8819

Diagram Cht. No. 8252-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

8819

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-49 (49) Office No. T-8819

LOCALITY

State Territory of Alaska

General locality Sitka Sound

Locality Katlian Bay, Lisianski Peninsula, Baranof Island

1948 and 1949

CHIEF OF PARTY
Clendon E. Boothe, Field
J.C. Partington, Field
Charles W. Clark, Photo. Office

LIBRARY & ARCHIVES

DATE MAR 25 1955

8-1870-1 (1)

DATA RECORD

T -8819

Project No. (II): Ph-49(49) Quadrangle Name (IV):

Field Office (II): Ship "PATTON" Chief of Party: Glendon E. Boothe (1948)
J.C. Partington (1948)

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Charles W. Clark

Instructions dated (II) (III): 5 August 1947 (field) Project CS-247
17 August 1951 (office)

Copy filed in Division of Photogrammetry (IV)
Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): MAY 8 1952 Date reported to Nautical Chart Branch (IV): MAY 16 1952

Applied to Chart No. Date: Date registered (IV): 22 Mar 1955

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): N.A. 1927 Vertical Datum (III): ~~Mean Sea Level~~ M.H.W.

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): GOMER, 1949

Lat.: 57° 10' 27.255" 843.1 m (1013.0 m) Long.: 135° 16' 49.911" 838.6 m (169.5 m) Adjusted X Unadjusted

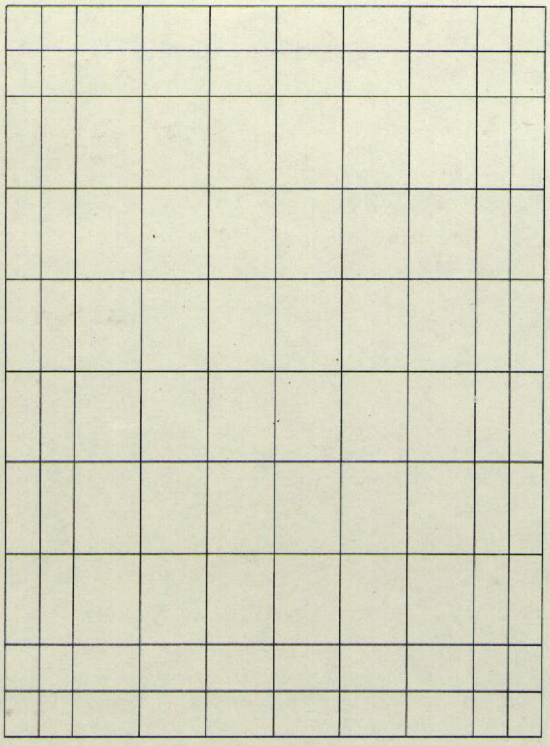
Plane Coordinates (IV): UTM State: Zone: 8

Y= X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

M-2618-12(4)



Areas contoured by various personnel
(Show name within area)
(II) (III)

Not applicable

DATA RECORD

Field Inspection by (II): Ship "PATTON" Date: Seasons 1948 & 1949

Planetable contouring by (II): None Date:

Completion Surveys by (II): None Date:

Mean High Water Location (III) (State date and method of location): Field inspection location during seasons 1948 & 1949 verified by stereoscopic inspection of photographs in photogrammetric office using 1942 photographs. EHK

Projection and Grids ruled by (IV): Wash. Office Date:

Projection and Grids checked by (IV): Date:

Control plotted by (III): J.L. Harris Date: 9-21-51

Control checked by (III): H.J. Atkins Date: 9-24-51

Radial Plot or Stereoscopic Control extension by (III): J.L. Harris & J.E. Deal Date: 10-24-51

Stereoscopic Instrument compilation (III): Planimetry Date:

Contours Date:

Manuscript delineated by (III): L. Graves Date: 2-27-52

Photogrammetric Office Review by (III): R.H. Barron Date: 3-10-52

Elevations on Manuscript checked by (II) (III): R.H. Barron Date: 3-10-52

M-2618-12(4)

Camera (kind or source) (III): U.S.C. & G.S. -9 lens - focal length 8.25 inches

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
9491 & 9492	7/8/42	10:45	1:10,000	6.7 ft. above M.L.L.W.
9494	7/8/42	10:46	1:10,000	6.7 ft. above " "
9517 to 9520 Incl.	7/8/42	11:01	1:10,000	6.6 ft. above " "
10568 to 10572 "	7/31/42	3:03	1:10,000	10.5 ft. above " "

Tide (III)

Diurnal

Ratio of Ranges	Mean Range	~~Spring~~ Range
	7.7	9.9
1.0	7.8	9.9

Reference Station: Sitka, Alaska
Subordinate Station: Olga Pt., Olga Strait, Alaska
Subordinate Station:

Washington Office Review by (IV): Everett H. Ramey Date: 5 Dec 1952

Final Drafting by (IV): Robinson, A.T. Date: 5-7-54

Drafting verified for reproduction by (IV): W.O. Hellwig Date: 6-9-54

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 1.0
Shoreline (More than 200 meters to opposite shore) (III): 22.5 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 1.5 " "
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: Identified:
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

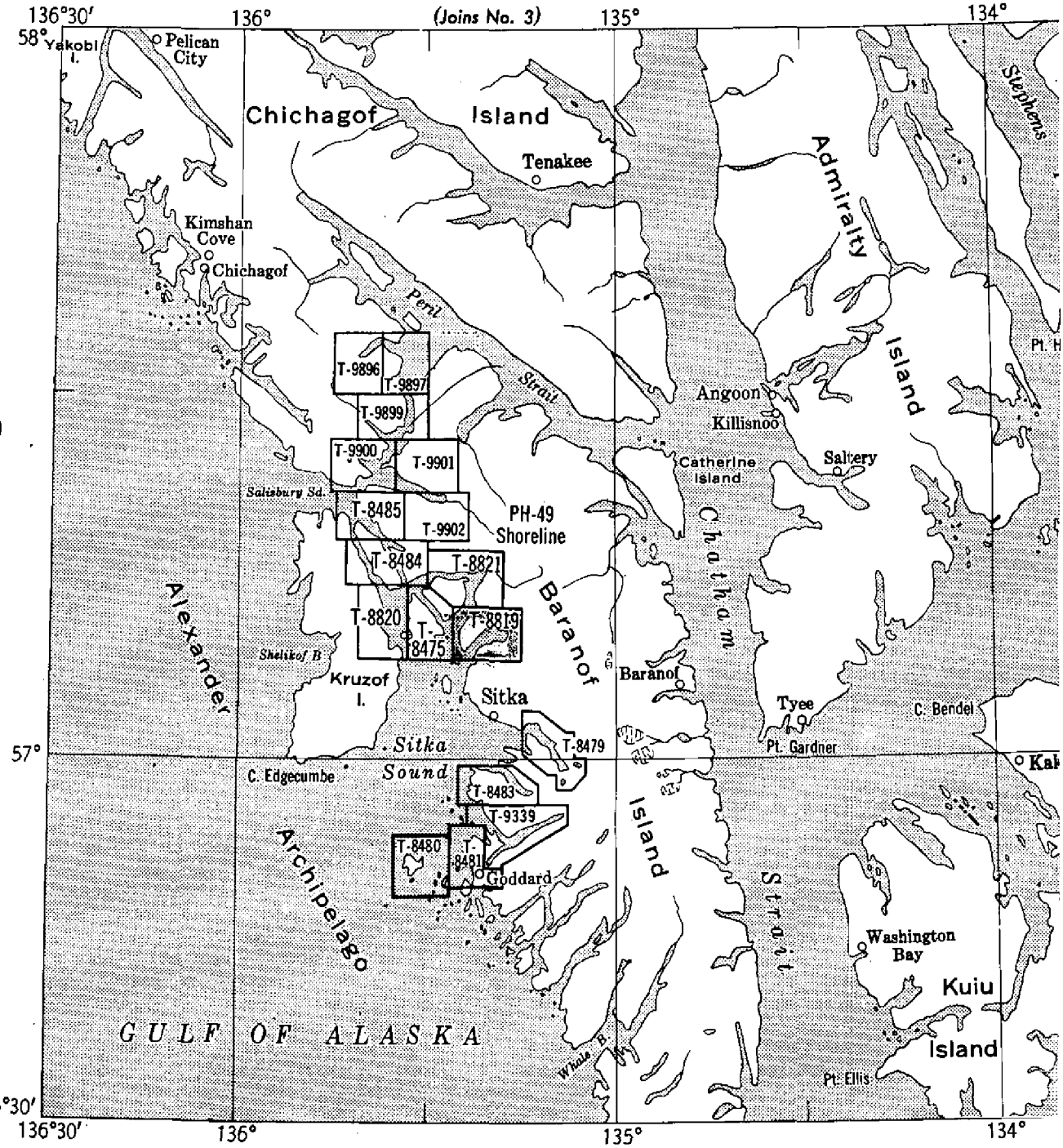
Remarks:

M-2618-12(4)

SHORELINE MAPPING PROJECT PH-49 (49)

ALASKA, Vicinity of Sitka Sound

Compilation scale 1:10,000



Summary to Accompany Descriptive Report T-8819

Shoreline survey T-8819 is one of seventeen similar surveys of Project Ph-49(49). It covers shoreline in Katlian Bay and along a portion of Nakwasina Sound which are water areas adjacent to Baranof Island.

Project Ph-49(49) is a graphic control survey. Field work in advance of compilation included the establishment of some additional horizontal control and the inspection of shoreline. This work was done in conjunction with field operations of Project CS-247.

Survey T-8819 was compiled at a scale of 1:10,000 using nine-lens photographs taken in 1942. It covers an area in latitude from 57° 08' to 57° 12' and in longitude from 135° 14' to 135° 25'.

Items registered under T-8819 will be a descriptive report and a lithographic print of the manuscript at a scale of 1:10,000.

FIELD INSPECTION REPORT
Map Manuscript No. T-8819
Project Ph-49(49)

Refer to special reports titled:

FIELD INSPECTION OF AIR PHOTOGRAPHS
S.E. ALASKA
OLGA STRAIT, NEVA STRAITS AND
SAINT JOHN BAPTIST BAY
U.S. COAST & GEODETIC SURVEY SHIP "PATTON"
PROJECT CS-247
GLENDON E. BOOTHE, CHIEF OF PARTY
1948

also

FIELD INSPECTION REPORT OF AIR PHOTOGRAPHS
S.E. ALASKA
NAKWASINA PASSAGE, NAKWASINA SOUND,
KRESTOF SOUND & KATLIAN BAY
U.S. COAST & GEODETIC SURVEY SHIP "PATTON"
PROJECT CS-247
J.C. PARTINGTON, CHIEF OF PARTY
1949

Both reports filed under project number in Div. of Photogrammetry

PHOTOGRAMMETRIC PLOT REPORT
Map Manuscript No. T-8819
Project Ph-49(49)

The radial plot for this map manuscript is described in a combined Photogrammetric Plot Report for Map Manuscripts Nos. T-8475 and T-8819 to T-8821 Incl. which is included in the Descriptive Report for T-8475.

Photogrammetry

MAP T- 8819 PROJECT NO. Ph-49(49) SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
✓ ULCER, 1949	III 886	N.A. 1927	57° 09' 32.364"			1001.2 (854.9)	
			135° 20' 45.816"			770.2 (238.5)	
✓ EPOCH 1949	III 886	"	57° 09' 48.577"			1502.7 (353.4)	
			135° 19' 56.180"			944.2 (64.3)	
✓ LABAN 1949	III 886	"	57° 09' 54.287"			1679.3 (176.7)	
			135° 18' 57.011"			958.2 (50.2)	
✓ GOMER 1949	III 886	"	57° 10' 27.255"			843.1 (1013.0)	
			135° 16' 49.911"			838.6 (169.5)	
✓ ADOBE 1949	III 886	"	57° 10' 35.405"			1095.2 (760.8)	
			135° 19' 16.798"			282.2 (725.9)	
✓ DERB Y 1949	III 886	"	57° 10' 43.739"			1353.0 (503.0)	
			135° 19' 55.585"			933.9 (74.2)	
✓ HEROD 1949	III 887	"	57° 11' 00.700"			21.7 (1834.5)	
			135° 20' 53.349"			896.2 (111.7)	
✓ JUBAL 1949	III 887	"	57° 10' 46.512"			1438.8 (417.3)	
			135° 20' 46.333"			778.4 (229.6)	
✓ BALAT 1949	III 886	"	57° 10' 15.931"			492.8 (1363.3)	
			135° 20' 45.451"			763.8 (244.4)	
✓ WAMUS 1949	III 886	"	57° 10' 01.203"			37.2 (1818.9)	
			135° 21' 24.420"			410.4 (598.0)	
✓ LIAN 1942	III 884	"	57° 09' 13.945"			431.4 (1424.7)	
			135° 22' 32.553"			547.3 (461.4)	
✓ KAT 1942	III 885	"	57° 08' 37.089"			1147.3 (708.8)	
			135° 23' 32.788"			551.4 (457.6)	

Page 9

1 FT. = .3048006 METER

COMPUTED BY: H.J. Atkins DATE 9/18/51 CHECKED BY: J.L. Harris DATE 9/20/51

M-2388-12

Photogrammetry

MAP T- 8819 PROJECT NO. Ph-49(49) SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE A.	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
✓ CORONA, 1947	878	1927/ N.H.	57° 11' 41.071"			1270.5 (585.6)	
			135° 23' 56.085"			941.9 (65.7)	
✓ MAGOG 1949	III 886	"	57° 09' 46.289"			1431.9 (424.1)	
			135° 17' 05.665"			95.2 (913.2)	
✓ KOOLOSH 1942	III 885	"	57° 08' 09.536"			295.0 (1561.1)	
			135° 22' 12.582"			211.6 (797.6)	
✓ SITKA 1942	III 885	"	57° 08' 27.880"			862.4 (993.6)	
			135° 22' 30.142"			506.9 (502.2)	
✓ EDGE 1942	III 884	"	57° 08' 51.104"			1580.9 (275.2)	
			135° 22' 24.666"			414.8 (594.1)	
✓ YEAST 1949	III 886	"	57° 08' 51.703"			1599.4 (256.7)	
			135° 22' 24.066"			404.7 (604.2)	
✓ CAMPO 1949	III 886	"	57° 09' 04.775"			147.7 (1708.4)	
			135° 21' 55.926"			940.3 (68.5)	
✓ CHIT 1897	878	"	57° 08' 24.923"			771.0 (1085.1)	
			135° 24' 55.031"			925.5 (83.6)	
✓ FAT 1897	573	"	57° 08' 43.632"			1349.7 (506.3)	
			135° 24' 04.314"			72.5 (936.4)	
✓ ANSKI 1897	III 881	"	57° 09' 00.841"			26.0 (1830.1)	
			135° 24' 32.059"			539.0 (469.8)	
✓ L1-A1 (USE) '42	III 884	"	57° 09' 28.40 "			878.6 (977.6)	
			135° 24' 50.01 "			840.7 (167.9)	
✓ DIPPER 1947	878	"	57° 10' 50.314"			1556.4 (299.6)	
			135° 24' 28.279"			475.1 (532.9)	

Page 10

1 FT. = .3048006 METER

COMPUTED BY: H.J. Atkins DATE 9/18/51 CHECKED BY: J.L. Harris DATE 9/20/51

M-2388-12

COMPILATION REPORT
Map Manuscript No. T-8819
Project Ph-49(49)

Side headings 31, 32, 34, 35, 36, 37, 38, and 40 of the Compilation Report for Map Manuscript No. T-8475 are applicable to T-8819.

33: SUPPLEMENTAL DATA:

Graphic control surveys used to supplement the photographs are as follows:

N-A-1942	Topograhic	Survey	T-6890
PA-A- 49	"	"	T-7129
PA-G-49	"	"	T-7129
PA-A-48	"	"	T-7088a

They were used in the same manner as described in the Compilation Report for T-8475, item 33.

39: JUNCTIONS:

Satisfactory junctions were made on the west with T-8475 and on the north with T-8821. There were no surveys on the east and south available to this office for junction purposes.
This survey junctions with T-6890 on the south at the west line. Eltk

46: COMPARISON WITH EXISTING MAPS:

A detailed comparison was made between Map Manuscript T-8819 and graphic control surveys listed in side heading 33 of this compilation report.

Disagreement in the location of the mean high-water line was found between the map manuscript and N-A 1942 between stations SITKA and KOOLOSH and with PA-G-49 between stations ULCER and LABAN. See item 62

The conclusion is believed to be the same as stated in side heading 46 of the Compilation Report for T-8475.

47: COMPARISON WITH NAUTICAL CHARTS:

Comparison was made by use of the vertical projector with

Nautical chart No. 8281, Scale, 1:40,000; Published June 1943 (5th Edition), last printed 3/5/51, and hand corrected 4/23/51.

Large disagreements between the location of the mean high-water line of the map manuscript and the shoreline shown on the chart were noted at the islands in the vicinity of stations ADOBE and DERBY and in the flat area east of Longitude 135° 17'.

Rocks awash shown on the chart which cannot be verified by office examination of the photograph are located as follows:

At Lat. 57° 11' 28" and Long. 135° 23' 26"

Lat. 57° 08' 14" and Long. 135° 22' 18"

See item 65

The above locations are approximate and apply to the position of the rocks in reference to the map manuscript.

Approved:

Fred A. Riddell

Fred A. Riddell
Officer-in-Charge
Portland Photogrammetric Office

Respectfully Submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Cartographer

48: GEOGRAPHIC NAMES LIST:

T-8819

According to the field inspection reports submitted by the Ship "PATTON" for the seasons of 1948 and 1949 Project CS-247 no new geographic names or changes in geographic names are recommended. The geographic names shown on this map manuscript were obtained from Nautical Chart No. 8281. An alphabetical list follows.

Southeastern Alaska (for title)
Sitka Sound "
Peril Strait "
Baranof Island*
Big Gavanski Island*
Katlian Bay*
Lisianski Peninsula
Lisianski Point
Nakwasina Sound*
Starrigavan Bay* (Old Sitka Harbor)
Cedar Cove*
Coxe River*
Katlian River*

Names underlined in red are approved.
11-7-52.
L. Heck.

* = B.G.N. decision

Review Report T-8819
Shoreline Survey
5 December 1952

62. Comparison with Registered Topographic Surveys.-

T-2289	1:40,000	1896-97
T-2304	1:20,000	1897
T-6890	1:5,000	1942

There is general agreement between T-8819 and these prior surveys. For features clearly visible on the photographs in which case comparison was exact, T-8819 was definitely superior to the above surveys in accuracy of both position and shape. Survey T-8819 may have minor errors (see item 66) but it should supersede the above surveys for nautical charting purposes for common areas.

63. Comparison with Maps of Other Agencies.- None

64. Comparison with Contemporary Hydrographic Surveys.-
H-7787 1:10,000 1949
Survey T-8819 shows two small stretches of MLLW line at latitude 57° 09' 45" and longitude 135° 17' 15" which are in contradiction with soundings. Because streams flow into Katlaan Bay at these points some deposition of material would be probable. Therefore, the MLLW line should be retained. Otherwise, the two surveys are in agreement. (The Hydro MLLW line retained) L.L.V

65. Comparison with Nautical Charts.-
8281 1:40,000 1943 corrected to 51 3/S
Reference Item 47. The first rock referred to is in a foreshore area and a small marshy islet was field inspected in this same position which is believed to be an adequate portrayal of the area. For the area of the second rock, there is some indication on the photographs of a reef which is depicted on the chart.

Changes made to the manuscript during this review are shown in red.

66. Adequacy of Results and Future Surveys.- Exact detailing of some shoreline features was probably not accomplished because photo-interpretation was difficult due to overhang and shadows obscuring small bays and streams. However, it is believed that errors resulting from this are small and of little importance for nautical charting. The shoreline from Lisianski Point to Nakwasina Sound and on Big Gavanski Island was not field inspected and is subject to errors of office interpretation.

This survey is adequate for nautical charting purposes and complies with project instructions except as noted above.

Reviewed by
Everett H. Ramey
Everett H. Ramey

L C Lundy
Chief, Review Section
Div. of Photogrammetry

Acting

Wallace A. Bruder
Chief, Nautical Chart Branch
Division of Charts GFS

Chief, Div. of Photogrammetry

1938

Carl O. Hearon
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T. 8819

Reviewed 5 Dec. 1952

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
			Before After Verification and Review
1958	Reconstr. 8281	Jack Allen	~~Before~~ After Verification and Review JMA
			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
			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.