

11919

11919

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE (Photogrammetric)
Field No.	Office No. T-11919
LOCALITY	
State	Hawaii
General locality	Maui Island
Locality	Hekili Point
1960 1962	
CHIEF OF PARTY	
H. J. Seaborg - Honolulu District Office	
Miller J. Tonkel - Baltimore District Office	
LIBRARY & ARCHIVES	
DATE	

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T-11919

PROJECT NO. (II):

PH 6012

FIELD OFFICE (III):

Honolulu, Hawaii

CHIEF OF PARTY

H. J. Seaborg

PHOTOGRAMMETRIC OFFICE (III):

Baltimore, Maryland

OFFICER-IN-CHARGE

William E. Randall

INSTRUCTIONS DATED (II) (III):

11 November 1960
28 November 1960
13 June 1961
27 December 1961
16 January 1962
1 April 1963

METHOD OF COMPILATION (III):

Kelsh Plotter

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

Old Hawaiian

VERTICAL DATUM (III):

~~MEAN LOW WATER~~ ~~EXCEPT AS FOLLOWS:~~ MHW
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):

Hekili (HGS) 1879

LAT.:

20° 48' 40.199"

LONG.:

156° 37' 15.708"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

= 173,549.13

x = 515,586.32

STATE

Hawaii

ZONE

2

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

FIELD INSPECTION BY (III): J. C. Lajoie		DATE: Feb. 1961
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Mean high water line located by Kelsh Plotter from field inspection photographs.		
PROJECTION AND GRIDS RULED BY (IV): RAC		DATE 18 Nov. 1960
PROJECTION AND GRIDS CHECKED BY (IV): JDC		DATE 18 Nov. 1960
CONTROL PLOTTED BY (III): D. M. Brant		DATE 7 March 1961
CONTROL CHECKED BY (III): H. P. Eichert		DATE 7 March 1961
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): Aerotriangulation - Washington Office		DATE January 1961
STEREOSCOPIC INSTRUMENT COMPILATION (III): D. M. Brant	PLANIMETRY E. L. Rolle	DATE June 1961
	CONTOURS Inapplicable	DATE November 1961
MANUSCRIPT DELINEATED BY (III): L. A. Senasack		DATE
SCRIBING BY (III): C. A. Lipscomb		DATE July 1963
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): D. M. Brant		DATE July 1963
REMARKS: FIELD EDIT 1962		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

"W" Camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
60 W 2349 & 2350	5 Oct. 1960	0942	1:25,000	0.3 ft. above MHW
60 W 2366 thru 2368	5 Oct. 1960	0950	1:25,000	0.3 ft. above MHW

From Predicted Tides

TIDE (III)

Diurnal

		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Honolulu, Hawaii			1.2	1.9
SUBORDINATE STATION: Kehei Maalaea Bay			1.6	2.3
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet - Atlantic Marine Center		DATE: Feb. 1966		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III): 2	RECOVERED: 2	IDENTIFIED: 1		
NUMBER OF BM(S) SEARCHED FOR (III): 0	RECOVERED: 0	IDENTIFIED: 0		
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): 0				
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		11		

REMARKS:

COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline furnished for hydro	Dec. 5, 1961	superseded
Final Compilation	July, 1963	

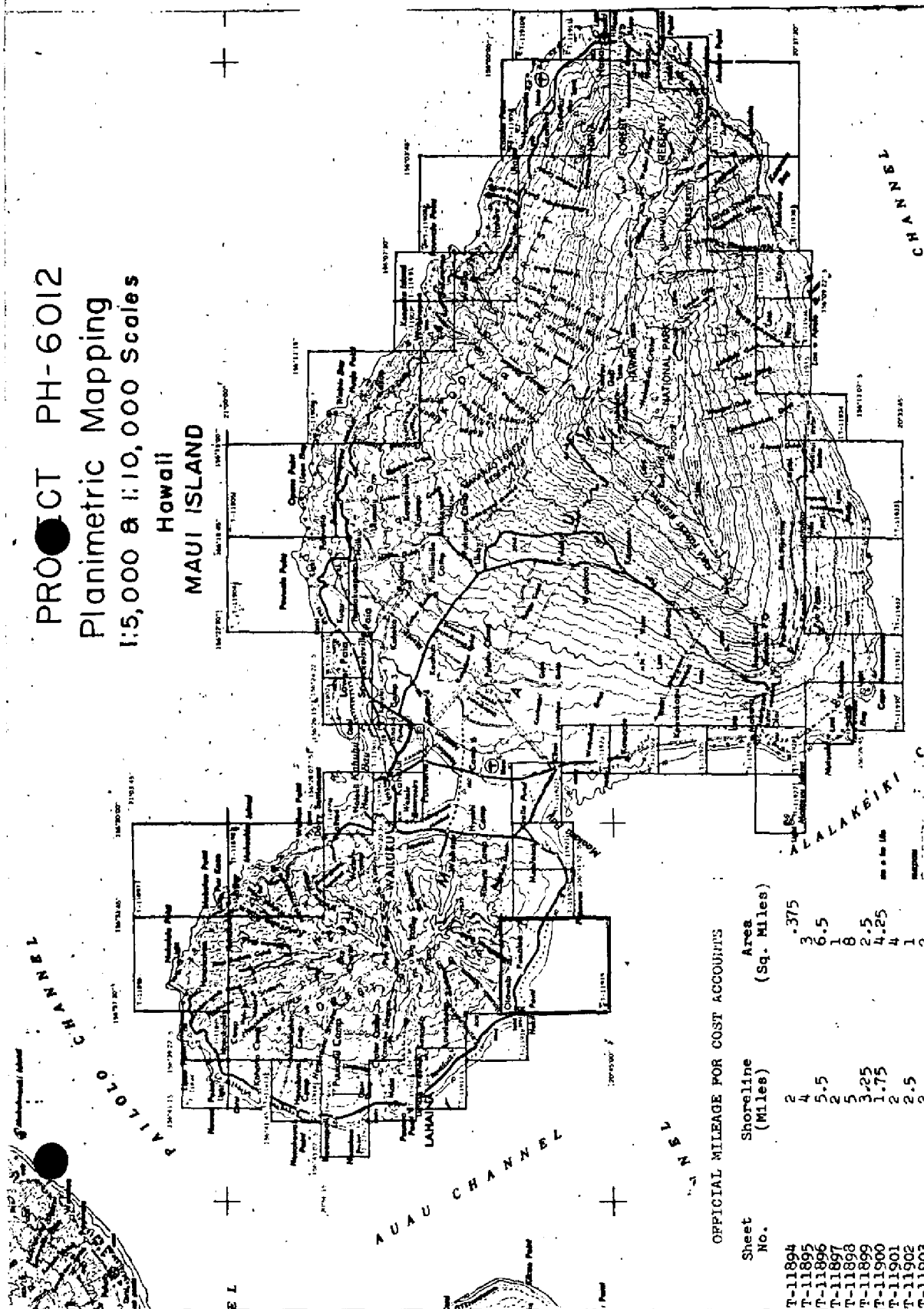
PROJECT PH-6012

Planimetric Mapping

1:5,000 & 1:10,000 Scales

Hawaii

MAUI ISLAND



OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11894	2	.375
T-11895	4	3
T-11896	5.5	6.5
T-11897	2	1
T-11898	3.25	2.5
T-11899	1.75	4.25
T-11900	2	4
T-11901	2.5	1
T-11902	2	2
T-11903	5	6
T-11904	1.5	4
T-11905	6.5	10
T-11906	7	6
T-11907	5	16
T-11908	4.75	2
T-11909	2.7	3
T-11910	2.2	4.5
T-11911	2.5	2.2
T-11912	2.5	4
T-11913	2.5	4
T-11914	2.5	4
T-11915	2.5	4
T-11916	2.5	4

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11922	3	3
T-11923	2.5	3
T-11924	2.5	1.5
T-11925	2.5	1
T-11926	1	.04
T-11927	1	.04
T-11928	1	.04

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Shoreline (Miles)	Area (Sq. Miles)
T-11931	2.5	1.5
T-11932	4.5	12
T-11933	5	8
T-11934	2.7	3
T-11935	2.5	4
T-11936	5	4
T-11937	5	4

CHANNEL

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-11919

Shoreline survey T-11919 (1:10,000 scale) is one of 49 similar maps in this project. It covers a part of the coastline of Maui Island from the town of Olowalu southeastward to longitude 156° 33' 45".

This was a stereoscopic instrument project in advance of hydrographic surveys to be made in the same area. Field operations preceding compilation included recovery and identification of horizontal control, field inspection and identification of photo-hydro signals.

The Stereoplanigraph was used for control extension. An adequate number of pass points were located for control of the models for Kelsh Plotter compilation methods. Compilation was at 1:10,000 scale and included the delineation of the mean high water line, alongshore detail, and the selection and identification of photo-hydro signals and pass points. A cronaflex copy was provided the hydrographer for preparation of the boat sheet. 1:10,000 ratio prints of the photography was subsequently provided for hydro-support purposes.

The manuscript is a vinylite sheet 4' 15" in latitude by 3' 45" in longitude. One cronar positive and one cronar negative are provided for record and registry.

FIELD INSPECTION REPORT
T-11919

Please refer to the Field Inspection Report for Maui Island,
Hawaii bound with the Descriptive Report for T-11894.

PHOTOGRAMMETRIC PLOT REPORT
T-11919

Please refer to the Photogrammetric Plot Report for Maui Island,
Hawaii dated March 1961 bound with the Descriptive Report for T-11894.

10.

COMPILATION REPORT
SURVEYS T-11919 thru T-11930

31. DELINEATION

Stereoscopic instrument methods (Kelsh Plotter with 1960 photographs) were used for delineation. The 1960 compilation was revised with 1961 photography where there were changes of importance. The color photography (where available) was used as an aid in compiling details alongshore.

Survey T-11927 (Molokini Island) is an exception to the others in this group. Molokini Island is a small crescent-shaped island about 0.3 mile long located 5.5 miles northwestward from Cape Hanamanioa. This survey was not covered by the photogrammetric bridge. The island was compiled from color photography (61 WC 899 thru 901) with the Kelsh Plotter. The models were controlled by three triangulation stations identified on the color prints. The high-water line and alongshore details were delineated from the color photography. There was no field inspection for this survey other than the identification of horizontal control.

32. CONTROL

The identification, density and placement of horizontal control was adequate.

The positions for triangulation stations TOWER, 1931, and MC GREGOR POINT LIGHT, 1950 are approximately the same. The name TOWER, 1931 is not shown on survey T-11921.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours - Inapplicable

The intermittent drainage is shown with a solid line.

35. SHORELINE AND ALONGSHORE DETAILS

Field inspection was adequate for the delineation of the high-water line. Alongshore details were compiled with the aid of field inspection and color photography. The color photography was utilized in the verification of the alongshore details.

The high-water line was delineated using the reference distances from prominent objects where they were recorded on the field inspection photographs. The date of these measurements was not noted.

36. OFFSHORE DETAILS

Details offshore were delineated from office interpretation of the photographs and are subject to verification by the hydrographer.

37. LANDMARKS AND AIDS

There is one non-floating aid on Survey T-11930 which is recommended to be charted. Form 567 has been submitted. A copy of Form 567 is bound with this report.

Mc GREGOR POINT LIGHT, 1950 (Survey T-11921) reported on Form 526 is identical with TOWER, 1931 and listed as Mc Gregor Point Daybeacon in the Light List.

38. CONTROL FOR FUTURE SURVEYS

There are no Recoverable Topographic Stations on these surveys.

An incomplete copy of these surveys showing the shoreline along with a set of ratio photographs with pass points and field identified photo-hydro signals was prepared and submitted for the use of the hydrographic party. These signals were removed from the final survey.

39. JUNCTIONS

The junctions for surveys T-11919 thru T-11930 are in agreement with adjoining surveys. Refer to the project layout bound in this report.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report bound with the Descriptive Report for surveys T-11894 and T-11895.

41. thru 45 Inapplicable

46. COMPARISON WITH EXISTING MAPS

Surveys T-11919 thru T-11930 were compared with the following U.S.G.S. Quadrangles:

OLOWALU, HAWAII	1:24,000	1955
MAALAE, HAWAII	"	1954
PUU O KALI, HAWAII	"	"
MAKENA, HAWAII	"	"

47. COMPARISON WITH NAUTICAL CHARTS

Chart Number 4104, 1:10,000 scale, published June 1934 (3rd edition) Dec. 31, 1951.

Chart Number 4115, 1:250,000 scale.

Chart Number 4116, 1:250,000 scale.

Chart Number 4130, 1:250,000 scale.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD:

None

Approved and Forwarded

Miller J. Tonkel
CDR C&GS
Baltimore District Officer

Respectfully submitted
6 November 1963

Joseph Steinberg
For: Donald M. Brant
Carto. (Photo.)

T-11919

48. Geographic Names List

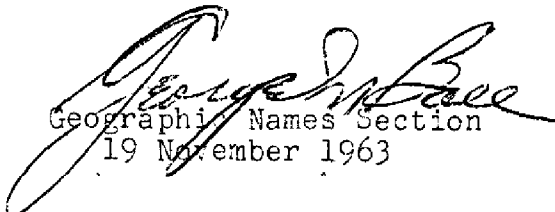
Hanaula Gulch*
Hekili Point

Manawaipueo Gulch
Mopua

Olowalu

Papalaua Gulch

Ukumehame Gulch


Geographic Names Section
19 November 1963

* Feature not delineated on this manuscript.

J.F.B.

49. NOTES TO THE HYDROGRAPHER

The following photo-hydro stations, identified by the field inspection party, were located during compilation.

1902	Southeast end of guardrail	60 W 2349
1903	Northwest corner of guardrail	60 W 2349
1904	North rock of 3, 10 m. outside HWL	60 W 2349
1905	Stake at point of grass	60 W 2349
1906	Stake at corner of road	60 W 2349
1907	Lone monkeypod tree on north side of road	60 W 2351
1908	East end concrete seawall	60 W 2351
1909	Offshore Palm tree	60 W 2351
1910	Northwest end of guardrail	60 W 2366
1911	Offshore palm	60 W 2366
1912	Southwest gable metal roof shed	60 W 2366

FORM 182 (8-61)		PHOTOGRAMMETRIC OFFICE REVIEW		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
50		T-11919			
1. PROJECTION AND GRIDS DMB		2. TITLE DMB		3. MANUSCRIPT NUMBERS DMB	
				4. MANUSCRIPT SIZE DMB	
CONTROL STATIONS		5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY DMB		6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS) NONE	
		7. PHOTO HYDRO STATIONS DMB		8. BENCH MARKS NONE	
		9. PLOTTING OF SEXTANT FIXES NONE		10. PHOTOGRAMMETRIC PLOT REPORT DMB	
		11. DETAIL POINTS DMB			
ALONGSHORE AREAS (Nautical Chart Data)		12. SHORELINE DMB		13. LOW-WATER LINE DMB	
		14. ROCKS, SHOALS, ETC. DMB		15. BRIDGES NONE	
		16. AIDS TO NAVIGATION NONE		17. LANDMARKS DMB	
		18. OTHER ALONGSHORE PHYSICAL FEATURES DMB			
		19. OTHER ALONGSHORE CULTURAL FEATURES DMB			
PHYSICAL FEATURES		20. WATER FEATURES DMB		21. NATURAL GROUND COVER DMB	
		22. PLANETABLE CONTOURS NONE		23. STEREOSCOPIC INSTRUMENT CONTOURS Inapplicable	
		24. CONTOURS IN GENERAL Inapplicable		25. SPOT ELEVATIONS NONE	
		26. OTHER PHYSICAL FEATURES DMB			
CULTURAL FEATURES		27. ROADS DMB		28. BUILDINGS DMB	
		29. RAILROADS NONE			
		30. OTHER CULTURAL FEATURES DMB			
BOUNDARIES		31. BOUNDARY LINES DMB		32. PUBLIC LAND LINES DMB	
MISCEL- LANEOUS		33. GEOGRAPHIC NAMES DMB		34. JUNCTIONS DMB	
		35. LEGIBILITY OF THE MANUSCRIPT DMB		36. DISCREPANCY OVERLAY DMB	
		37. DESCRIPTIVE REPORT DMB			
		38. FIELD INSPECTION PHOTOGRAPHS DMB		39. FORMS DMB	
		SIGNATURE OF REVIEWER For: D. M. Brant Joseph Steinberg		SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT Joseph Steinberg	
40. FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.					
SIGNATURE OF COMPILER Joseph Steinberg For: D. M. Brant			SIGNATURE OF SUPERVISOR Joseph Steinberg		

USE REVERSE SIDE FOR REMARKS

USCOMM-OC 26383-P61

FIELD EDIT REPORT

T-11919

Please refer to the Field Edit Report for Maui Island, Hawaii
(strips 1 through 7) dated 17 August 1962 bound with the Descriptive
Report for T-11894.

REVIEW REPORT T-11919
SHORELINE
February 7, 1966

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with Registered Planetable survey No. 3268, 1:20,000 scale, made in 1912 and registered March 30, 1914. Shoreline survey T-11919 supersedes this prior survey and should be used for all future nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. quadrangles Olowalu and Maalaea, Hawaii, 1:24,000 scales editions of 1955 and 1954 respectively. These quadrangles show numerous submerged rocks offshore of the mean high water line which are not visible on photography of the area, nor are any shown on the boat sheets.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8580 (SU-10-5-61) 1:10,000 scale. The shoreline of the boat sheet and the manuscript are identical.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 4130, 1:80,000 scale, 4th edition dated August 31, 1964. This chart shows numerous submerged rocks just offshore of the outer limits of the coral reef between longitudes 156° 36' 18" and 156° 37' 30". These are in the same area as those referred to in item 63.

A thorough inspection of the photography failed to find any submerged rocks in this area.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.

Future surveys should check for submerged rocks in the area mentioned in item 65.

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet

Approved by:

J. Bull
J. Bull
Director, Atlantic Marine Center

Approved by:

L. F. Woodcock
Chief, Photogrammetry Division

Charles Lamm
Chief, Cartographic Branch
Photogrammetric

Chief, Chart Division

Chief, Operations Division

