

# 8620

Diag. Chart No. 8201-3.

<b>Form 504</b> U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY  <b>DESCRIPTIVE REPORT</b>	
<i>Type of Survey</i> Hydrographic	
<i>Field No.</i> LJ-5-1-61 <i>Office No.</i> H-8620	
<b>LOCALITY</b>	
<i>State</i> S. E. Alaska	
<i>General locality</i> Wrangell Island	
<i>Locality</i> Wrangell Harbor	
<u>19 61</u>	
<b>CHIEF OF PARTY</b>	
L. G. Tyalor	
<b>LIBRARY &amp; ARCHIVES</b>	
<b>DATE</b>	July 13, 1962

USCOMM-DC 5087

## IMPORTANT

PAGE 19 WAS ADDED

IT IS NOT A PAGE IN THE REPORT

IT SHOWS DETAIL FROM

ORIGINAL DOCUMENT MISSING

FROM THE SCAN OF PAGE 18

# 8620

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-8620

Field No. LJ-5-1-61

State SE ALASKA

General locality WRANGELL I

Locality WRANGELL HARBOR

Scale 1:5,000 Date of survey 7/11/61 to 7/18/61

Instructors dated 10 November 1960 and 19 December 1960

Vessel Ship LESTER JONES Launch No. 88

Chief of party Lorne G. Taylor

Surveyed by H. E. McCall

Soundings taken by fathometer, graphic recorder, Hand Held / etc

Fathograms scaled by Ship Personnel

Fathograms checked by Ship Personnel

Protracted by V. F. Flor

Soundings penciled by V. F. Flor

Soundings in and tenths fathoms 1/1000 at MLW MLLW and based on a reliability

REMARKS: at sound of sea surface. and are true depths

*Handwritten mark*

DESCRIPTIVE REPORT LJ-5-1-61 (SP-2-61) H-8620

A. PROJECT:

Special Project 2-61 original instructions dated 10 November 1960, supplemental instructions dated 19 December 1960. ✓

B. AREA SURVEYED:

The area surveyed was in Wrangell Harbor and the approach. Survey was started 11 July 1961 and completed on 18 July, 1961. Junction was made with LJ-10-1-61, scale 1:10,000, 1961, on the west. Prior survey of the area is on H-6282. ✓

C. SOUNDING VESSEL:

All hydrography was accomplished with launch 88, blue being the identifying color. ✓

D. SOUNDING EQUIPMENT:

All soundings were obtained with 808 fathometer number 125-S. Bar checks were taken daily to determine initial corrections. Phase comparisons were taken to determine phase corrections and velocity corrections were determined from temperature and salinity observations. ✓

E. SMOOTH SHEET:

F. CONTROL:

All control was located by planetable on sheet LJ-B-61, scale 1:5,000, 1961. T-71406

G. SHORELINE:

Shoreline was transferred from LJ-B-61 and verified. In some areas the low water line was not defined by soundings because of piers and steep beaches. ✓ T-71406(1961)

H. CROSSLINES:

Crosslines were in excess of ten percent and were in good agreement. ✓

I. JUNCTIONS:

Junction on the west with LJ-10-1-61 was in good agreement. H-8621 (1961) Review TP5

J. COMPARISON WITH PRIOR SURVEYS:

Depths were generally in good agreement with H-6282, however there was shoaling of  $\frac{1}{2}$  fathom in some areas of the inner harbor and along the mill pier. (1961) TP66 Review

K. COMPARISON WITH THE CHART:

Soundings were generally in good agreement with chart 8164, scale 1:10,000, 1939 (4th Edition). There is some indication of shoaling in the harbor of up to  $\frac{1}{2}$  fathom. TP7 Review

L. ADEQUACY OF SURVEY:

The survey is complete and adequate for charting. ✓

M. AIDS TO NAVIGATION:

Aids to navigation are listed in the report on landmarks for charts and Fixed Aids to Navigation. The five day beacons, numbered 2 through 6, were located by planetable and should be relocated on Chart 8164.

IP7B  
Review

N. STATISTICS:

The total number of positions on the sheet is 548, total nautical miles of sounding lines are 16.6, and the area surveyed is 0.2. ✓

Q. REFERENCE TO REPORTS:

Tide records were forwarded to the Washington Office during the season. The fathometer report will be forwarded in the near future. ✓  
A copy of the abstract of corrections is included in this report.

*Harold E. McCall*

Harold E. McCall  
LTJG, C&GS  
EX. O. LESTER JONES

TIDE NOTE (LJ-10-1-61 & LJ-5-1-61)

The tide station was located on McCormick's Dock, latitude  $56^{\circ}28.3'N$ , longitude  $132^{\circ}23.1'W$ . The height of the tide staff corresponding to MLLW was 8.3 feet. No corrections for differences in time or height were applied to the observed tides.

PHASE CORRECTIONS - SPECIAL PROJECT 2-61

Launch #88  
LJ-10-1-61 & LJ-5-1-61  
Fathometer No. 125-S

<u>Scale</u>	<u>"A"</u>	<u>"B"</u>	<u>"C"</u>
Correction	0.0	-0.4	-0.6

VELOCITY CORRECTION ABSTRACT

(Applicable 3 May 1961 to 31 May 1961)

<u>DEPTH (Fathoms)</u>	<u>CORRECTION (Fathoms)</u>
0-12	0
12.1-34	+0.1
34.1-54	+0.2
54.1-73.6	+0.3
73.7-93.5	+0.4

(Applicable 1 June 1961 to 18 July 1961)

<u>DEPTH (Fathoms)</u>	<u>CORRECTION (Fathoms)</u>
0-6	0
6.1-20.1	+0.1
20.2-42.0	+0.2
42.1-62.0	+0.3
62.1-82.0	+0.4
82.1-102.0	+0.5

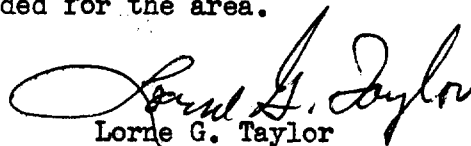
LIST OF STATIONS ON LJ-5-1-61

<u>Name used in Hydrography Survey</u>	<u>Origin of Station</u>
ANT	LJ-B-61
AXE	"
CRY	"
DON	"
ENT	{ WRANGELL BREAKWATER ENTRANCE LIGHT, 1954
FIL	LJ-B-61
FOR	{ FORT WRANGELL N. BASE 2, 1916-37
FOX	LJ-B-61
GEL	WRANGELL B.M. 6
HAL	LJ-B-61
JIM	"
KID	"
LAD	"
LEG	"
LIZ	"
MAR	"
MAX	"
MIL	"
NUT	"
OFF	LJ-B-61
OIL	OIL DOCK REEF DAY BN., 1954
ORA	LJ-B-61
PIE	"
POL	"
POT	"
RAG	"
SIG	"
SOL	"
TEE	"
TOM	"
TOT	"
TRY	"
WHY	"

APPROVAL SHEET LJ-5-1-61

The survey records including the Boast Sheet, Sounding Volumes and Fathograms were inspected at regular intervals during the progress of field work. All record books were inspected and approved at the conclusion of field processing and the survey is approved.

No additional field work is needed for the area.



Lorne G. Taylor  
CDR, C&GS  
C.O. LESTER JONES



PROCESSING OFFICE NOTES - H-8620

E. SMOOTH SHEET

The smooth sheet was hand constructed by the Seattle Hydrographic Processing Unit, using standard methods of construction and checking. ✓

F. CONTROL

Hydrography on this survey was controlled by sextant angles measured to shore signals composed of triangulation and graphic control locations. The graphic control was transferred from LJ-B-61 and checked. ✓  
T-71406

G. SHORELINE

The shoreline was transferred from LJ-B-61 and checked. ✓  
T-71406

I. JUNCTIONS

The junction with H-8621 will be compared when that sheet has been plotted. (1961) ✓  
P5  
Review

J. COMPARISON WITH PRIOR SURVEYS

Comparison not made on smooth sheet. H-6282 was not transmitted by ship. ✓  
P60  
Review

K. COMPARISON WITH CHART

This survey compared with Chartlet N.M.4, dated January 27, 1962, attached to Chart 8164, 4th Ed., dated June 2, 1952, and the chart. The soundings on the smooth sheet are generally slightly deeper than those of the boat sheet, from which the soundings for the chartlet were taken. The soundings on the Chart, outside of the area of the chartlet, appear generally deeper than this survey. There is also some shoreline change. ✓  
P7A  
Review

See section of Chart 8164 and Chartlet attached to this report for comparison. ✓

Respectfully submitted,

*William M. Martin*

William M. Martin  
Supervisory Cartographer

WMM/eo

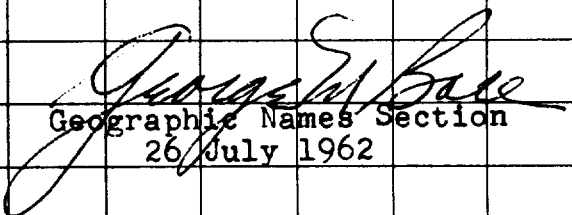
Approved and forwarded

*M. E. Wennermark*  
M. E. Wennermark  
Captain, C&GS  
Seattle District Officer

✓

GEOGRAPHIC NAMES  
Survey No. H-8620

Name on Survey	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On Chart No. 8164</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On previous survey No.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On U. S. quadrangle Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">From local information</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On local Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">P. O. Guide or Map</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Rand McNally Atlas</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">U. S. Light List</div> </div>										
	A	B	C	D	E	F	G	H	K		
Point Shekesti	x										1
Shakes Island				x							2
Wrangell	x									x	3
Wrangell Harbor				x							4
Wrangell Island	x										5
Zimovia Strait	x										6
											7
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 Geographic Names Section  
 26 July 1962

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8620....

Records accompanying survey: Smooth sheets ..<sup>1</sup>...;  
 boat sheets ..<sup>1</sup>...; sounding vols. ..<sup>2</sup>...; wire drag vols. ....;  
 Descriptive Reports ..<sup>1</sup>...; graphic recorder envelopes ..<sup>1</sup>...;  
 special reports, etc. ....  
 .....

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

Number of positions on sheet	.....	548
Number of positions checked	.....	119
Number of positions revised	.....	1
Number of soundings revised (refers to depth only)	.....	0
Number of soundings erroneously spaced	.....	4
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	.....
Special adjustments	Time	.....

Verification by *J. C. Chambers*..... Total time *40*..... Date *2/20/63*.....

Reviewed by *[Signature]*..... Time *9*..... Date *3/15/63*.....

RAIC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Institution of Hydrography and Oceanography~~

July 31, 1962

Division of Charts: R. H. Carstens

Plane of reference approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET 8620

Locality Wrangell Harbor, Alaska

Chief of Party: L. G. Taylor (1961)  
Plane of reference is mean lower low water, reading  
8.3 ft. on tide staff at Wrangell  
53.3 ft. below B. M. 5 (1916)

Height of mean high water above plane of reference is: 15.2 feet

Condition of records satisfactory except as noted below:

J. M. Simmons  
Chief, Tides and Currents Branch

~~Chief, Division of Tides and Currents~~

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8620

FIELD NO. LJ-51-61

S.E. Alaska, Wrangell I., Wrangell Harbor

SURVEYED: July 1961

SCALE: 1:5,000

PROJECT NO. SP 2-61

SOUNDINGS: 808 Depth Recorder

CONTROL: Sextant  
fixes on shore  
signals.

Chief of Party-----L. G. Taylor  
Surveyed by-----H. E. McCall  
Protracted by-----V. F. Flor  
Soundings plotted by-----V. F. Flor  
Verified and inked by-----J. C. Chambers  
Reviewed by-----I. M. Zeskind  
Inspected by-----R. H. Carstens

Date: 3/15/63

1. Description of the Area

This is a survey of Wrangell Harbor. The bottom is fairly smooth except close inshore where ledges and rocks awash are usually found. The bottom generally slopes steeply from the ledge limits to depths of 10 fms and then slopes gradually to the offshore limits of the survey where depths as great as 40 fms. are found.

2. Control and Shoreline

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

The shoreline originates with planetable survey T-7140b (1961).

3. Hydrography

Depths at crossings are in good agreement. The usual depth

curves were adequately delineated. The bottom configuration and least depths are considered to be adequately developed.

#### 4. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.

#### 5. Junctions

The junction with H-8621 (1961) which joins the present survey on the north, west, and south will be considered in the review of H-8621.

#### 6. Comparison with Prior Surveys

- a. H-1623a (1882-85), 1-5,000  
H-1741 (1886), 1-10,000  
H-3938 (1916), 1-10,000

The above surveys have been superseded by H-6282 (1937) within the common area and are not considered in this review.

- b. H-6282 (1937), 1-5,000

The present survey falls within the area of the prior survey. A comparison between the prior and present surveys shows the bottom generally to have shoaled 1-2 ft. except in those areas where dredging operations have occurred; here greater differences in depths are noted. A number of piers have been either constructed or rebuilt since 1937. Several large piers on the prior survey no longer exist. In several areas, land has been reclaimed, as for example, in the vicinity of lat.  $56^{\circ}28'15''$ , long.  $132^{\circ}23'00''$ .

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

- c. H-3946 WD (1916), 1-20,000

There are no conflicts between the present survey and the effective wire drag depths.

7. Comparison with Drawing No. 5 of Chart 8164  
(Corrections applied to print of 6-2-52)

A. Hydrography

The charted hydrography originates with H-6282(1937) previously discussed which needs no further consideration and the boat sheet (Bp 61593) of the present survey. The charted depths are in adequate agreement with the present survey.

The present survey supersedes the charted hydrography within the common area.

B. Aids to Navigation

The charted positions of the aids to navigation originate with the present survey and adequately mark the features intended.

C. Controlling Depths

The charted controlling depths in Wrangell Harbor originate with the boat sheet (Bp 61593) of the present survey. The charted controlling depths here are in agreement with the present survey depths after verification and review.

8. Compliance with the Project Instructions

The survey adequately complies with the project instructions.

9. Additional Field Work Recommended

This is a good basic survey and no additional work is recommended.

Examined and Approved:

*Merritt T. Paulsen*  
Chief,  
Nautical Chart Division

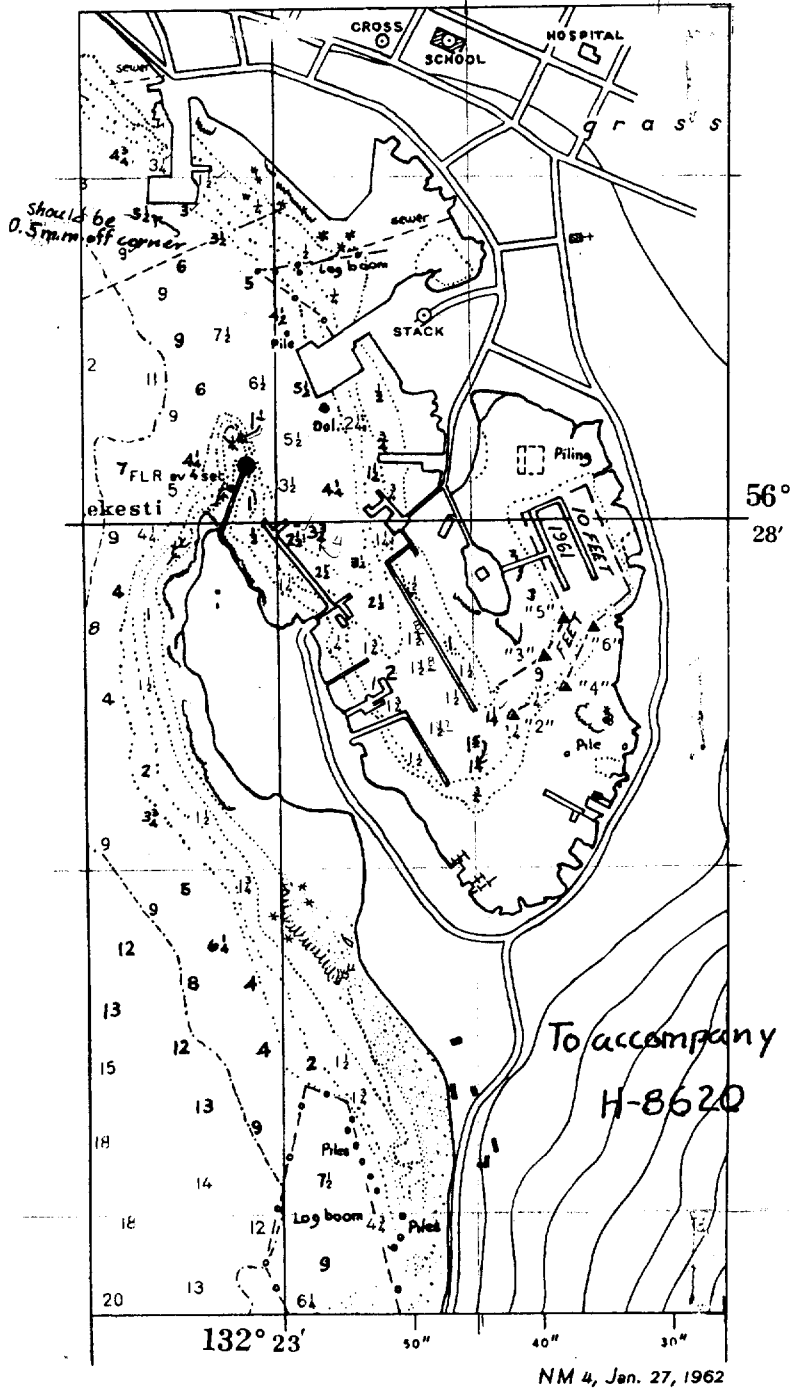
*Charles W. Clark*  
Projects Officer  
Operations Division

*J. T. Jarman*  
Assistant Director,  
Office of Cartography

*Max B. Kellie*  
Assistant Director,  
Office of Oceanography



Correction to C. & G. S. Chart 8164





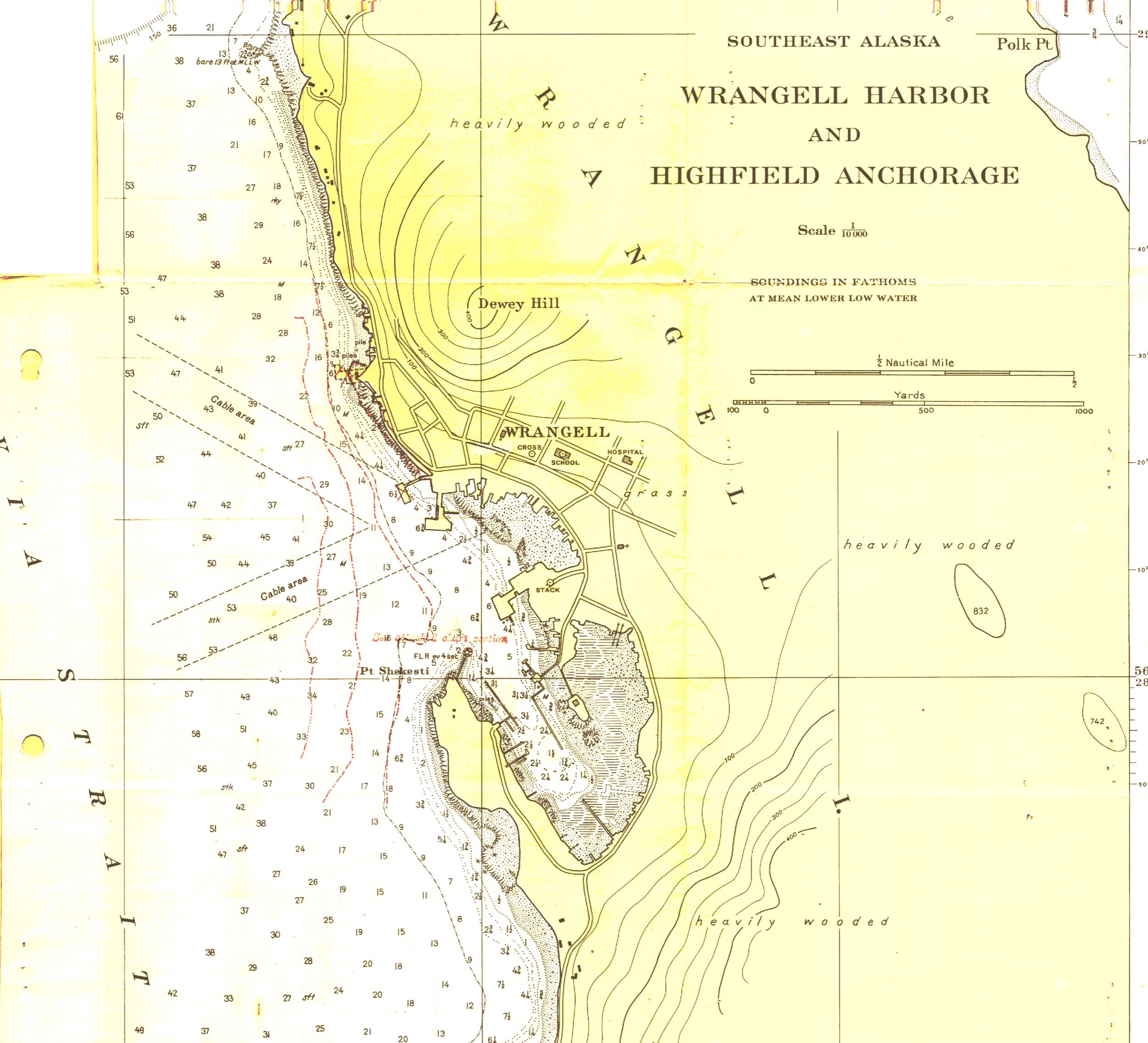
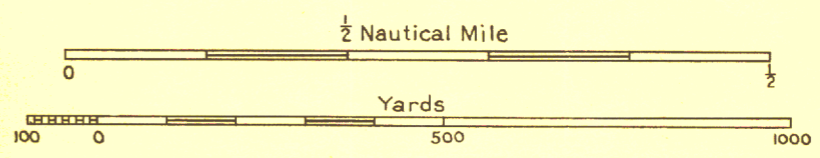
SOUTHEAST ALASKA

Polk Pt

# WRANGELL HARBOR AND HIGHFIELD ANCHORAGE

Scale  $\frac{1}{10000}$

SCOUNDINGS IN FATHOMS AT MEAN LOWER LOW WATER



132°24'

(CONTINUED ON CHART 8161)

23' 50" 40" 30" 20" 10" 22' 50"

SONS, BUOYS, AND DANGERS CORRECTED  
ATION RECEIVED TO THE FOLLOWING DATE

(Steamer Bay, Wrangell Hbr. & Highfield Anchorage)

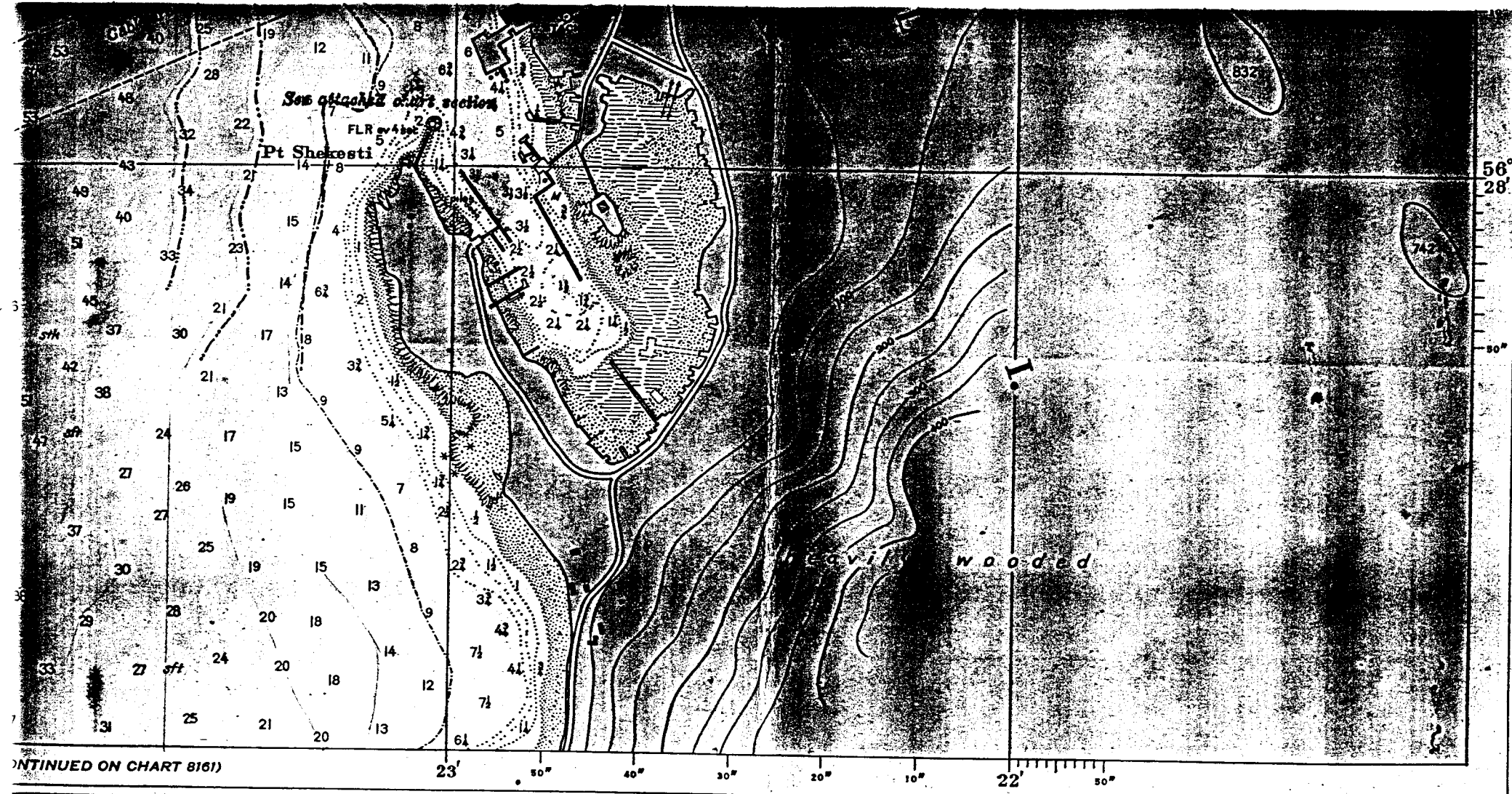
U.S.C.&G.S. 8164

PRICE 25 CENTS

To accompany H-8620

MAY 2 1915





*(Steamer Bay, Wrangell Hbr. & Highfield Anchorage)*

U.S.C.&G.S. 8164

PRICE 25 CENTS

NO. 19 MAY 12 '62  
U.S.C.&G.S.  
WASHINGTON, D. C.

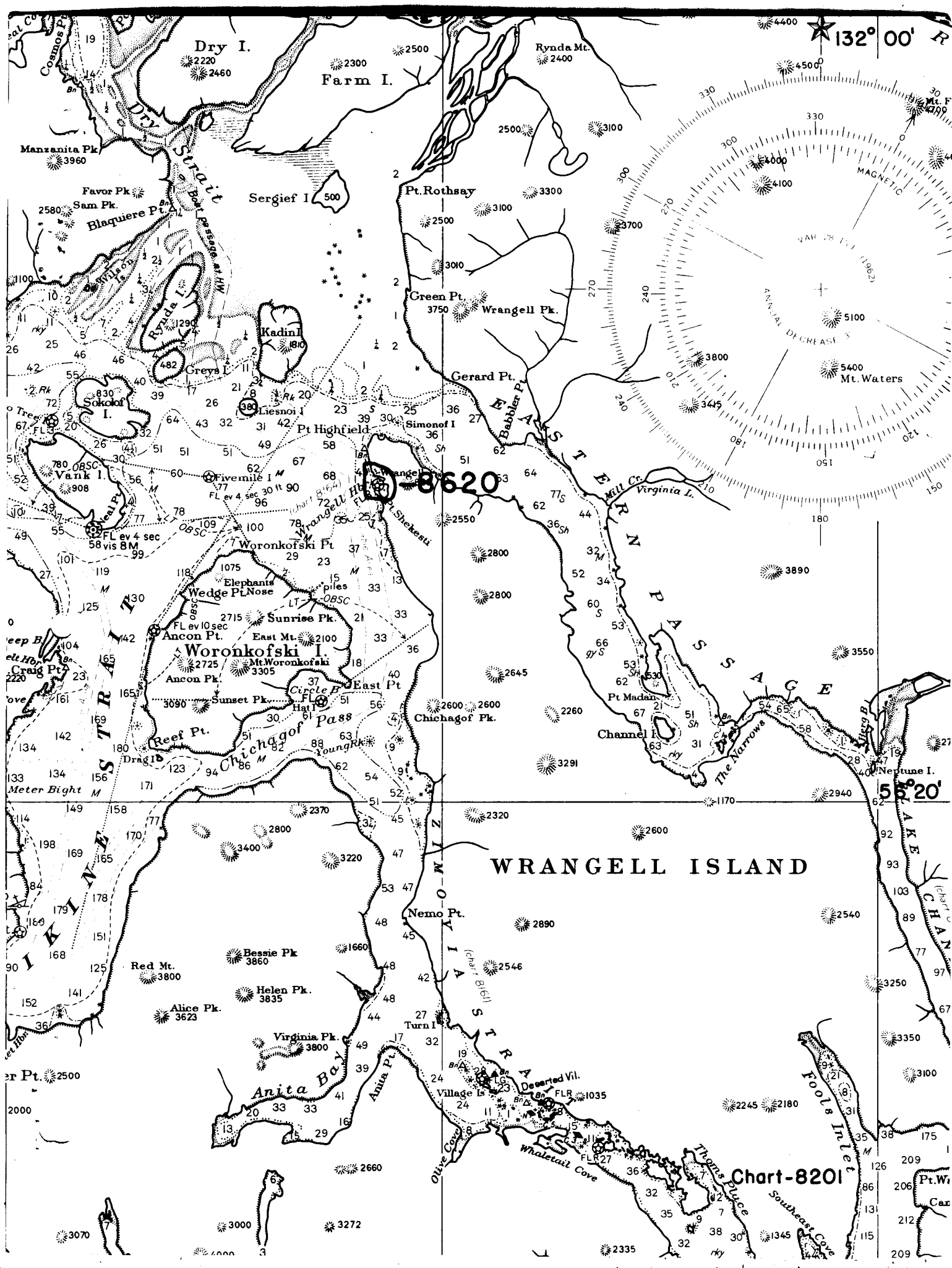
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To accompany H-8620

ON ORIGINAL DOCUMENT

CONTINUED ON CHART 8161)



132° 00' R

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3800

3445

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180

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3890

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WRANGELL ISLAND

Chart-8201

8620

55° 20'

92

93

103

89

97

67

3350

3100

175

209

206

212

209

Dry I.

Farm I.

Rynda Mt.

Favor Pk.

Sam Pk.

Blaquiere Pt.

Sergief I.

Pt. Rothsay

Green Pt.

Wrangell Pk.

Gerard Pt.

Babbler P.

Pt. Highfield

Simonof I.

Woronkofski Pt.

Woronkofski I.

Wedge Pt. Nose

Sunrise Pk.

Ancon Pt.

East Mt.

Woronkofski I.

Mt. Woronkofski

Ancon Pk.

Sunset Pk.

Reef Pt.

Chichagof Pass

Chichagof Pk.

Nemo Pt.

Bessie Pk.

Helen Pk.

Alice Pk.

Virginia Pk.

Anita Bay

Anita Pt.

Turn I.

Village Is.

Deserted Vil.

Whaletail Cove

Thurs. Juice

Southeast Cove

3070

3000

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2335

1345

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