

8660

Diag. Cht. No. 8102-3.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. LJ-10-4-62 Office No. H-8660

LOCALITY

State Alaska

General locality Clarence Strait

Locality Clover Bay

19 62

CHIEF OF PARTY

M. E. Natto

LIBRARY & ARCHIVES

DATE November 20, 1967

USCOMM-DC 37022-P66

8660

Area's
CHT 9083

Inked in

APP

To C322

reviewed HDES

This ~~is~~ survey H-8660
is submitted for final indication
on the Standards and examination
for chart corrections and should
be returned to Vault. Area Chief,
please send chargeout slip to
Vault.

Chief, Marine Surveys Division

OUT FOR SIGNATURE

HYDROGRAPHIC TITLE SHEET

H-8660

INSTRUCTIONS - 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.

LJ-10-4-62

State ALASKA

General locality CLARENCE STRAIT

Locality CLOVER BAY

Scale 1:10,000 Date of survey 8/30/62 thru 9/19/62

Instructions dated 2 Oct/56 & 31 Jan/62 Project No. OPR-381

Vessel USC&GSS LESTER JONES Launch No. 88

Chief of party M. E. Nato^t

Surveyed by M. E. Nato^t & R. K. Hanson

Soundings taken by echo sounder, hand/lead, 6614/

Graphic record scaled by Ship Personnel

Graphic record checked by Ship Personnel

Protracted by C. R. Lehman Automated plot by _____

Soundings penciled by C. R. Lehman

Soundings in fathoms and fathoms 1/feet/ at MLLW

REMARKS: _____

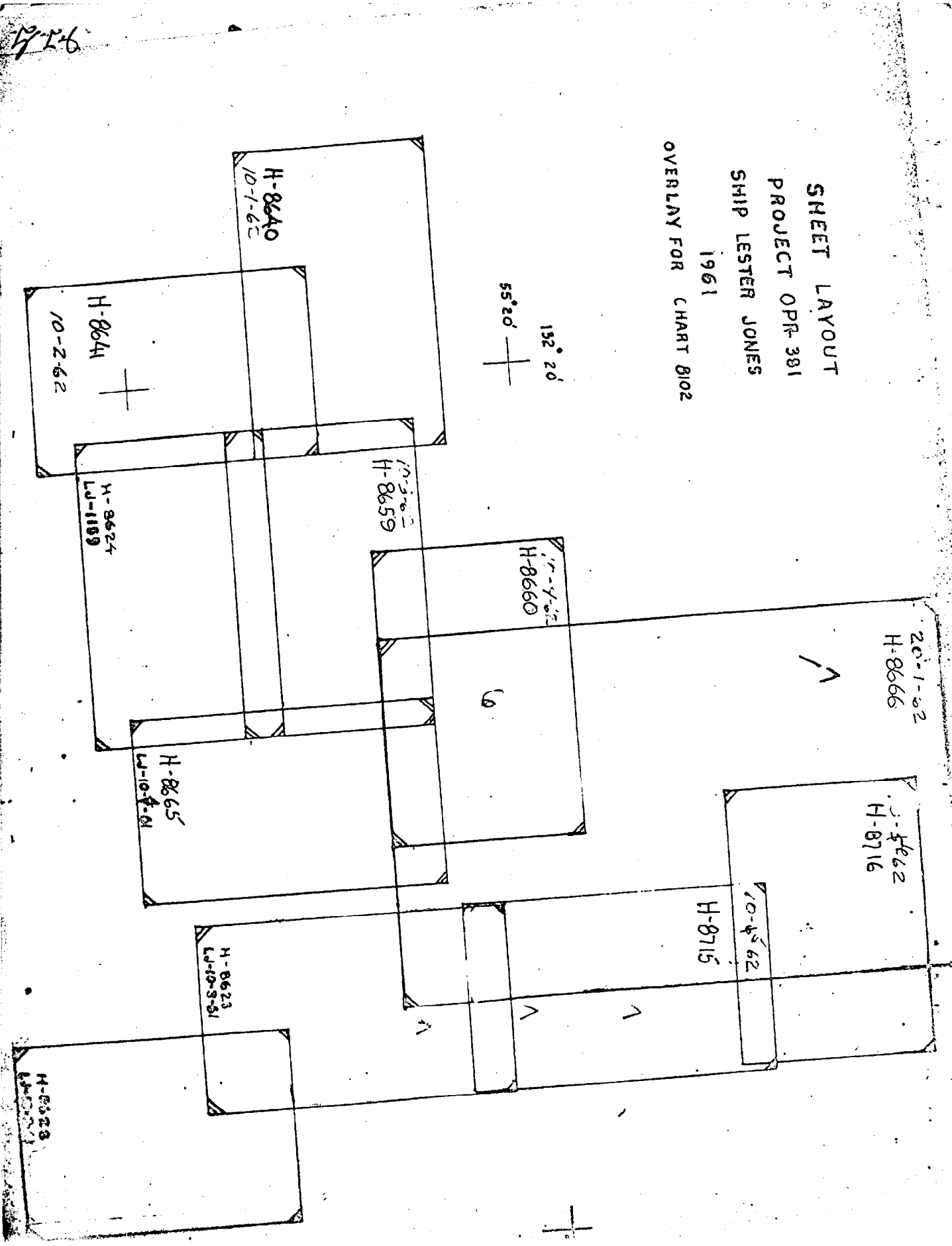
SHEET LAYOUT

PROJECT OPR-381

SHIP LESTER JONES

1961

OVERLAY FOR CHART B102



20-1-62
H-8666

10-4-62
H-8716

10-4-62
H-8715

132' 20"
55' 20"

H-8640
10-1-62

H-8641
10-2-62

H-8659
10-3-62

H-8660
10-4-62

H-8624
10-1-62

H-8665
10-4-61

H-8623
10-3-61

H-8628
10-4-61

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8660

(LJ-10-4-62)
1962

USC&GSS LESTER JONES
S. E. ALASKA

M. E. NATTO, LCDR, C&GS
COMMANDING OFFICER

A. PROJECT - Survey ^{H-8660}LJ-10-4-62 of OPR-381 was accomplished according to Original instructions dated October 2, 1956 and supplemental instructions dated January 31, 1962. ✓

B. AREA SURVEYED - The area surveyed consisted of all of Clover Bay in Clarence Strait of S. E. Alaska and the area adjacent to the shoreline extending from a point 1½ miles north of Clover Bay southward to the entrance to Cholmondeley Sound. The adjacent coastline consisted of steep rugged mountains covered by a dense growth of timber. The approximate limits of the survey are the 55 17'N parallel on the south, 55 20.3N parallel on the north, the shoreline on the west, and on the east by a line varying from 132 04'W to 132 05.5W. Inclusive dates of hydrography are August 30 through September 19, 1962. The survey junctions with contemporary surveys LJ-20-1-62 (H-8666) and LJ-10-3-62 (H-8659) and prior surveys H-4197, done in 1921 at a 1:20,000 scale and H-4190 done in 1921 at a scale of 1:50,000. Prior surveys H-4190 done in 1921 at a scale of 1:50,000 and H-4196 done in 1921 at a scale of 1:20,000 both cover portions of the area surveyed on this sheet. *Unclimbed sheet H-8771 (1963) not available at time of review.* ✓

C. SOUNDING VESSEL - Launch 88 was used to obtain all soundings and purple was used for the position numbers. ✓

D. SOUNDING EQUIPMENT - The Raytheon DE-723 type of echo sounder was used for all hydrography. Serial number 250 was used for all days except "a" day, when number 251 was in use. The instruments sounded satisfactorily in all areas of the sheet, the maximum depth being 123 fathoms. Leadline soundings were used in a few cases to obtain the least depth over shoal areas. Echo sounder corrections consisted of velocity corrections computed from T & S observations, initial corrections scaled from the fathograms, and phase corrections. The initial on the fathograms was set to compensate for draft and instrument error. Phase corrections were made as outlined in the Preliminary Operation & Maintenance Manual for the Raytheon DE-723 Fathometers. Reference is made to the Season's Fathometer Report for more details of fathometer corrections. ✓

E. SMOOTH SHEET - The smooth sheet was made by the ruling machine in the Washington Office. ✓

F. CONTROL - Hydrography was controlled horizontally by visual control. Signals were located by photogrammetric methods using both photo-hydro and hydro signals with the exception of three signals which were built on existing triangulation stations. Photogrammetric compilations used for the transfer of signals were T-11511, T-11512, and T-10702. ✓

G. SHORELINE - The shoreline detail was transferred from the blue lines of the incomplete manuscripts listed under the preceding section. Shoreline revisions were shown on smooth ozalids and sent to the Washington Office for revision of manuscripts. The transfer of shoreline and topographic details was verified. In many areas the low water line is not defined due to the steep slope and ruggedness of the shoreline.

Smooth sheet shoreline from Advanced copies of manuscripts listed under "F"

H. CROSSLINES - The amount of crosslines run was 10% with good agreement found in all areas of the sheet.

I. JUNCTIONS - Satisfactory agreement of depths was found at the junctions with contemporary surveys H-8659 and H-8866, and ~~prior surveys H-4197 and H-4190~~. Junctional sheet H-8771 (1963) not available at time of review.

J. COMPARISON WITH PRIOR SURVEYS - There were 4 articles on the presurvey review within the limits of this survey.

1. The most NW'ly article on the review was shown as an 8 fathom shoal. The shoal was verified and a least depth of 6.3 fathoms found. 55 19.07N, 132 06.80W. pos. 51-52 "e", vol. 4, p. 15
2. The most NE'ly of the articles was shown as a 13 fathom shoal. Launch hydrography verified the existence of the shoal's position and found a least depth of 9.2 fathoms. 55 18.88N, 132 04.88W. pos. 130-131 "h", pos. 157-158 "h", vol. 6, pp. 11 and 16.
3. The most SE'ly of the review articles was shown as a 3 3/4 fathom shoal. The shoal's position was verified and a least depth of 2.8 fathoms found by launch hydrography. 55 18.02N, 132 05.72W. pos. 47-48 "k", vol. 7, p. 3
4. The most SW'ly article of the review was a rock shown on the ~~boat~~^{smooth} sheet number H-4197 (1921) though not on previous topographic sheets, in record volumes, or in the descriptive report. Extensive searching and soundings in the ~~proposed~~ area of the rock conclusively disprove the rock's existence. ~~Proposed~~ Position was 55 18.12N, 132 07.46W. Could be part of charted reef @ 55°18.08, 132°07.53 and plotted about 50m. too far north. Smooth sheet shows rock @ same Long. and 50m. south. (Paragraph somewhat confused)

The first three articles should be charted while the last article should not appear on charts.

The results of this new surveys are much more complete than those of all prior surveys including H-4190, (1:50,000, 1921), H-4196, (1:20,000, 1921), and H-4197 (1:20,000; 1921). The agreement between the new and prior surveys is good although differences exist in the shoalest soundings found in several areas due to the additional coverage and the larger scale of the 1962 survey. No features or depths were disproved or need to be deleted from the charts. However, the results of this survey produced many new features and depths which should appear on future charts of the area.

K. COMPARISON WITH THE CHART - The only chart of the area is the 6th edition of chart No. 8102, last revised & printed 12/18/61. It is of such small scale that little comparison can be made. However, the soundings and symbols on the chart correspond with similar soundings & features found in the same general in 1962. (Reviewet's comparison with Chart No. 8083) ✓

It is recommended that the charted feature of a wreck, 450 meters SSW of Skin Island, bearing the notation PA be removed from the charts of the area unless there is conclusive evidence of the wreck's existence in this area. No evidence of a wreck in the area was found during surveying operations. (Not on chart No. 8083) *retain - not disproved* ✓

IMPORTANT NEWLY FOUND DANGERS TO NAVIGATION

| <u>DANGER</u> | <u>LATITUDE</u> | <u>LONGITUDE</u> | <u>LEAST DEPTH</u> (fms) | <u>POSITION NO.</u> |
|---------------|-----------------|---------------------------------|-----------------------------|-----------------------------------|
| Shoal# | 55 18'88N | item on 132 04'88 | ptesurvey 9.2✓ | also 157-158 "h" ✓ 130-131 h ✓ |
| Shoal | 55 17'92 | 132 05'17 | 4.4✓ | 204 h ✓ |
| Rock | 55 17'87 | 132 05'05 ⁸ | 10.3✓ | See B.S. 2a p 6 v. 1 ✓ |
| Shoal# | 55 18'03 | item on 132 05'72 | ptesurvey 2.87 | 47-48 "k" ✓ |
| Shoal | 55 17'92 | 132 06'34 | 67.29 ← 6 ² | 18-19 "l" ✓ 10-11 "l" ✓ |
| Shoal# | 55 19'07 | item on 132 06'80 | ptesurvey 6.3✓ | 51-52 e ✓ |
| Shoal | 55 18'45 | 132 07'25 | 5.24 | 182-183 c ✓ |
| Shoal | 55 17'82.78 | 132 06'85 ³ | 5.22 | 68-71 36k-37k ✓ |
| Shoal | 55 18'76 | 132 08'00 | 4.89 | 163-164 g ✓ |
| Shoal | 55 19'41 | 132 08'67 | 2.87 | 70 h ✓ |
| Shoal* | 55 18'20 | item on 132 07'70 ⁶⁸ | ptesurvey 0.4✓ | 8-9 d ✓ |
| Shoal | 55 17'91 | 132 08'23 | 7.6 ⁸ | 1-2 l ✓ |
| Shoal | 55 17'76 | 132 09'16 | 1.5✓ | 86-87 j ✓ |
| Bar | 55 17'90 | 132 09'52 | 1.8 ⁹ | 71-72 j ✓ |
| Rock | 55 17'67 | 132 09'32 | 0.2 | See B.S. 6a Vol 1 ✓ |
| Shoal | 55 17'81 | 132 09'02 | 4.07 | 82-83 j ✓ |
| Rock | 55 17'77 | 132 10'08 | Bares 0.2(2) | See B.S. 4a Vol 1 ✓ |

*Reported to U.S.C.G. #Mentioned in section J-7
The reef 250 Meters SEward is mentioned in section J

L. ADEQUACY OF SURVEY - The survey is complete & adequate to supersede all prior surveys for charting purposes. ✓

M. AIDS TO NAVIGATION - The only aid to navigation within the area surveyed was Skin Island Light. This light was located by third order triangulation during the 1962 field season. Data appearing in the Light List and chart 8102 are satisfactory in their present form and the light is serving the purpose for which it was established. Reference is made to the separate report on Landmarks on Charts and Fixed Aids to Navigation. ✓

N. STATISTICS -

Positions: 165⁶
Nautical miles of sounding line: 190.6
Area of survey, sq miles: 7.5
Tide stations: None
Current stations: None
Bottom samples: 45

N. STATISTICS (CONT.) - Magnetic Stations: None
Recoverable topo stations: none established

O. MISCELLANEOUS - Temperature and salinity observations applicable to this survey were made on August 15 and September 12, 1962.

Q. REFERENCES TO REPORTS - Report on Landmarks for Charts 13 May
and Fixed Aids to Navigation: 11 May
Leveling Records (Tide Station): 18 May & 17 Sept
Fathograms: Forwarded with boatsheet
Sounding Records: Forwarded with boatsheet
Fathometer Correction Report: Dec 3
Record of Observed T & Ss: Dec 3
Coast Pilot Report: Sept 24, 1962
Marigrams: 14-15 Sept 1, 16-17 Sept 15, 18-21 Oct 19
Triangulation Station Recovery Notes: July 21 /Sept 17
Shoreline inspection of ozalids T-11511, T-11512, T-10702
Season's Report: October 19, 1962

TIDE NOTE

The tide gage used for this survey was a portable gage previously established in Lancaster Cove of Cholmondeley Sound at 55 12.87N, 132 05.71W. The 5.5 foot mark on the staff corresponds to MLLW. The 120th degree west time meridian was used for the gage. No corrections were applied to the observed tides for differences in time or height. Hourly heights were not furnished by the Washington Office. ✓

GEOGRAPHIC NAMES

~~ANDERSON POINT
CLARENCE STRAIT
CLOVER BAY
CLOVER CREEK
DOCTOR POINT
MONIE LAKE
PRINCE OF WALES ISLAND
SKIN ISLAND~~

Survey H-8660 and accompanying records have been examined by
me and are approved. No additional field work is recommended.

M E Natto

M. E. Natto, LCDR, C&GS
Chief of Party
Ship LESTER JONES

ABSTRACT OF ECHO SOUNDING CORRECTIONS

H-8660

The echo correction for 10-4-62 were a combination of the phase correction and the velocity correction. The phase corrections for both fathometers used follow on the next page. The following list indicates the fathometers in use for each day of hydrography. A separate report covering the details of these corrections to echo soundings more fully will be submitted for the project under the title "Fathometer Correction Report".

Not included in this report.

| DAY | FATHOMETER | DATE |
|-----|------------|------|
| a | 251 | 8/30 |
| b | 250 | 9/6 |
| c | 250 | 9/7 |
| d | 250 | 9/8 |
| e | 250 | 9/11 |
| f | 250 | 9/12 |
| g | 250 | 9/13 |
| h | 250 | 9/14 |
| j | 250 | 9/15 |
| k | 250 | 9/18 |
| l | 250 | 9/19 |

VELOCITY CORRECTIONS FOR ~~10-4-62~~, ~~10-5-62~~, ~~10-4-61~~

FROM T & S OBSERVATIONS ON SEPTEMBER 12, 1962

PERIOD SEPTEMBER 1 THRU SEPTEMBER 30

| Correction (fms) | To Depth (fms) |
|---------------------|-------------------|
| 0.0 | 5.5 |
| +0.1 | 18.0 |
| +0.2 | 32.0 |
| +0.3 | 50.0 |
| +0.4 | 70.0 |
| +0.5 | 92.0 |
| +0.6 | 101.0 |
| +0.5 | 162.0 |
| +1.0 | — |

VELOCITY CORRECTIONS FOR 10-4-61, 10-4-62

FROM T & S OBSERVATIONS ON AUGUST 15, 1962

PERIOD JULY 26 THRU AUGUST 31

| Corrections (fms) | To Depth (fms) |
|----------------------|-------------------|
| 0.0 | 4.0 |
| +0.1 | 14.8 |
| +0.2 | 32.0 |
| +0.3 | 51.0 |
| +0.4 | 73.0 |
| +0.5 | 95.5 |
| +0.6 | 101.0 |
| +0.5 | 167.0 |
| +1.0 | — |

LIST OF SIGNALS

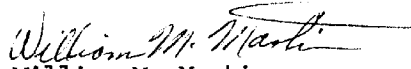
| | | | |
|---------|---------------------|------|-------------------------|
| ABE | Vol I p 4 | JIB | T-11511 |
| AGO | T-10702 | KID | T-11511 |
| ART | T-11512 | KIN | T-11512 |
| AZO | T-11512 | LEO | T-11512 |
| BAH | T-10702 | LIG | SKIN ISLAND LIGHT, 1962 |
| BED | T-11512 | LUG | T-11511 |
| BIG | T-11512 | LUG | T-10702 |
| BOA | T-11512 | MAX | T-11511 |
| BUT | T-11512 | MOO | T-10702 |
| CAB | T-11512 | NED | T-10702 |
| CAT | T-11512 | NIL | T-11512 |
| CHASINA | NORTH CHASINA, 1912 | NON | T-11512 |
| CLOVER | CLOVER, 1921 | ORA | T-10702 |
| COD | T-11512 | ORB | T-11512 |
| COW | T-10702 | OWL | T-11512 |
| DAY | T-11512 | PAD | T-10702 |
| DIP | T-11512 | PAR | T-11512 |
| DUD | T-11512 | PRO | T-11512 |
| DUO | T-11512 | RAG | T-11512 |
| EBB | T-11512 | RIG | Vol I p 4 |
| EGG | T-11512 | ROY | Vol I p 3 |
| ELV | T-11512 | RUM | T-11512 |
| EON | T-11512 | SAM | T-11512 |
| FAR | Vol I p 3 | SIS | T-11512 |
| FEZ | T-11512 | SKIN | SKIN, 1912 |
| FOG | T-11512 | SUB | T-11512 |
| GOB | T-11512 | TAN | T-11512 |
| GUS | Vol I p 4 | TAP | T-11512 |
| HAG | Vol I p 4 | TIP | T-11512 |
| HEX | T-11512 | TOM | Vol I p 3 |
| HUB | T-11511 | VAL | T-11512 |
| IDA | T-11512 | VET | T-11512 |
| IRK | Vol I p 3 | VIG | T-11512 |
| JAR | Vol I p 5 | VIM | T-11512 |
| JAY | T-11512 | WAR | T-11512 |
| | | WOO | T-11512 |
| | | YAK | T-11512 |
| | | YEA | T-11512 |
| | | YET | Vol I p 5 |
| | | ZOO | T-11512 |

ADDENDUM NOTES H-8660

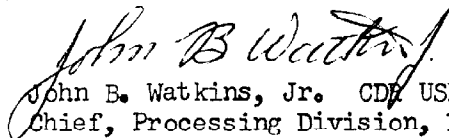
This smooth sheet was compared with Chart 8083, 1st Ed., June 19, 1967. Differences between chart and smooth sheet are shown in red on section of chart attached to this report. Reviewer used 2nd Ed, 5-13-'68 ✓

Pen and ink changes have been made to reported items in the Descriptive Report to agree with smooth sheet values where differences exist. ✓

Examined and Approved.


William M. Martin
Supervisory Carto. Tech.

Approved and Forwarded.


John B. Watkins, Jr. CDE USESSA
Chief, Processing Division, PMC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Seattle Regional Officer
~~Nautical Chart Division~~

March 31, 1964

Plane of reference approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET H-8660

Locality Clarence Strait, S.E. Alaska

Chief of Party: M.E. Natto

Plane of reference is mean lower low water reading
5.5 ft. on tide staff at Lancaster Cove
18.7 ft. below B.M. NO 3 (1959)

Height of mean high water above plane of reference is: 14.2 ft.

Condition of records satisfactory except as noted below:



Chief, Tides and Currents Branch

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-8660

(LJ-10-4-62)

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

| RECORD DESCRIPTION | | AMOUNT | RECORD DESCRIPTION | | AMOUNT | |
|--------------------|---------------|----------------------|--------------------|------------|-------------------------------------|--------------------------------|
| SMOOTH SHEET | | 1 | BOAT SHEETS | | 1 | |
| DESCRIPTIVE REPORT | | 1 | OVERLAYS | | Several inserted in Sounding Volume | |
| DESCRIPTION | DEPTH RECORDS | HORIZ. CONT. RECORDS | PRINTOUTS | TAPE ROLLS | PUNCHED CARDS | ABSTRACTS/ SOURCE DOCUMENTS |
| ENVELOPES | | | | | | |
| CAHIERS | 1 | | | | | |
| VOLUMES | 8 | | | | | |
| BOXES | | | | | | |

T-SHEET PRINTS (List) T-11511, T 11512 and T 10702

SPECIAL REPORTS (List)

OFFICE PROCESSING ACTIVITIES

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

| PROCESSING ACTIVITY | AMOUNTS | | | |
|--|------------------|---------------|--------|--------|
| | PRE-VERIFICATION | VERIFICATION | REVIEW | TOTALS |
| POSITIONS ON SHEET | | | | 1664 |
| POSITIONS CHECKED | | 450 | 9 | |
| POSITIONS REVISED | | 27 | 0 | |
| DEPTH SOUNDINGS REVISED | | 38 | 2 | |
| DEPTH SOUNDINGS ERRONEOUSLY SPACED | | 40 | 0 | |
| SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED | | 1 | 0 | |
| | TIME (MANHOURS) | | | |
| TOPOGRAPHIC DETAILS | | 6 hrs | 8 | |
| JUNCTIONS | | 18 hrs | 18 | |
| VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS | | 12 hrs | 3 | |
| SPECIAL ADJUSTMENTS | | None | 13 | |
| ALL OTHER WORK | | 142 hrs. | 38 | |
| TOTALS | | 178 hrs | 80 | |
| PRE-VERIFICATION BY | BEGINNING DATE | ENDING DATE | | |
| VERIFICATION BY <u>Cornelius A. J. Pann</u> | Aug 10, 1964 | Sept 23, 1964 | | |
| REVIEW BY <u>S. Rose</u> | April 22, 1969 | May 5, 1969 | | |

Carey Insp. H.K. Myers 7/21/77 33hr Cartogram 7/11/77 USCOMM-DC 6641-204 8/17/77

H-8660

Information for Future Presurvey Reviews

No significant changes have occurred since the prior surveys.

| <u>Position Index</u> | | <u>Bottom Change</u> | <u>Use</u> | <u>Resurvey</u> |
|-----------------------|--------------|----------------------|--------------|-----------------|
| <u>Lat.</u> | <u>Long.</u> | <u>Index</u> | <u>Index</u> | <u>Cycle</u> |
| 551 | 1321 | 1 | 1 | 50 years |

OFFICE OF MARINE SURVEYS AND MAPS

MARINE SURVEYS DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8660

FIELD NO. LJ-10-4-62

Alaska, Clarence Strait, Clover Bay

SURVEYED: August 30 - September 19, 1962

SCALE: 1:10,000

PROJECT NO.: OPR-381

SOUNDINGS: Raytheon DE-723 Depth
Recorders

CONTROL: Sextant Fixes on
Shore Signals

| | |
|--------------------------------------|----------------------|
| Chief of Party | M. E. Natto |
| Surveyed by | M. E. Natto |
| | R. K. Hanson |
| Protracted by | C. R. Lehman |
| Soundings Plotted by | C. R. Lehman |
| Verified and Inked by | Cornelius A. J. Pauw |
| Reviewed by | S. Rose |
| | Date: May 5, 1969 |
| Cursory inspection made--survey | G. K. Myers |
| processing considered complete | July 21, 1977 |

1. Description of the Area

This survey covers the western side of Clarence Strait between Cholmondeley Sound and Twenty Fathom Bank. It includes Clover Bay and the area surrounding Skin Island.

The bottom in Clarence Strait is characterized by steep slopes which extend to depths of over 100 fathoms. In Clover Bay steep gradients extend from shore. Many rocky shoals and reefs exist inshore and evidences of kelp were found in some areas of the present survey. Many large shoals abruptly rise from the bottom in deeper depths.

Predominant bottom characteristics in the area are mud, pebbles, clay, and shells.

2. Control and Shoreline

The source of the control is adequately described in the Descriptive Report.

The shoreline originates with advance manuscripts of T-11511 (1954-62), T-11512 (1954-62), and T-10702 (1956-63).

The mean high water line is shown for guidance only; the true position is shown on the topographic surveys mentioned above.

3. Hydrography

a. Depths at crossings are in good agreement considering the nature of the bottom.

b. In general, usual depth curves in depths of 5 fathoms and greater are well defined. In less than 5 fathoms, the usual inshore curves were not always completely developed because of slopes or foul inshore areas.

c. The development of the bottom configuration and determination of least depths are considered adequate.

4. Condition of Survey

The field plotting, sounding records, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual. However, the recorder mistakenly inserted MRV (middle reed vibrating) in some sounding volumes. This comment can only be made when 808 fathometers are used for sounding.

5. Junctions

Adequate junctions were effected with the following surveys:

H-8659 (1962) on the south
H-8666 (1962) on the east
H-8771 (1963) on the north

6. Comparison with Prior Surveys

| | | |
|-----------|--------|----------|
| H-1649"b" | (1885) | 1:80,000 |
| H-4190 | (1921) | 1:50,000 |
| H-4196 | (1921) | 1:20,000 |
| H-4197 | (1921) | 1:20,000 |

The prior surveys taken together cover the present survey. A comparison of prior and present depths indicates no significant change has occurred in the area. The present survey in some random areas seems shoaler, but this results from the more detailed hydrography of the present survey.

The rock awash located at latitude $53^{\circ}18.14'$, longitude $132^{\circ}07.52'$ from the boat sheet of H-4197 (1921) falls in present depths of greater than 20 fathoms. This feature is considered displaced about 80 meters due north of its true position and should be disregarded.

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

7. Comparison with Chart 8083 (latest print date May 13, 1968)

a. Hydrography

The charted hydrography within the area of the present survey is from the verified smooth sheet of the present survey. No significant differences were noted between the chart and the present survey.

b. Aids to Navigation

There are no floating aids to navigation within the area of the present survey. The one fixed aid to navigation located on the present survey agrees with the charted position and adequately serves the purpose intended.

8. Compliance with Instructions

The present survey adequately complies with the project instructions.

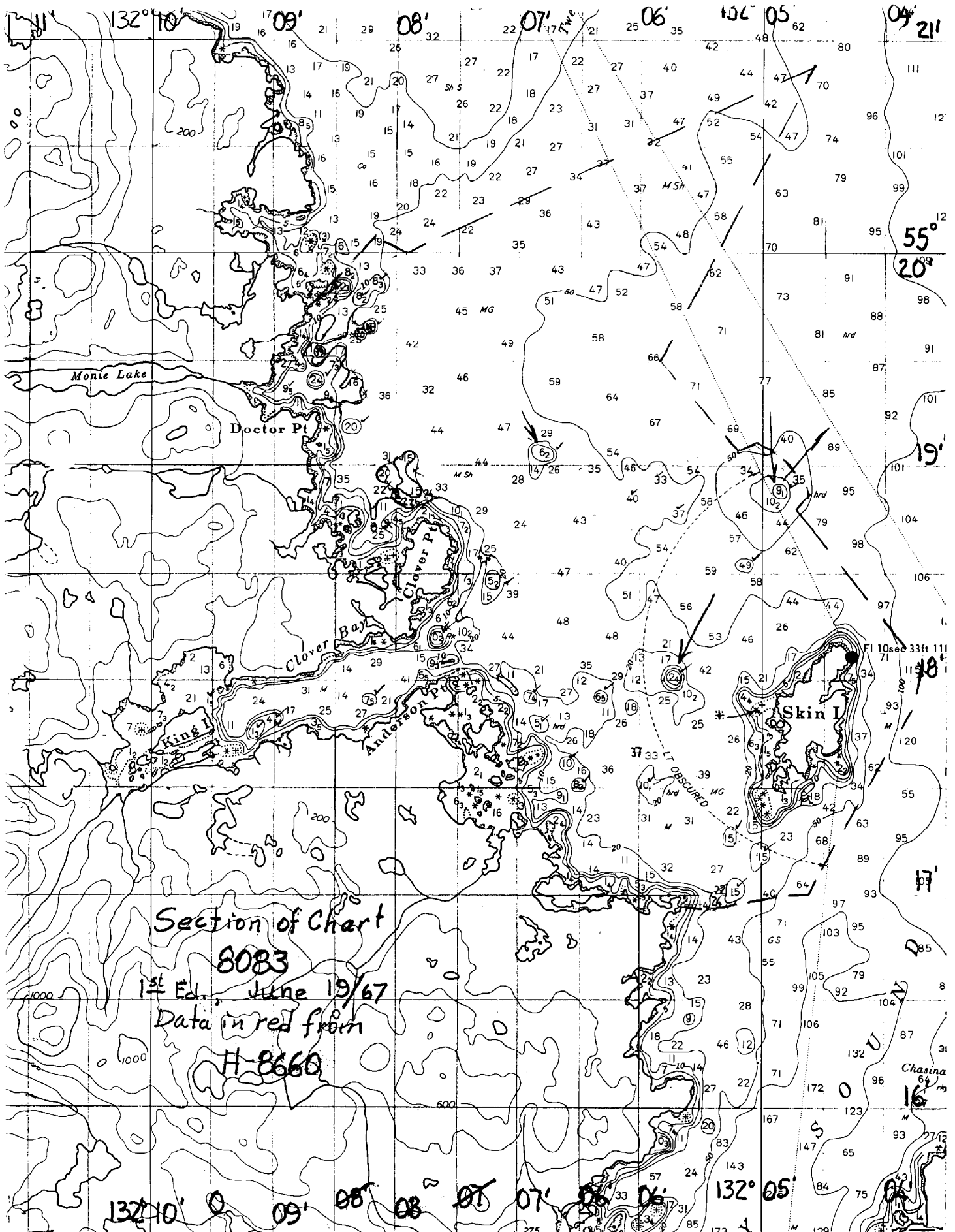
9. Additional Field Work

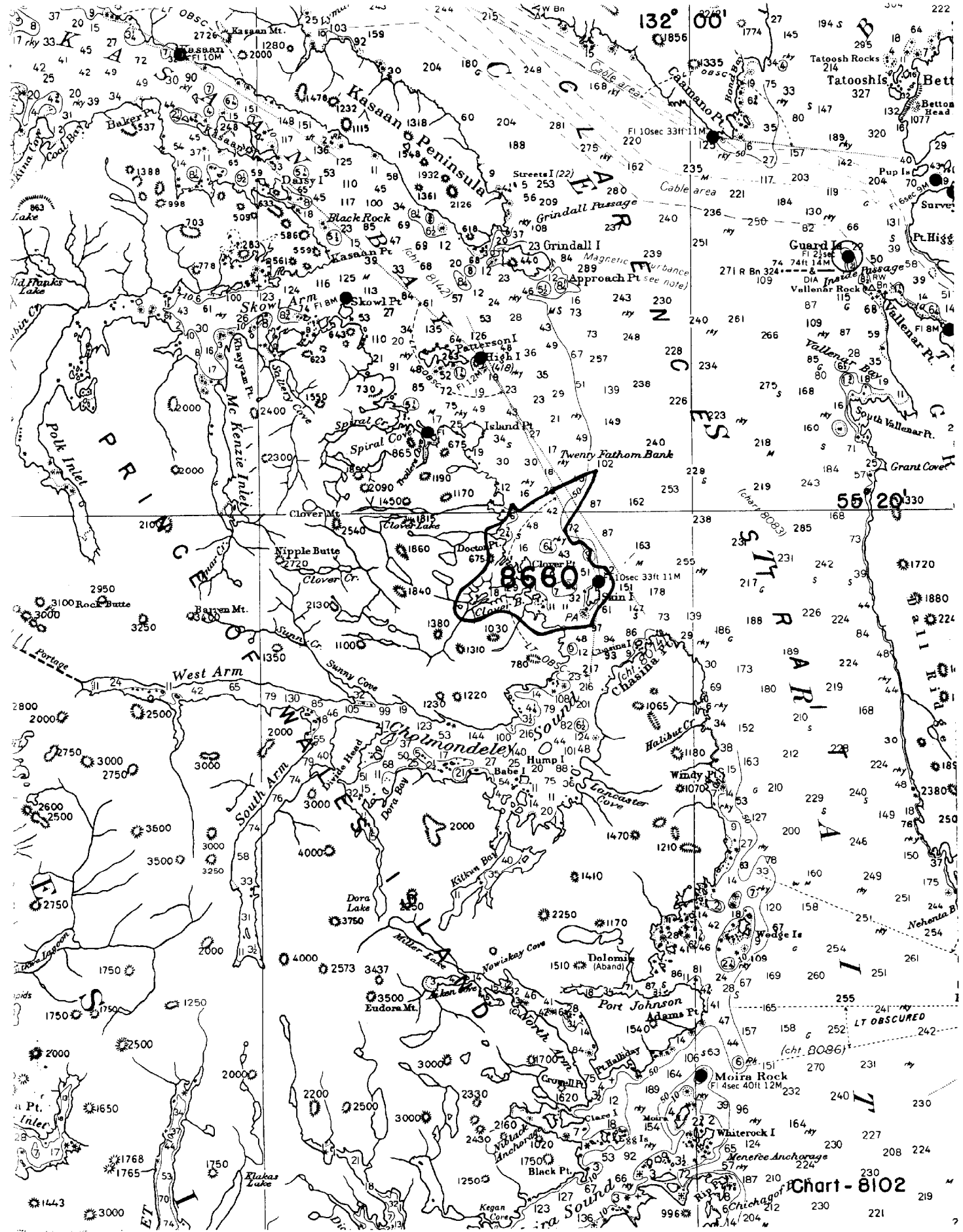
The present survey is a very good basic survey and no additional field work is recommended.

Examined and Approved:

R.H. Carstens
for Chief
Marine Surveys Division

R.H. Smith
Associate Director
Office of Marine Surveys
and Maps





RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8660

INSTRUCTIONS

- A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
 1. Letter all information.
 2. In "Remarks" column cross out words that do not apply.
 3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

| CHART | DATE | CARTOGRAPHER | REMARKS |
|--------|----------|-------------------|---|
| 8083 | 4/1/68 | J.S. McMillan | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. <i>Critical Correction applied only</i> |
| | | | <i>consider full application until reconstruction</i> |
| 8102 | 4-8-69 | Osami Chapman | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. <i>Critical Corrections applied only</i> |
| | | | <i>thru chrt 8083 dwg # 2</i> |
| 8142 | 5/69 | Clarence Muefeldt | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. 8083 <i>App'd thru chrt 8083</i> |
| 8142 | 11/23/70 | J.H.S. Millan | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. <i>10 CRITICAL CORRECTION ONLY</i> |
| 8102 | 4-16-71 | E. Frey | Full Part Before After Verification ^{draft} Review Inspection Signed Via Drawing No. <i>App'd one sdg via chrt 8083</i> |
| | | | <i>critical examination only at this time</i> |
| 8083 | 12/15/71 | J.B. Graham | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. <i>#3 App'd misc additional</i> |
| | | | <i>critical corrections</i> |
| 8142 | 10/25/72 | James Graham | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. <i>11 App'd misc corr. thru chrt. 8083 dwg #3</i> |
| 8102 | 4/19/73 | E. FREY | Full Part Before After Verification ^{before} Review Inspection Signed Via Drawing No. <i>App'd misc additional corrections via chrt 8083 dwg #3</i> |
| 8083 | 11/1/77 | M.J. Friese | Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Examined for Critical Cor + N to M¹⁵</i> |
| 17420 | | | Full Part Before After Verification Review Inspection Signed Via |
| (8102) | | | Drawing No. |