# 8383

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 Hydregraphic
Field No. LJ-1157 Office No. H-8383
LOCALITY
State Alaska
General locality Clarence Strait
Locality Eastern Shere, Prince of
Wales <sup>I</sup> sland
19.57
CHIEF OF PARTY
E. B. Brewn
LIBRARY & ARCHIVES
DATE October 1959

USCOMM-DC 37022-P66

MAC

#### 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-8383
Field No. LJ-1157

State	ALASKA
	CLARENCE STRAIT
Locality	EASTERN SHORE, PRINCE OF WALES, IS.
Scale 1:10,000	Date of survey 8 Aug 10 Sept. 1957
Instructions dated	2 OCTOBER 1956
Vessel LAUNCH 8	8, SHIP LESTER JONES
Chief of partyE	. B. BROWN
Surveyed byL	. G. TAYLOR
Soundings taken by 1	athometer, graphic recorder, hand lead, wire 8085
Fathograms scaled b	y SHIP PERSONNEL
Fathograms checked	by SHIP PERSONNEL
Protracted by	J. K. Richards & L. C. Haverkamp
Soundings penciled b	y V. F. Flor
	oms feet at MLW MLLW and based on a volocity
REMARKS:	sound of 800 fms/sec.
	· · · · · · · · · · · · · · · · · · ·
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#### DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY H-8383 FIELD NO. LJ-1157 SCALE 1:10.000

USC&GSS LESTER JONES E. B. BROWN. CHIEF OF PARTY

- Project No. 13810, Instructions dated 2 October, 1956.
- Survey Limits: The western shore of Clarence strait between Kendrick Bay and Ingraham Bay on Prince of Wales Island. Survey Junctions with H-8384 to the north and H-8382 to the East. Field work began on 8 Aug 157 and ended on 10 Sept 157.
- Vessel & Equipment: Launch #88 was used throughout. Base of operations was from camp at Ingraham Bay and from Ship based at Hidden Bay.
- Tide & Current Stations: Portable automatic tide gage at Ingraham Bay was used without correction for reducing soundings. Within limit of sheet but beyond survey limit.
- (Processing Office) E.
- F. Control Stations:
  - 1. Triangulation stations: Chief of Party Ferdinand Westdahl 1912.
  - Topographic Stations from T-10538, T-10539, T-10540, T-11526. All Hydrographic control stations were located using photogrammetric methods.
- Shore line & Topography: Shoreline and topographic detail from map manuscripts listed in F-2 above. HWL indicated on map manuscripts T-11526 and T-10538 by dashed line was revised using planetable methods on sheet LJ-A-57. Inked in red or inked solid black on smooth sheet

The following changes in topographic detail recorded in Hydrographic volumes are listed below:

rocks awash from manuscript.

~*1*0538` Steep rocky slopes prevented defining the LWL in many areas. Numerous notes in the sounding volumes indicate the character of the beach when HWL and LWL coincide.

- H. Soundings: Soundings were taken with portable depth recorder (808 Fath. No's 102-S) and hand lead soundings during investigations of least depths.
- I. Control of Hydrography: Standard methods of Sextant Fixes on previously located control points was used throughout.
- J. Adequacy of Survey: Survey is satisfactory to supersede prior surveys for charting.
- K. Crosslines: Crosslines were run 8% of regular lines (Discrepancies Processing Office)
- L. Comparison with Prior Surveys: (Processing Office)
- M. Comparison with Chart: (Processing Office)
- N. Dangers & Shoals: No uncharted dangers were found in the area. Shoals which required investigation are listed below:

POS NO	G.P.	DEPTH	To replace Topo location
<u>POS</u> <u>NO</u> √3a (blue)	54 - 54.27×	DEPTH O.O ~	To replace Topo location
<i>L</i> .	131 - 58.42~		of Rock awash. T-10540
√15K517K3	55 <b>-</b> 54.54~	8.6~	Investigation to locate
(lower case)	131 - 58.05~		least depth.
95 <b>f</b> 🗸	54 <b>-</b> 54.63/	1.0	Investigation to locate
	131 - 58.18		least depth.
√107 <b>f-112</b> f	54 - 54.83V	2.0~	Investigation to locate
	131 - 58 <b>?</b> X7/		least depth.
62d-63d√	54 <b>-</b> 54.82√	0.6	Investigation to locate
÷	131 <b>-</b> 58.30 <sup>30</sup>		least depth.
/209h-218h/	54 - 54.84\so	wice: 6.2/	Investigation to locate
	131 - 57.80 H-	3390 (1912)	least depth on 11 fathoms
			sounding from old Survey.
√68j-72jv	54 - 54.98	11.9~	Investigation to locate
	131 - 57.753	soutce : H-4200 (1921)	least depth. Investigating
		H-4200 (1421)	charted 17 fathoms shown on
			preliminary review.
18k —	54 - 54.85-	7.36~	Investigation to locate
	131 - 58.15	6	least depth.
✓219h-220h	54 <b>-</b> 54.9 <b>5</b> 6	4.36~	Investigation to locate
_	131 - 58.30		least depth.
√221h	54 - 55.0 <b>56</b>	3.25 3.4	Investigation to locate
86-87 "f"	131 - 58.22✓	3.4	least depth. Sunken rock
·			shown on old Survey. H-4200(1921)
√4a (blue)	54 - 55.12×	3.9 ℃	To replace Topo location of
	131 - 58.83		rock awash. 2017-10540
	4		100 profess south.
			New perition
			, , , , , , , , , , , , , , , , , , ,

1.

# N. Dangers & Shoals (Continued)

POS NO 2	G.P.	DEPTH	REMARKS
7 - 39f - 69f	1 54 - 55.38-	5.08	Shoal Development Investi-
152-153 "6"	131 - 57.75-		gation. PEAH ON LINE
√40f-44f	54 - 55.45	5.0レ	Investigation to locate -
7 4 - 4 4 -	131 - 57.70~	• •	least depth.
✓38f <b>-</b> 39f	54 - 55.48	7.6	Investigation to locate
	131 - 57.55		least depth.
✓32f <b>-</b> 37f	54 - 55.54~	5.7~	Investigation to locate -
	131 - 57.77		least depth.
√5a (blue)	54 - 55.54 }	73 from pos. 155-	To disprove topo location
	131 - 58,0(56)	156 "h", vol. 6, P. 64	rock awash. T-10540 (igg how
v6a-7a (blue)	54 55.0555	0.7~	To check topo location delineron
	131 - 58.1060	A	rock awash. 7-10540 To disprove topo location
<b>√</b> 132h	54 - 55.8756	4.0	To disprove topo location
	131 - 59.83325		rock awash. T-10540
√65j-67j \	r 54 - 55.92	5.1	Investigation to locate
v7116-726 }	(131 - 57.71	4.51	least depth.
V/61-1626	54 - 56.04	3.8 <u>.</u>	Investigation to locate 🗸
, a	131 - 57.92		least depth.
62"a" 17f=20f 19"f" + 2 out 62 a - 63 ar	[ 54 - 56.7 <del>9</del> 33]	Lapprox 7.50	Investigation to determine
+ = out 62 a - 63 av	131 - 57. 3.62	both pos. 6"si	least depth. Peak on line 62-63 a
✓21f-26f	54 - 56.31 <sup>33</sup>	1.2	Investigation to locate
	131 - 57.8882		least depth.
√8f-16 <b>f</b>	54 - 56.44	6.6	Investigation to locate
	131 - 57.65		least depth. anly one rose vers
√9a-lla (blue)	54 - 56.85 <sup>36</sup>	0.4	Investigation to check topo
	131 - 57.5800-	<b>,</b>	location of rock awash. 7-10538
✓24e <b>-</b> 25e ✓	54 - 56.7928	1.0	Investigation to locate
	131 - 58.52	5.164	least depth.
<b>√</b> 39j <b>-</b> 43j	54 - 56.73	1	Investigation to locate
	131 - 59.7069	·	least depth.
✓85h <b>-</b> 87h	54 - 57.05 m	0.34	Investigation to locate
	$131 - 58.75^{25}$	9. /	least depth. Topo * disprovat
<b>√</b> 75h <b>-</b> 78h	54 - 57.04	Sect. "G" 9.09	Investigation to disprove
	131 - 58.45	mis report	topo location rock awash.10538
✓14b <b>-</b> 15b	54 <b>-</b> 57.25.76	-6.80	Investigation to locate
	131 - 57.953	•	least depth out and shoal
			from sheet 1257, H-83837
			1 1

O. Coast Pilot Information: List of Anchorages used by ship during the survey:

LOCATION 54 - 54.30 20 131 - 58.4838	DEPTH Fathoms	BOTTOM hrd	REMARKS Fair Anchorage
54 - 55.45 15	Fathoms 🗸		Poor Anchorage because of current and bottom.
54 - 56.60 19 131 - 59.60	Fathoms	ers gy S	and bottom.  Very good anchorage. Entrance channel is narrow with strong currents during certain stages of the tide.

During the salmon fishing season fish traps extending from the beach, as indicated on the boat sheet, are maintained at the northern entrance to Kendrick Bay and at Scott Point. These traps are removed from these locations at the end of the fishing season.

- P. Aids to Navigation: No Aids to Navigation are located in the Surveyed area.
- Q. Landmarks for Charts: No Landmarks are within the Surveyed area.
- R. Geographic Names: No Changes to Existing Geographic Names.
- S.Y. Not Applicable
  - Z. Tabulation of Data: See Pages 5 & 6 of this report.

    (List of signals put in Vol. 1)

Respectfully submitted,

IORNE G. TAYLOR, LCDR., C&GS

#### TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

Registry No.
Field No. LJ _A - 57
Scale 1:10,000
State S.E. Alaska General locality Prince of Wales Island
Specific locality Hidden Bay
Dates: Survey began 16 Aug. 1957 Completed 17 Aug. 1957
Photography, Supplemented by ground surveys to
Project No. 13810 Instructions dated 2 October 1956
Vessel Party or LESTER JONES Chief of party E. B. BROWN
Field work by A. J. LEWIS Office work by A. J. LEWIS
Final inking by A. J. LEWIS
$ \begin{array}{c} \text{Ground elevations} \\ \text{Treetop elevations} \end{array} \} \ \text{in feet above} \ \left\{ \begin{array}{c} \text{M. H. W.} \\ \text{or} \\ \end{array} \right. $
$ \begin{array}{c} \textbf{Contours} \\ \textbf{Approximate contours} \\ \textbf{Form lines} \end{array} \right\} \ \textbf{by} \ \left\{ \begin{array}{c} \textbf{Planetable} \\ \textbf{Multiplex} \\ \end{array} \right\} \ \textbf{Interval} \ \underline{\hspace{1cm}} \ \textbf{ft.} $
REMARKS This sheet was used to define portions of HWL which had been
dashed on manuscript. Portions shown next Os NEO ODD to SAR
WEN VAL and apposite side of Box, off GAG to YAK
were applied to H-8383 where significante
Planetable sheet destroyed

#### PROCESSING OFFICE NOTES H-8383

#### TIDE AND CURRENT STATIONS

No Tide Note was sent the Processing Office with the Field Report and no information is available as to the MLLW elevation on the staff. The gage was located at Lat. 54° 58'.70, Long. 131° 59'.78.

#### SMOOTH SHEET

The smooth sheet projection was hand constructed by the Seattle Hydrographic Processing Unit using standard methods of construction and checking. The shoreline and signals were transferred by ship's officers and presumably checked by them. Signals and shoreline were rechecked by the Processing Unit. The signals were in agreement but a couple bad discrepancies were found in the shoreline and corrected. The positions were plotted and inked and numbered by ship's officers, soundings penciled by the Processing Unit.

#### SHORELINE AND TOPOGRAPHY

In addition to the changes of topographic detail listed in the Field Report, there are several other changes in rocks as noted below:

		56'.16レ 58 .25レ	Pos. 6-7e-	This survey 10-11 fms ~
		56 .14× 58 .20×	Pos. 5-6c (cannot be "c")	) 7-10 fms (may mean "e" day)
		54 .82 × 58 .35 ×	Pos. 97f (also see pos III	"f")6.2 fms~
		54 .78~ 58 .41~	Pos. 116-117f (see 56-57	d") 2.3 fms/
Lat. Long.	54 131	55 .33 × 58 .78 ×	Ps. 108-109h√ 3 rks	4.0, 1.7 & 3.2 fms /

Page one of Field Report under this heading has been checked.

#### ADEQUACY OF SURVEY

The survey is considered complete and adequate for charting.

Junctions have not been compared. No prints of prior surveys are available in the Processing Office. The junction with H-8384 will be compared when that survey has been smooth plotted.

#### COMPARISON WITH PRIOR SURVEYS

No comparison was made with prior surveys, nonebeing available in the Processing Office See Review

#### COMPARISON WITH CHART

This survey has been compared with Chart 8102, 6th Ed. Revised 1/26/59. An accurate comparison between the survey and the chart is not feasible because of the large difference in scale.

Reviewed's comparison with Charts # 8086 and 8145

In the channel entrance to Hidden Bay the chart shows a depth of 5 fathoms. This is not verified by the smooth sheet, which has a controlling depth of the force of classical and conditions by along the conditions.

A charted 17 fm sounding at Lat. 54° 55'.0, Long. 131° 57'.7 falls very close to a 12 fm. sounding on the smooth sheet. Also there is a 6.2 fm. sounding, bearing S 15° k, 300 meters from the above mentioned 12 fms. Other charted soundings and rocks appear to be in satisfactory agreement.

#### DANGERS AND SHOALS

A rather complete list of shoals was compiled by the hydrographer. Corrections and additions to this have been made in ink for the smooth sheet values.

Several items usually contained in the reports were not forwarded to the Processing Office. They are the Tide Note, the Velocity and Phase Correction Abstracts, the Approval Sheet and the Statistics. The latter tabulation was compiled in the Processing Office and is included with this report. Not enough information was available to complete the other items.

Also, T-10540 was not available to the reviewer

Respectfully submitted,

WILLIAM M. MARTIN

Supervisory Cartographer

APPROVED AND FORWARDED

d. C. MAST, CAPTAIN, C&GS SEATTLE DISTRICT OFFICER

## STATISTICS FOR HYDROGRAPHIC SURVEY H-8383 (1957) Ship LESTER JONES Project 13810

DAY	VOL.	DATE	H. L. SNDG	POS.	STAT. M.
Skiff a	1	14 June	10	12	
Launch No	2 2	8 Aug		208	36.6
ъ	2&3	14 Aug	6	175	19.7
c	3	15 Aug	6	157	14.6
d	3&4	16 Aug	1	229	24.7
e	4	19 Aug	1	116	12.7
f	5	20 Aug		174	13.6
g	5&6	21 Aug	1	238	28.1
h	6&7	23 Aug	1	222	23.6
j	7	24 Aug		72	6.3
k	7	26 Aug	1	31	2.5
Totals fo	or Launch No	. 188	17	1622	182.4
Totals fo	or sheet		27	1634	182.4

## GEOGRAPHIC NAMES PENCILED ON H-8383

CLARENCE STRAIT

HIDDEN BAY

PRINCE OF WALES ISLAND

SCOTT POINT

FORM **197** (3-16-55)

On J. Madra de P.O. Citale of Mass J.S. Light List **GEOGRAPHIC NAMES** trongorous and Or oca was Survey No. H-8383 Ou 40. E Name on Survey K (title) Alaska 2 Clarence Strait 3 Prince of Wales Island 4 Hidden Bay 5 Scott Point 6 Ingraham Bay (tide station) 7 Names approved 10-27-59 L. Meck 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

# Hydrographic Surveys (Chart Division)

# HYDROGRAPHIC SURVEY NO. . 8383...

Records accompanying survey			
Boat sheets 1; sounding vols;	wire dr	ag vols.	••••;
bomb vols; graphic recorder roll	s ZeEnve	lope	
special reports, etc1-Smooth sheet an	d 1-Descr	iptive re	eport.
••••••••••••••••••••••••••••••	• • • • • • •	• • • • • • • •	• • • • •
The following statistics will be submitted rapher's report on the sheet:	with the	_	Review
Number of positions on sheet		1634	24 1
Number of positions checked		264	
Number of positions revised		0	0
Number of soundings revised (refers to depth only)		0	0
Number of soundings erroneously spaced			O
Number of signals erroneously plotted or transferred			0
Topographic details	Time	8	1
Junctions	Time	. 4	3
Verification of soundings from graphic record	Time	4.	1
Verification by J. b. Chambus Total time	me <i>30!</i>	Date 3	177/60
Reviewed by S. Rose Tin	me 120 h	s. Date 8	-13-'69
"Rough serification due to inexperience,	corrected	1 by ricvi	ewer,

#### TIDE NOTE FOR HYDROGRAPHIC SHEET

#### 

3 Nov. 1959

Division of Charts: R. H. Carstens

Plane of reference approved in 7 volumes of sounding records for

HYDROGRAPHIC SHEET 8383

Locality Clarence Strait, Alaska

Chief of Party: E. B. Brown in 1957
Plane of reference is mean lower low water, reading
5.8 ft. on tide staff at Ingraham Bay
19.3 ft. below B. M. 2 (1957)

Height of mean high water above plane of reference is 13.5 feet.

Condition of records satisfactory except as noted below:

Tides Branch

Chief, DANISSANARATAGE AND NORTHWEST

#### OFFICE OF HYDROGRAPHY AND OCEANOGRAPHY

#### MARINE CHART DIVISION

#### HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8383	FIELD NO. LJ-1157
Southeast Alaska, Clarence Strates Island, Eastern Shore	it, Prince of Wales
SURVEYED: August 8, 1957 through	gh September 10, 1957
SCALE: 1:10,000	PROJECT NO.: OPR-381
SOUNDINGS: Type-808 Fathometers	CONTROL: Sextant Fixes on Shore Signals
Chief of Party Surveyed by Protracted by	L. G. Taylor
Soundings Plotted by  Verified by  Reviewed by  Inspected by	V. F. Flor J. C. Chambers S. Rose

## 1. <u>Description of the Area</u>

This is an inshore survey of Clarence Strait extending North of Kendrick Islands to Scott Point, and eastward approximately to the 200-fathom curve. The survey includes Hidden Bay.

The shore is steep and generally rocky or comprised of ledge. Off-lying reefs and rocky shoals rise abruptly shoreward of the 20-fathom curve; kelp is abundant in this area.

The bottom is rocky and its gradient so steep that the 200-fathom curve is within .4-mile of Scott Point, and at no place within the survey is it more than a mile offshore.

## 2. Control and Shoreline

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

The shoreline originates with manuscripts of T-10538, 10539, 10540 and 11526. These manuscripts are incomplete, and are based upon 1956 photography. T-10540 was not available at the time of this review. Several rocks shown awash on the topographic surveys and identified in the descriptive report were disproved in the field.

## 3. Hydrography

- A. Depths at crossings are in good agreement.
- B. The standard depth curves are adequately delineated, except in foul inshore areas.
- C. The development of the bottom configuration and least depths is adequate. A few shoal indications were not specifically investigated. The least depths on only a few features were verified with the handlead.

## 4. Condition of the Survey

The field plotting, sounding records and the Descriptive Report are adequate, and conform to the requirements of the Hydrographic Manual. Recorded notes providing supplementary information were unusually complete.

## 5. Junctions

Adequate junctions were effected with the following surveys:

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H-8382 (1957) on the east H-8384 (1957) on the north
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Charted soundings on the south are in adequate agreement with present depths.

#### 6. Comparison with Prior Surveys

H-1649a	1:80,000	(1885)
H-3390	1:20,000	(1912)
H-4195	1:20,000	(1921)
H-4200	1:20,000	(1921)

Portions of these surveys comprise the prior coverage of the area of the present survey. The year 1885 survey is reconnaisance in nature, and because of its small scale has only one sounding plotting within the area of the present survey.

The year 1912 survey has widely-spaced soundings expressed in feet which provide little more than general depths in an area of great irregularity.

A comparison between the present survey and the 1921 surveys reveals some differences which are attributed to the methods of surveying and errors on the earlier surveys. The prior positions of shoreline and offshore rocks differs by 25 to 40 meters for some features. These differences may result from sketching and approximations on the prior surveys. Prior depth curves are more generalized than present ones and are in some areas as much as 50 meters farther offshore. The present larger scale survey reveals numerous features not previously shown and is adequate to supersede the prior surveys in the common area.

7. Comparison With Chart No. 8086, First Ed., Revised September 20, 1965 and Chart No. 8145, 5th Ed., Revised July 17, 1967.

## A. Hydrography

The charted hydrography in the area of the present survey is from the verified smooth sheet of the present survey. Chart No. 8086 is the first one to present on a large scale the corresponding area of the present survey.

The 2-fathom sounding charted at Lat. 54°56.70' Long. 131°59.99' is an obvious error. A depth of 12 fathoms should be charted at this location.

Minor additions to the ledge were made in the Hidden Bay area.

Except as noted, the charted information is in adequate agreement with the present survey.

## B. Aids to Navigation

The e are no aids to navigation within the area of the present survey.

## 8. Compliance With Project Instructions

The present survey adequately complies with project instructions.

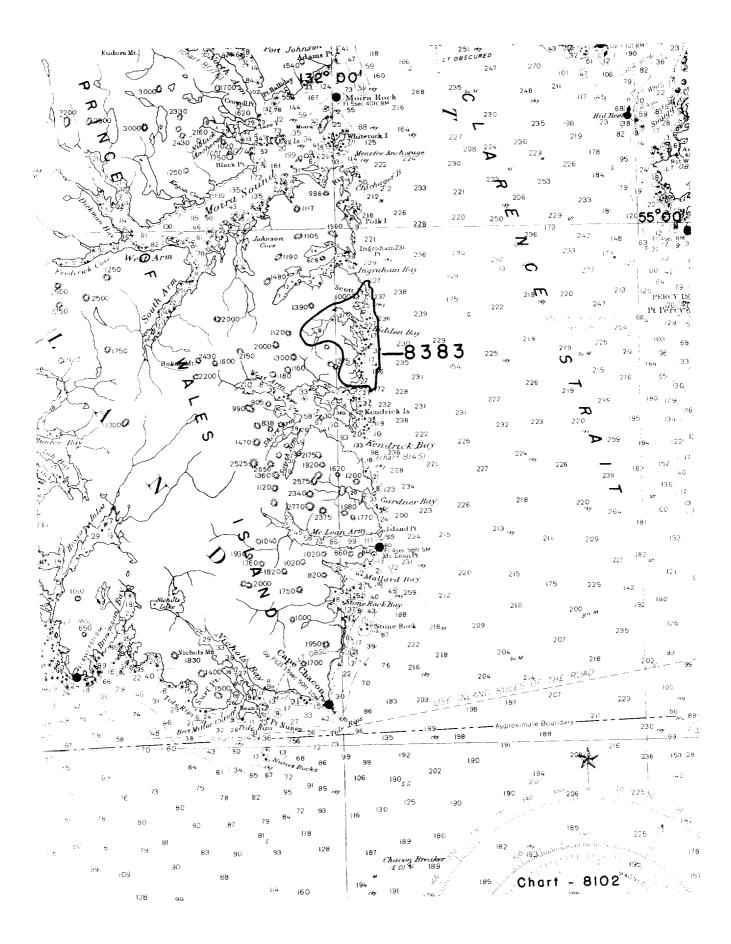
## 9. Additional Field Work

This is a very good basic survey, and no additional field work is required.

Examined and Approved:

Chier Marine Chart Division Associate Director

Hydrography and Oceanography



# NAUTICAL CHARTS BRANCH

## SURVEY NO. <u>H-8383</u>

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
///	CIAT		but before release to Review
1/10/61		E.E. Thomas	Considered Competition applied - Cht 8086 (Prelim)  Sully applied  After Verification  Sully applied  After Verification
3-9-61	New Chit	m. Rogersb	Sully apple Verification but before receio.
		1	
1 Yur 61	8002	En M Broging	Persone After Verification and Review No corr, on this seals anxion comp. appl., The 8086  Before After Verification Review Applied thru new
1//	***	0/	this seals anxider comp. appl., The 8/02 drugting
96/61	8/45	Helmer	Before After Verification Review Applied thru new
		301	chart 8086 in overlap. Fully appl in overlapt remaindor
11-20-78	8/45/	O. Stembel	Poisson After Verification and Review-Fully applied
ļ			
10/1/80	17432	Raitor	Full Before After Verification and Review, Ungo, Sugnature to Ducy 6
			to Dug 6
			Before After Verification and Review
		1,114	Before After Verification and Review
			·
			Before After Verification and Review
			,
			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.