out of position. In its corrected position about 100 meters southeastward, the prior sounding falls in comparable depths on the present survey.
- (3) The 31-fm. sounding charted in lat.  $57^{\circ} 13.32'$ , long.  $135^{\circ} 22.85'$ , from H-2302 falls in 50 to 51-fm. depths on the present survey. Closely spaced sounding lines on the present survey clearly indicates smooth bottom. The prior sounding is considered to be 20 fms. in error and should be disregarded.
- (4) The 12-fm. sounding charted in lat.  $57^{\circ} 13.93'$ , long.  $135^{\circ} 23.45'$ , from H-2302 falls in depths of 20-30 fms. on the present survey. The prior sounding which falls on a steep slope is considered to be out of position and should actually fall about 80 meters westward where comparable depths were obtained on the present survey. The prior sounding should be disregarded.

The present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 8281 (Latest print date 3/5/51)

A. Hydrography

Charted hydrography originates principally with the previously discussed surveys supplemented by a few critical soundings from the present survey prior to verification and review.

The charted information is entirely superseded by the present survey.

B. Aids to Navigation

No aids to navigation are charted within the limits of the present survey. The only dangers to navigation in the area lie close inshore, near small islets and in Nakwasina Passage where extensive tidal flats abound. The passage should not be navigated except by small boats at low water when the outer limits of the tidal flats are visible.

7. Condition of Survey


- a. The sounding records are complete; the Descriptive Report covers all matters of importance.
- b. The preliminary inspection and verification of the survey sheet indicates that the smooth plotting was well done.


8. Compliance with Project Instructions

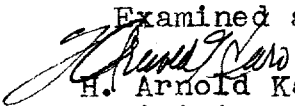
The survey adequately complies with the Project Instructions. Coverage of the area for bottom characteristics was unusually complete.

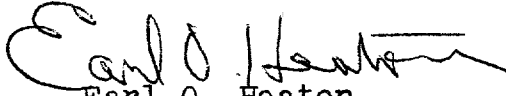
9. Additional Field Work

This is an excellent basic survey and no additional field work is necessary.

  
H. R. Edmonston  
Chief, Nautical Chart Branch

  
L. S. Hubbard  
Chief, Section of Hydrography

Examined and approved:  
  
H. Arnold Karo  
Chief, Division of Charts

  
Earl O. Heaton  
Chief, Division of Coastal Surveys

# Preliminary Verification

TH-7780

## Instructions

1. Inspect junctions for agreement of hydrography, and curves
2. Verify the following:

3.7 fm	Lat. 57°14.03'	Long. 135°30.75'	✓
5.6	14.07'	30.65'	✓
*	14.75	31.0	✓
8.6	14.81	30.68 - spacing or scanning interval?	✓
(2) 2.4	14.8	30.33	✓
4.3	14.75	30.37	✓
12.5	14.82	29.96 12.3 - 18 J	✓
0.6 (MISREAD)	14.78	29.20 - offshore from 2-fm at 79h?	✓
7.2	14.23	30.50 15 K	✓
*	15.02	30.02 - also, extend 3-fm curve here	✓
0.6	15.23	29.3 - also, " 1-fm " "	✓
0.8	15.25	29.16 - detached pos. 228g in error? No	✓
0.5	15.20	29.10 - detached from reef? Yes	✓
-	15.17	29.0 = reef? T Sheet in TURTLE ISLAND Basin compiled - See Bear Sheet	✓
0.6	15.21	28.2	✓
-	15.34	28.34 Description @ Bad Desc. Rept. See GC. PA. Chart	✓
*	15.30	28.35	✓
-	14.9	26 - all channel depths in passage from 1 to 5 fms (insert)	✓
0.8	14'56"	25'55" (insert) detached shoal or displaced?	✓
4.9	14.85	23.57	✓
*	14.53	23.26	✓
6.1	14.57	23.07	✓
*	15.0	22.7	✓
9.1 (also 9.2)	14.77	22.5 148-149 e 150-151 e	✓
*	14.98	21.82	✓
9.6	14.57	21.17	✓
3.4	14.74	20.80	✓
*	14.53	23.77	✓
3.9	14.15	23.5	✓
9.7	14.02	23.40 107-108 e	✓
*	15.07	22.9 - 18 e day	✓

(Over)

36, 38	52-53 ~	14.15'	22.97'	OK possible 5-fm errors in scanning
9.1		14.36	21.6	✓
same line {		14.518	21.88	-(drop 0.2 for curve) ✓
		14.34	21.15	-on turn 15.60? check bottom of 52-53f ✓
		14.27	21.37	✓
		14.1	21.6	- 235-236e ✓
		14.25	21.2	- Description @ Mum 900 D.R. ✓
3.9		14.45	21.15	✓
9.6		14.57	21.17	(again?) ✓
6.6		13.81	23.5	✓
4.8		13.98	22.10	{ - spacing 220-221d irregular timing miscut } ✓
10.9		13.12	23.60	✓
-		12.48	24.25	- Sdgs 100-101b appear to be ✓
			See Not for off shore.	100-101b



# NAUTICAL CHARTS BRANCH

SURVEY NO. H-7788  
Preliminary Review 23 Sept. 1952

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
May 51	8252	James H Bell	partial application for short soundings Before <del>After</del> Verification and Review
Febr. 51	8281		added a few critical sdgs. Before <del>After</del> Verification and Review
12/11/52	8281	Sa McGinn	<sup>Preliminary</sup> <del>Before</del> After Verification and Review
Mar 59	8281	Recon CR W. Timmer	<del>Partially</del> <sup>Preliminary</sup> applied. Completely applied? Before After Verification and Review <span style="float: right;">7/11/60</span>
8-19-60	8252	Earl M. Boyatzis	<del>Before</del> After Verification and Review Completely app'd Re 8281 Reconstr Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.