

9393

Diag Cht, Nos. 1270 and 1272-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-60(49)B Office No. T-9393

LOCALITY

State Louisiana

General locality Breton Sound

Locality Breton Island

194 50

CHIEF OF PARTY

P. L. Bernstein, Chief of Field Party

J. E. Waugh, Tampa Photogrammetric

Office

LIBRARY & ARCHIVES

DATE April 19, 1957

B-1870-1 (1)

9393

# DATA RECORD

T-9393

Project No. (II): Ph-60(49)B      Quadrangle Name (IV):

Field Office (II): Gulfport, Mississippi

Chief of Party: Percy L. Bernstein

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: J. E. Waugh

Instructions dated (II) (III): 8 August 1950

Copy filed in Division of  
Photogrammetry (IV)

*Office Files*

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:20,000**

Stereoscopic Plotting Instrument Scale (III): **Inapplicable**

Scale Factor (III): **None**

Date received in Washington Office (IV):

**JUN 11 1952**

Date reported to Nautical Chart Branch (IV):

**JUN 23 1952**

Applied to Chart No.

Date:

Date registered (IV):

**3-24-57**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**

Vertical Datum (III):

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): **COOL, 1951**

Lat.: **29° 27' 46".43 (1429.5m.)**

Long.: **89° 12' 59".66 (1607.5m.)**

~~checked~~  
Unadjusted

Plane Coordinates (IV):

State: **LA**

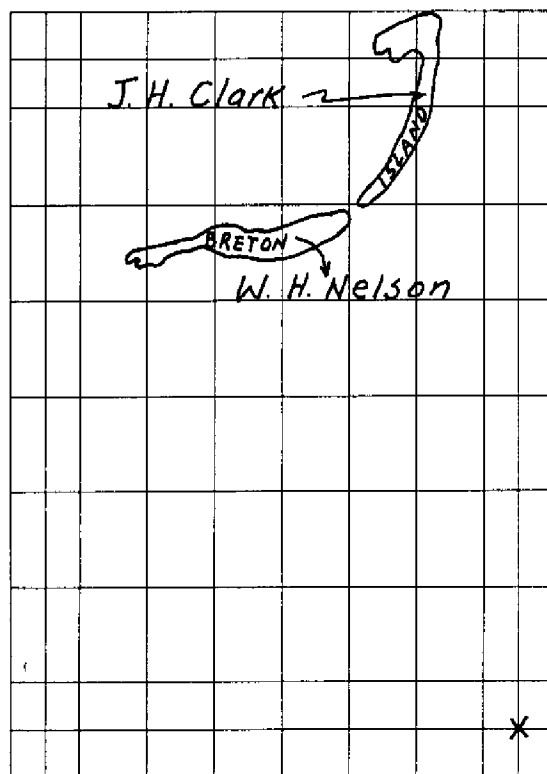
Zone: **South**

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.



\* 29°22.5'  
89°07.5'

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

# DATA RECORD

Field Inspection by (II): **W. H. Nelson**  
**J. H. Clark**

Date: Nov-Dec 1950

Planetable contouring by (II): **W. H. Nelson**  
**J. H. Clark**

Date: Nov-Dec 1950

Completion Surveys by (II): **None**

Date:

Mean High Water Location (III) (State date and method of location):

**March 1951 Air Photo. compilation**

Projection and Grids ruled by (IV): **T. L. J. (W.O.)**

Date: **24 Feb. 1951**

Projection and Grids checked by (IV): **H. D. W. (W.O.)**

Date: **26 Feb. 1951**

Control plotted by (III): **I. I. Saperstein**

Date: **1 June 1951**

Control checked by (III): **R. J. Pate**

Date: **8 June 1951**

~~Radial Plot or Stereoscopic~~  
~~Control extension~~ by (III): **M. M. Slavney**

Date: **4 Sept. 1951**

Planimetry  
Stereoscopic Instrument compilation (III): **Inapplicable**  
Contours

Date:

Date:

Manuscript delineated by (III): **R. E. Smith Jr.**

Date: **9 Jan. 1952**

Photogrammetric Office Review by (III): **J. A. Giles**

Date: **14 March 1952**

Elevations on Manuscript  
checked by ~~W~~ (III): **J. A. Giles**

Date: **13 March 1952**

Camera (kind or source) (III): U. S. C. & G. S. Nine-lens camera 8.24" focal length

Number	Date	PHOTOGRAPHS (III)			Stage of Tide
		Time	Scale		
25860	9 May 1950	10:04	1:20,000	0.5 MLW <i>SLR</i>	
25861	"	10:05	"	0.5	
25863	"	10:11	"	0.5	

Tide (III)

Reference Station: **PENSACOLA**  
Subordinate Station: **CHANDELEUR LIGHT**  
Subordinate Station:

Diurnal

Ratio of Ranges	Mean Range	Spring Range
0.9	-	1.2
	-	1.3

Washington Office Review by (IV): *Everett H. Ramsey*

Date: *24 Feb 1955*

Final Drafting by (IV): *John H. Frazier*

Date: 7 Dec, 1955

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **1**

Shoreline (More than 200 meters to opposite shore) (III): **12**

Shoreline (Less than 200 meters to opposite shore) (III): **1**

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): **1** Recovered: 0 Identified: 0

Number of BMs searched for (II): **0** Recovered: 0 Identified: 0

Number of Recoverable Photo Stations established (III): **3**

Number of Temporary Photo Hydro Stations established (III): **none**

Remarks:

**2 triangulation stations established.**

Summary to Accompany Topographic Map *T-9393*

This topographic map is one of eleven similar maps of Part B of Project Ph-60. Part B covers the islands in Mississippi, Chandeleur and Breton Sounds in Louisiana and Mississippi.

Project Ph-60 is a graphic compilation project. Field work in advance of compilation included the establishment of some additional control, complete field inspection, the delineation of 5-foot contours directly on the photographs by planetable methods, and the investigation of geographic names and political boundaries.

None of the maps of Part B of Project Ph-60 were field edited. All were compiled at a scale of 1:20,000, using nine-lens photographs taken in 1950. With the addition of hydrographic data, these maps will be forwarded to the Geological Survey for publication as standard 7-1/2-minute topographic maps.

Items registered under each map number will include a descriptive report, ~~cloth-backed~~ copies of the manuscript and the published map.

*Cronar*

*web*

## 2. AREAL FIELD INSPECTION

Land area of this quadrangle is composed solely of Breton Island; a low, narrow, sand and mangrove swamp strip approximately five miles in length, roughly crescent in shape and separating the Gulf of Mexico and Breton Sound.

The Gulf of Mexico side of the island is a sand and shell beach reaching well around each end of the island. The Sound side is mangrove swamp with small scattered areas of marsh. Mangrove is not restricted to swamp, however. In some areas, particularly the mid-section of the island, mangrove is to be found growing on the higher ground immediately west of the ridge along the beach. This is attributed to the gradual advance of the sand and shell beach westwardly over the marsh.

A long shoal running southwestwardly from North Point, the north end of the island, creates a small shallow natural harbor affording protection from weather except from the southwest. Because of the shallow water it cannot be used by boats of more than  $3\frac{1}{2}$  ft. draft; consequently nothing other than fishermen with local knowledge of the area can use it. Another long shoal extends southwestwardly from the west end of the island beyond the limits of the map.

Gas and oil wells have been brought in the immediate vicinity with one in Berton Sound just offshore of North Point. This is a gas well which is not producing because of difficulties and expense of pipeline construction.

This island is subject to constant change in shoreline under normal conditions with radical changes being made by hurricane tides. As an example, at the time of photography the island was unbroken as compared to the broken island as now charted. A hurricane passed to seaward of this area in September 1950 and the resulting tide again separated the island but at a point north of the break as now charted. As photography was of a recent date and no unusual changes had occurred little difficulty was encountered in photographic interpretation. The photographic tones have a wide gradation with some tones of land features also representing features below mean high water. Sand and shell appear as white; mangrove on solid ground is a dense gray tone; living mangrove in marsh is a gray of less density than the mangrove on solid ground while mangrove which has been killed by cold is still a lighter gray and has a brownish color in nature; marsh covered with grass is a light gray tone; ponds are a very dense gray except when light-struck; higher sand dunes are covered with vegetation around their bases and part way up their sides with scattered clumps on top; level areas of fast ground covered with grass is the lightest of all the gray tones. Shoal areas appear in various tones, the lightest gray results from bare sand ranging to a dense gray from sand covered with marine vegetation or by deeper water. In the cove near the north end of the island currents have made deposits of sand on mud which cause a streaked

appearance on the photographs. There are areas of discoloration in surrounding waters. This results from the junction of the relatively clear sea water of Breton Sound and the layer of discolored fresh water from the Mississippi River moved about by wind and tidal currents. These junction lines are very easily recognized when passing over them in boats.

See photograph No. 25862 for interior field inspection notes.

3. HORIZONTAL CONTROL

Two new third-order triangulation stations, COOL 1950 and BRETON ISLAND LIGHT 1951, were established on Breton Island plus a fourth-order position of recoverable topographic station BIDE 1950 and BRETON ISLAND DAYBEACON 1951. All were identified on photograph 25860 or 25862.

See "Special Report, Supplemental Control, Project Ph-60(49), Breton Island, Louisiana", forwarded to the Washington Office 11 April 1951 and "Special Report, Supplemental Control, Project Ph-60(49)B, Breton and Chandeleur Sounds", to be forwarded at a later date. See 514

Triangulation station BRETON ISLAND 1921 was reported lost.

4. VERTICAL CONTROL

There was no existing vertical control on Breton Island and none was established. Vertical control for contours was obtained from the water level corrected for height of tide from "Tide Tables, Atlantic and Gulf Coasts."

5. CONTOURS AND DRAINAGE

Contouring was done by standard planetable methods directly on the photographs.

All elevations above five feet are peaks of small shifting dunes. No contours were shown.

There is no definite drainage pattern other than tidal drainage in the marsh and mangrove swamp.

6. WOODLAND COVER

There is no woodland cover on Breton Island other than mangrove.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line along the Gulf of Mexico and around each end of the island was located by reference measurements from points of identifiable

detail. The mean high water line around the break in the island near the north end was located directly on the photographs by planetable traverses beginning and ending on points of identifiable detail.

Because of the steep beach the mean low water line lies from 2.0 meters to 3.5 meters offshore of the mean high water line along the Gulf shore and well around each end of the island. In areas exposed to the surf from the open Gulf a shifting bar approximately 5 meters in average width lies approximately 25 meters offshore of the mean high water line and is awash at mean low water. It is broken in many places and changes shape and position constantly.

When the area was visited at the time of low water the approximate mean low water line along the Sound side of the island was delineated.

There are no landing facilities or shoreline structures of any type on the island.

#### 8. OFFSHORE FEATURES

Cribbing around a capped gas well in Breton Sound is offshore of North Point and is fifteen feet above mean high water.

Breton Island Shoal extends several miles in a generally southwest direction from the west end of the island and has less water over it now than is shown on current charts of the area. The outer end of the shoal is not marked. *Nautical*

A second shoal makes off in a generally southwest direction from North Point for approximately two miles and is marked at its outer end by Breton Island Daybeacon.

A small detached shoal is located southeast of Breton Island Daybeacon and approximately midway between the daybeacon and Breton Island. It does not bare at any stage of the tide.

There are no other offshore features.

#### 9. LANDMARKS AND AIDS

There are neither landmarks for charts, interior landmarks, nor aeronautical landmarks in the area.

Two fixed aids to navigation exist and were located. Breton Island Light (No. 3850, "Light List, Atlantic and Gulf Coasts") was located by third-order triangulation. Breton Island Daybeacon was located by triangulation but with less than third-order accuracy.

10. BOUNDARIES, MONUMENTS, AND LINES

This entire island lies within Police Jury Ward Four, Plaquemines Parish, Louisiana. See "Special Report, Boundaries, Project Ph-60(49)", to be submitted at a later date. *(Report filed under project data, Div. of Photogrammetry)*

No original section corners were recovered. A Bureau of Land Management field unit arrived on Breton Island to reestablish section corners. As this was after field work was complete, no results could be obtained. The Bureau of Land Management unit was requested to see that the Washington Office was furnished with results of their survey.

11. OTHER CONTROL

In addition to the third-order control the following recoverable topographic stations were established:

BIDE 1950 by triangulation methods of less than third-order accuracy;  
BONE 1950 and CHOP 1950 were identified and their positions are to be determined by the radial plot.

12. OTHER INTERIOR FEATURES

There are no other interior features.

13. GEOGRAPHIC NAMES

See "Special Report, Geographic Names, Project Ph-60(49)" to be submitted at a later date. *(Report filed in Geographic Names Section, Div. of Charts) enr*

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

"Special Report, Supplemental Control, Project Ph-60(49)B, Breton Island, Louisiana", forwarded to the Washington Office 11 April 1951.  
*(Report filed with GTZ(48965) in Bureau Archives) enr*

"Special Report, Supplemental Control, Project Ph-60(49)B, Breton and Chandeleur Sounds", to be forwarded at a later date. *(Report filed under Project data, Div. of Photogrammetry) enr*

"Special Report, Boundaries, Project Ph-60(49)", to be forwarded at a later date.

"Special Report, Geographic Names, Project Ph-60(49)", to be forwarded at a later date.

Letter of transmittal 60-4, data, quadrangle T-9393( ), forwarded to Tampa Office 16 April 1951.

Letter of transmittal 60-3, data, Supplemental Control, Project Ph-60(49)B, Breton and Chandealeur Sounds, to be forwarded at a later date.

Form 567, to be forwarded at a later date.

Submitted  
12 April 1951

*William M. Reynolds*  
William M. Reynolds  
Cartographic Survey Aid

Approved  
16 April 1951

*Percy L. Bernstein*

Percy L. Bernstein  
Chief of Party

**PHOTOGRAMMETRIC PLOT REPORT**

**This report is filed as part of the Descriptive Report  
for T-9383 and covers maps T-9383 thru T-9393.**

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: J. I. Saperstein.

DATE 21 May 1951

CHECKED BY: R. J. Pate

DATE.

23 May 1951

M-2388-12

12

COMPILATION REPORT T-9393

PHOTOGRAMMETRIC PLOT REPORT.

Submitted with T-9383.

31. DELINEATION.

Compiled by graphic method. No unusual method of compilation was employed. The field inspection was adequate.

32. CONTROL.

A sufficient number of well placed secondary control points were established by the radial plot.

33. SUPPLEMENTAL DATA.

None.

*See § 14*

34. CONTOURS AND DRAINAGE.

Reference Item 5.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate. For low-water line information, refer to Item 7.

36. OFFSHORE DETAILS.

Reference Item 8.

37. LANDMARKS AND AIDS.

Reference Item 9.

38. CONTROL FOR FUTURE SURVEYS.

Three recoverable topographic stations are being submitted on Form 524 with this report. They have been listed under Item 49.

39. JUNCTIONS.

Entire quadrangle is surrounded by water.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

*See §66*

41. PUBLIC LAND LINES.

Three section corners were established by the Bureau of Land Management and section lines shown accordingly. (Reference letter dated 12 June 1951 from Bureau of Land Management and letter dated 15 June 1951 from Comdr. Percy L. Bernstein. Copies of these letters are being submitted with this report.)

46. COMPARISON WITH EXISTING MAPS.

None.

*See §62*

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison has been made with USC&GS Nautical Chart No. 1272, scale 1:80,000, published March 1947, (ninth edition), and corrected to 4 December 1950. The shoreline has changed since the chart was made. The change was due chiefly to hurricane tides. Reference Item 2.

*See §65*

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.

Rexford E. Smith, Jr.  
Rexford E. Smith, Jr.  
Cartographic Photo Aid

APPROVED AND FORWARDED:

J. E. Waugh  
J. E. Waugh, Chief of Party

50

## PHOTOGRAMMETRIC OFFICE REVIEW

T- 9393

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.G. 4. Manuscript size J.G.

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G. 7. Photo hydro stations XX 8. Bench marks XX 9. Plotting of sextant fixes J.G. 10. Photogrammetric plot report J.G. 11. Detail points J.G.

## ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline J.G. 13. Low-water line J.G. 14. Rocks, shoals, etc. J.G. 15. Bridges XX 16. Aids to navigation J.G. 17. Landmarks XX 18. Other alongshore physical features J.G. 19. Other along-shore cultural features XX

## PHYSICAL FEATURES

20. Water features J.G. 21. Natural ground cover J.G. 22. Planetable contours XX 23. Stereoscopic instrument contours XX 24. Contours in general XX 25. Spot elevations J.G. 26. Other physical features J.G.

## CULTURAL FEATURES

27. Roads XX 28. Buildings J.G. 29. Railroads XX 30. Other cultural features XX

## BOUNDARIES

31. Boundary lines J.G. 32. Public land lines XX

## MISCELLANEOUS

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy overlay J.G. 37. Descriptive Report J.G. 38. Field inspection photographs J.G. 39. Forms J.G. 40. Jesse A. Giles Jesse A. Giles William A. Rasner  
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

## FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

\_\_\_\_\_  
Compiler\_\_\_\_\_  
Supervisor

43. Remarks:

M-2623-12

Review Report  
Topographic Map T-9393  
24 February 1955

62. Comparison with Registered Topographic Surveys:

T-1097	1:20,000	1869
T-3920	"	1922

Considerable changes in shoreline have occurred since these surveys. For the area it encompasses, T-9393 is to supersede these prior surveys for nautical charting purposes.

63. Comparison with Maps of Other Agencies: None.

64. Comparison with Contemporary Hydrographic Surveys: None.

65. Comparison with Nautical Charts:

1272	1:80,000	1947, corrected to 54-7/26
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The advance print of T-9393 was applied in its entirety to this chart. No changes affecting the chart were made during this review.

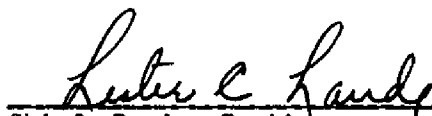
66. Adequacy of Results and Future Surveys:

This map meets the National Standards of Map Accuracy and fulfills Bureau requirements.

Reviewed by:

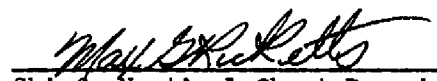
  
Everett H. Ramey

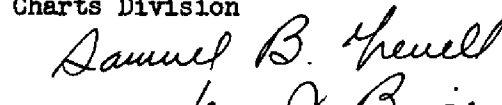
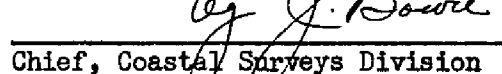
APPROVED:

  
Chief, Review Section  
Photogrammetry Division

  
Chief, Photogrammetry Division

16 April '57

  
Chief, Nautical Chart Branch  
Charts Division

  
by   
Chief, Coastal Surveys Division

# TIDE COMPUTATION

PROJECT NO. Ph. 60(49)T. 9393

Time and date of exposure 10:05 9 May 1950 Reference station PENSACOLA Mean range —  
 Date of field inspection 29 March 1951 Subordinate station CHANDELEUR LIGHT Ratio of ranges 0.9

	Time		Height feet	Height x Ratio of ranges	Time h. m.	Time h. m.
	h.	m.				
High tide	16	31	1.0	0.9	16	31
Low tide	3	05	0.0	0.0	-0	30
Duration of rise or fall	13	26		0.9	16	01

	h.	m.	feet	Photo. No.
Time H. T. or L. T. <u>4:44 AM</u>	16	01	0.9	25861
Required time	10	05	0.4	
Interval	5	56	0.5	
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				

48. GEOGRAPHIC NAME LIST.BRETON ISLAND\*BRETON ISLAND SHOALBRETON NATIONAL WILDLIFE REFUGEBRETON SOUNDGULF OF MEXICOLOUISIANANORTH POINTPLAQUEMINES PARISHPOLICE JURY WARD 4*(Not mapped) ENK*WEST POINT

\*Name not shown on map manuscript since feature could not be delimited satisfactorily from photographs.

*Names underlined in  
red are approved.*

*8-15-52  
L. HECH*



49. NOTES FOR THE HYDROGRAPHER.

The following topographic stations may be useful to the hydrographer:

BONE, 1950

BIDE, 1950

CHOP, 1950

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
WASHINGTON 25, D.C.

COPY

June 12, 1951

Commanding Officer,  
Coast and Geodetic Survey,  
P. O. Box 858,  
Gulfport, Mississippi

Dear Sir:

Pursuant to my conversation with Mr. Lampton, instrument man with the C. & G. S., on Breton Island, March 29, 1951, there are enclosed herewith, sketch plats showing ties thereon between corners of the public land net and triangulation stations established on Breton Island by the C. & G. S.

The land net was extended from an identified land corner near Fort Phillips in the delta area and represents the first time that the rectangular system of surveys has been extended over Breton Island. No other islands in the Chandeleur - Breton Island chain were surveyed in the public land system.

Yours very truly,

/s/ Norville E. Shearer  
Norville E. Shearer  
Cadastral Engineer

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
P. O. BOX 858  
BULFORD, MISSISSIPPI

COPY

15 June 1951

To: Officer in Charge  
Tampa Photogrammetric Office  
U. S. Coast and Geodetic Survey  
P. O. Box 1689  
Tampa, Florida

Subject: Land Lines, Project Ph-60(49) - Quadrangle T-9393

There is enclosed a letter to me from Bureau of Land Management and two township diagrams showing section corners recently established by that agency on Breton Island and ties made by them to control of this Bureau. This information was supplied at the request of this party as explained in Field Inspection Report for Map T-9393.

/s/ Percy L. Bernstein  
Percy L. Bernstein  
Commander, U.S.C.&G.S.  
Chief of Party

IYF/c



# History of Hydrographic Information for T-9393

Hydrography was added to the map manuscript in accordance with the Photogrammetry Division General Specifications of 18 May 1949.

Depth curves and soundings are in feet at Mean Lower Low Water datum and originate with the following C&GS Nautical Chart:

<u>No.</u>	<u>Scale</u>	<u>Corrected to</u>
1272	1:80,000	8/22/55

Hydrography was compiled by Bernard J. Colner on 4 June 1956 and verified by O. Svendsen.