

10890

Diag. Cht. No. 1. Inset.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. Ph-5911 Office No. T-10890

LOCALITY

State U. S. Possession

General locality Caribbean Sea

Locality Swan Islands

1959-60

CHIEF OF PARTY

E.L.Jones, Chief of Party

L.W.Swanson, Div. of Photo. Wash., D.C.

LIBRARY & ARCHIVES

DATE August 3, 1962

USCOMM-DC 5087

10890

DESCRIPTIVE REPORT - DATA RECORD

T - 10890

Project No. (II): PH-5911

Quadrangle Name (IV):

Field Office (II): Ship EXPLORER

Chief of Party: E. L. Jones

Photogrammetric Office (III): Washington, D. C.

Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III): 19 January 1960

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Stereoplanigraph

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Approx. 1:12,000

Scale Factor (III):

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 3/12/62

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 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): Swan Island (USAF 1959) 1960

Lat.: 17 24 15.295

Long.: 83 56 24.080

Adjusted
~~Unadjusted~~

Plane Coordinates (IV): UTM

State:

Zone: 17

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.

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

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

Inapplicable

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): James B. Allen

Date: 12-15 March
1960

Planetable contouring by (II): Inapplicable

Date:

Completion Surveys by (II): Inapplicable

Date:

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

Office interpretation of photographs using field inspection
notes as guide

Projection and Grids ruled by (IV): Washington Office

Date: January 1960

Projection and Grids checked by (IV): " "

Date: "

Control plotted by (III): R. Puhl

Date: Sept. 1960

Control checked by (III): R. Kelly

Date: Sept. 1960

Radial Plot or Stereoscopic

Control extension by (III): W. A. Kuncis

Date:
Feb. 1960

Planimetry W. A. Kuncis

Stereoscopic Instrument compilation (III):

~~Contours~~

Date: " "

Date:

Manuscript delineated by (III):

R. Fuechsel and R. Kelly - Graphic Method

Date: Sept. 1960

Photogrammetric Office Review by (III): E. H. Ramey

Date: " "

Elevations on Manuscript
checked by (II) (III):

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): U.S. Air Force - Single-lens - Metrogon

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
814, AST6,1370				(Approx.)
1 thru 10	24 Nov.1959	1813-1822 (Greenwich)	1:10,000 (Approx.)	at MHW

Tide (III) *

Reference Station:
Subordinate Station:
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	0.66	

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

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

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

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

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):

Number of Temporary Photo Hydro Stations established (III):

Remarks: * Tides observed simultaneously with field operations.

FIELD INSPECTION REPORT
Swan Islands
Project CS-08700 (Ph-5911)
1960

Instructions

Director's Instructions, reference 22 MEK, dated 4 Dec. 1959.
Director's Instructions, reference 22 MEK, dated 5 Jan. 1960.

Photographs

U.S. Air Force photography taken 24 November 1959 at stage of tide near high water.

Manuscript

Preliminary manuscripts were furnished the ship at Panama while enroute to Swan Islands as follows:

Sheet A, West and Great Swan Island, scale about
1/10,000.
Sheet T-10809, Swan Islands, scale about 1/10,000.
10890 EHR

These manuscripts provided excellent hydrographic control and shoreline information. There were no discrepancies found in the field. The limited time schedule (seven days) for all field operations precluded regular hydrographic development of the area. Consequently, only about half of the photo points located on the manuscript were ~~field and~~ used. The depths determined by stereoscopic means and shown by the Washington Office on the manuscripts gave only a very general indication of the depths. On this particular project this information was little used and not believed warranted.

The photogrammetric work on Swan Islands was limited by necessity to the field identification of photo points for hydrographic signal sites and such shoreline information as could be easily obtained in the vicinity of the station.

The field inspection was done 12-15 march 1960 by Ensign James B. Allen, assisted by Captain Edmund L. Jones, during the first 1½ days of field work. Pricking cards are submitted for the following hydrographic signals and control stations:

Station Name	Photo Point	Photo Identified
Ace		Subs. sta. from photo pt. #810
Air	"A"	Direct
Arm	#815	Direct
Bid	#807	Direct
Bud	#826	Direct
Bee	#901	Direct
Cry		Sextant cuts.
Cut		Subs. sta. from photo pt #829.
Dar		" " " " " 813.
Dog		" " " " " 817.
End		" " " " " 704.
Est		" " " " " 711.
Eva	#709	Direct
Fin	#713	Direct
Gut	#822	Direct
Mat		Subs. sta. from photo pt. 805.
Nig		Sextant cuts.
Tip	#710	
Win.		Located from End.
Yam	#824	Direct
Zip	#706	Direct
Swan I		Distances
AZ MK		
Swan I,		Distances
1959		
Cay		Subs. Sta. from photo pt #901 or Bee.

Photo Interpretation

The attached four by five inch photos were taken by Mr. Bryan Hale and are intended to show shoreline conditions and assist

①



②



③



4



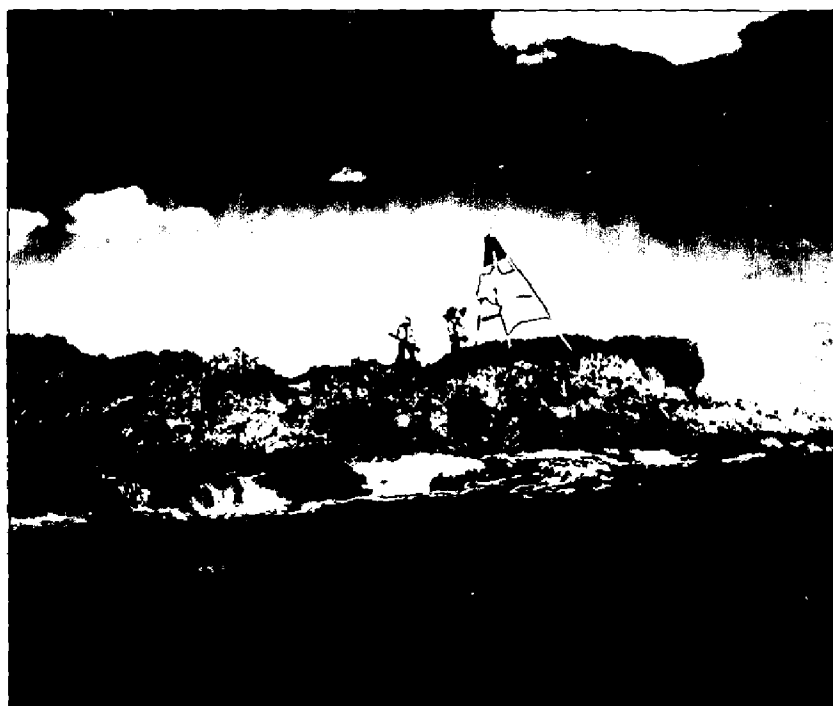
5



6



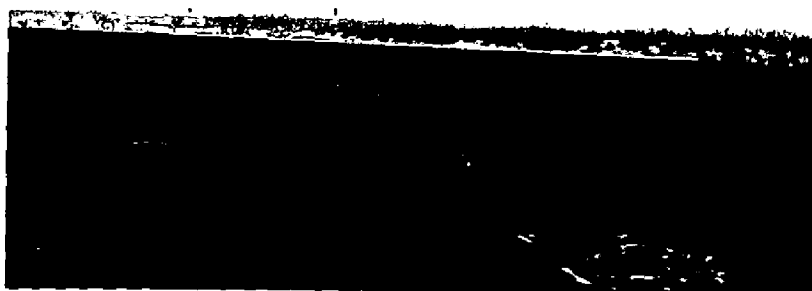
7

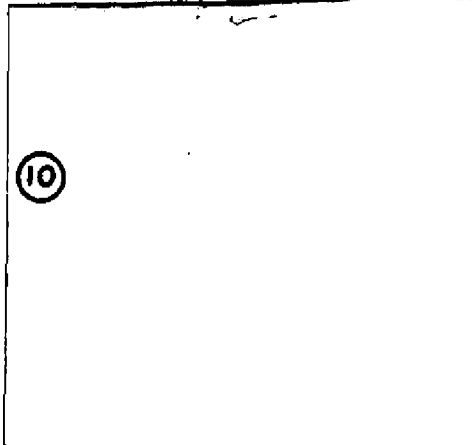


8



9





UNCLASS EXPLORER

SHORELINE MANUSCRIPT

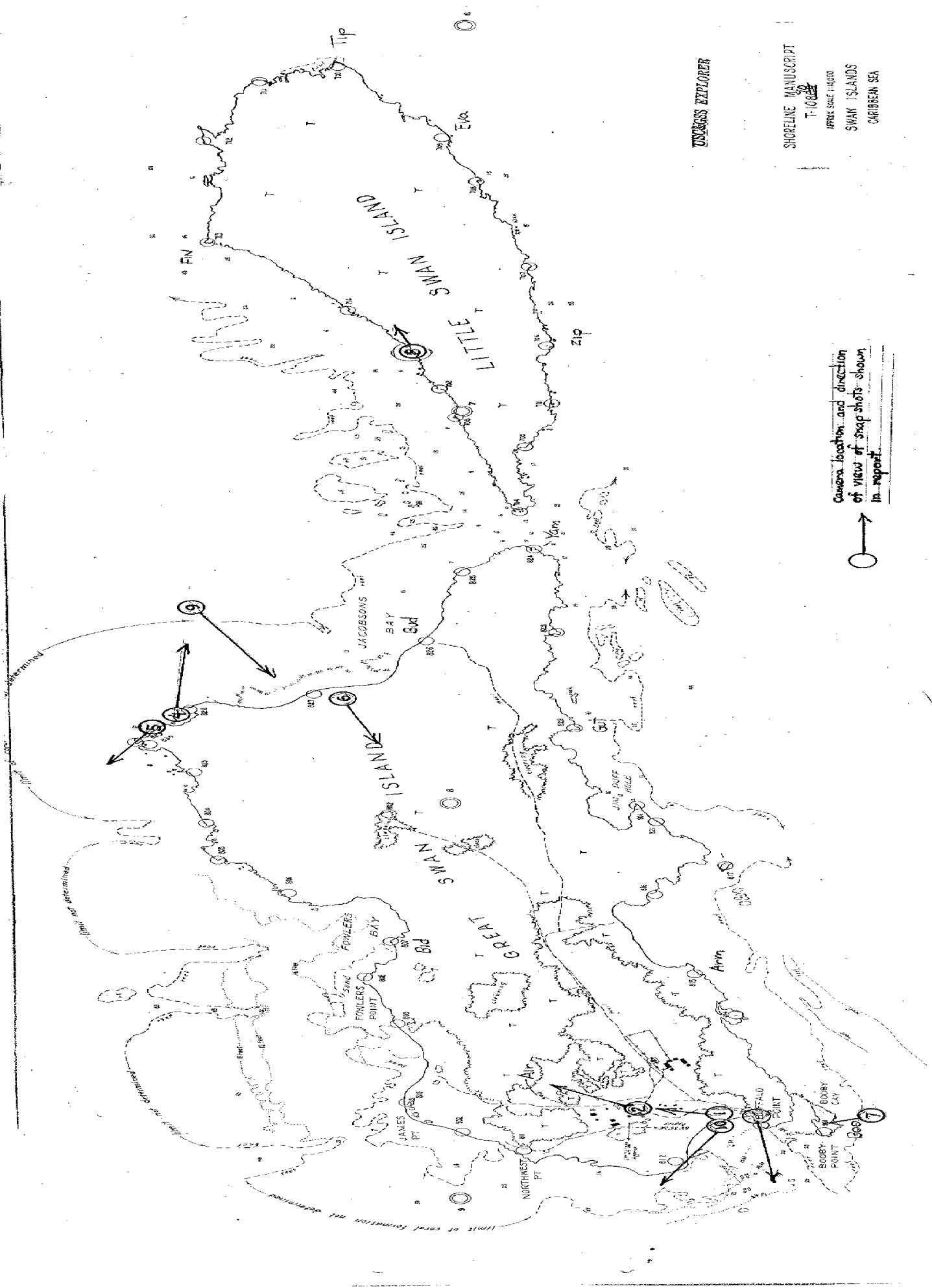
T-1084

APPROX SCALE 1:10,000

SWAN ISLANDS

CARIBBEAN SEA

Camera location and direction
of view of snap shots shown
in report.



PHOTOGRAMMETRIC PLOT REPORT
PROJECT PH-5911
SWAN ISLANDS
February-September 1960

21. Area Covered:

T-10890 at a scale of 1:10,000 which covers all of Swan Islands in the Caribbean Sea.

22. Method:

In February 1960 a three-model bridge was set for horizontal control using U.S. Air Force photographs taken November 1959 and office identified control. Compilation was completed simultaneously with the bridging operations. This compilation, not tied to datum and without projection lines, served as a base for hydrographic work during the 1960 season.

Only two of the six horizontal control stations established by the hydrographic party were used to fix the datum of the bridge. See# 23. These stations were referenced to the original bridge pass points and mathematically adjusted. The adjusted positions were then plotted on a new manuscript and used in the revised compilation.

23. Adequacy of Control:

The field party established six unchecked horizontal positions by tellurometer traverse methods. This traverse was referenced to a horizontal position and an azimuth station established by the U.S. Air Force. As stated above, only two of these stations, "B00" and "WIN", could be referenced to photo points to control the photogrammetric bridge. Thus the bridge is unchecked.

24. Supplemental Data:

None.

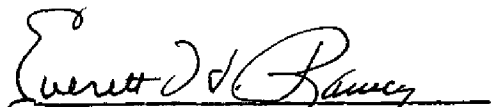
25. Photography:

The diapositives were made from duplicate copy of the original film. The quality as to definition and accuracy was thus poor with a prevalence of residual parallax. Sketch and Control List are attached.

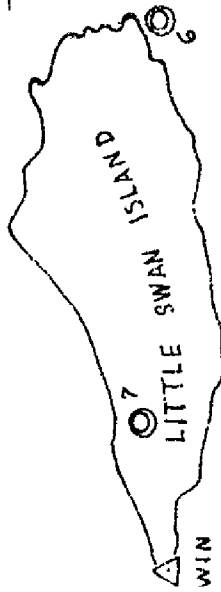
Submitted by:


Willard A. Kuncis 1/29/60

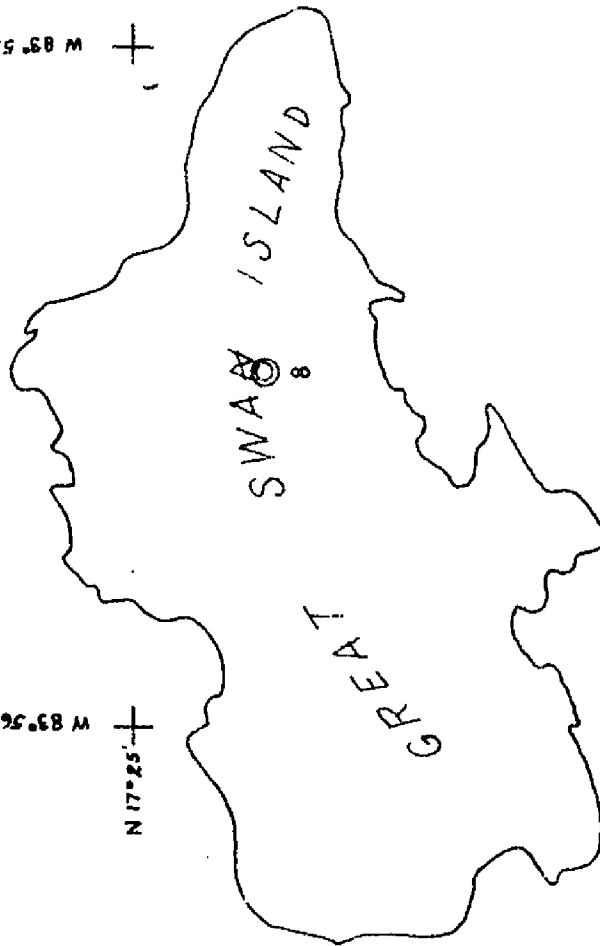
Approved:


Everett H. Ramey, Chief
Aerotriangulation Section

W 83° 54'



W 83° 55'



N 17° 25' W 83° 56'

5

SEA

CARIBBEAN



(Sketch not to scale)

SCALE FACTOR

1 FT. = 3048006 METER	COMPUTED BY: R. Puhl	DATE Sept. 15, 1960	CHECKED BY: R. B. Kelly	DATE Sept. 16, 1960	COMM-DC-57843
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COMPILATION REPORT
SHORELINE MANUSCRIPT T-10890
September 1960

31. Delineation:

A preliminary manuscript was compiled by stereoplanigraph in February 1960 to serve as a base for hydrographic surveys (Item 22, Photogrammetric Plot Report). This manuscript included some approximate depths determined by stereoplanigraph. These were added only to serve as an accuracy comparison on the method used. *SEE FIELD INSPECTION REPORT UNDER "MANUSCRIPT" AKA*

With the addition of some new control and limited field inspection of shoreline features, the manuscript was redelineated. Graphic methods were used for this using ratioed prints of the original photographs. Pass point positions were used to control the delineation. *SEE ITEM #22 PLOT REPORT AKA*

32. Control:

Discussion of basic horizontal control is under Item 23, Photogrammetric Plot Report. The delineation of the new manuscript was referenced to pass point positions as computed from the photogrammetric bridge.

33. Supplemental Data:

None

35. Shoreline and Alongshore Details:

All shoreline and alongshore features were based on data furnished by the field party. The field inspection of the shoreline and alongshore features was limited because of time. It was sufficient to compile a manuscript adequate for charting needs. *VERY LITTLE SHORELINE WAS FIELD INSPECTED. Most OF IT IS OFFICE INTERPRETED.*

36. Offshore Details:

Offshore details were delineated in accordance with field-inspected photographs. Interpretation of some areas could not be made because of poor contrast. Rock heights were corrected by tidal observations made by the hydrographic survey. Offshore features are subject to verification by hydrographic surveys. *AKA 3/4/62*

37. Landmarks and Aids:

Prominent objects such as radio tower, skeleton tower, elevated dome and a square tower were compiled on the west end of Great Swan Island.

No 567 FORM SUBMITTED BY FIELD PARTY

46. Comparison with Existing Maps:

AKA

* Due to the incompleteness of the prior survey, no detailed comparison was made.

* THIS MUST REFER TO THE INCOMPLETE MANUSCRIPT SINCE THE ONLY PRIOR SURVEY IS HYDROGRAPHIC OFFICE CHART No 5170

47. Comparison with Nautical Charts:

As this is the first complete controlled mapping of the shoreline and adjacent features of these islands, the entire compilation should be applied to charts.


AKA

Items to be carried forward: None.

Submitted by:


Robert Kelly

Approved:


Everett H. Ramey, Chief
Aerotriangulation Section

48.

Geographic Name List:

BOGUE
BOOBY CAY
BOOBY POINT
BUTTONWOOD BAY
CARIBBEAN SEA
EMERSON BAY
FOSTER POINT
FOWLERS BAY
FOWLERS POINT
GOATS BAY
GREAT SWAN ISLAND
HARBOR BAY
JACOBSONS BAY
JAMES BAY
JAMES POINT
JIM DUFF HOLE
LITTLE SWAN ISLAND
MACK POINT
SANDY BEACH
SMITH BAY
STEAMER HEAD ROCK
SWAN ISLANDS

49. Notes for the Hydrographer:

George M. Ball
16 Sept 1960

Tabulation of photo-hydro points:

Great Swan Island

Little Swan Island

801-825

701-714

901-902

CUT - Shown on Photo No. 9

DAR " " "

MAT " " "

ACE " " "

BOO " " "

BID " " "

REVIEW REPORT T-10890
SHORELINE
March 2, 1962

61. General Statement

This project, containing one manuscript, covers all of Great Swan Island and Little Swan Island. These islands are situated approximately 100 miles N.W. of Honduras in the Caribbean Sea. The project was initiated in 1959 hydrographic and photogrammetric field work being assigned to the Ship EXPLORER on her transfer run from Seattle to Norfolk. There is no recent topographic or hydrographic survey of the islands. Hydrography for the West Coast of Great Swan Island was completed by the Hydrographic Office in 1913 by U.S.S. HANNIBAL at a scale of 1:10,000. Shoreline of the island is complete on this chart but little interior detail. The chart number is 5170.

62. Comparison with Registered Topographic Surveys

There are no previous Bureau surveys of this area.

63. Comparison with Existing Maps

Hydrographic Survey No. 5170. This survey dated 1913 was of little use in comparison. There is no information available on the reliability of its datum. Office examination revealed it to be erroneous being 400 m S in Latitude and 160 m E in Longitude.

64. Comparison with Contemporary Hydrographic Surveys

Two surveys H-8515 at scale 1:10,000 and H-8516 scale 1:100,000 dated 1960 were used during review. There are no discrepancies.

65. Comparison with Nautical Charts

Inapplicable.

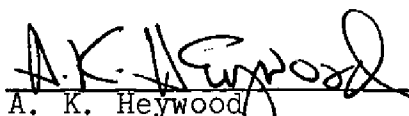
66. Adequacy of Results and Future Surveys

See Plot Report item 23 and the paragraph under "Manuscript" beginning with "The photogrammetric work; etc," of the field inspection report.


Datum of the islands was established by Hiran methods. At the time of final review these stations were unadjusted.

Since the MHW line was office interpreted for the most part and only two field established positions were used in aerotriangulation (resulting in no check) this survey cannot be considered as meeting National Standards of Map Accuracy.

Respectfully submitted:



A. K. Heywood

Approved:


Chief, Review and Edit


Chief, Chart Division

 8/2/62
Chief, Photogrammetry Div.


Chief, ~~Coastal Surveys~~ Div.
Operations

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10890

Record of Application to Charts

[illegible]

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.