

10661

Original

Diag. Cht. No. 77-6.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-161 Office No. T-10661

LOCALITY

State Virginia-Maryland

General locality Potomac River

Locality Chisford

1955-58

CHIEF OF PARTY

Joseph K. Wilson, Chief of Party
William E. Randall, Baltimore Dist. Office

LIBRARY & ARCHIVES

DATE

JUL 17 1963

USCOMM-DC 5087

10661

DESCRIPTIVE REPORT - DATA RECORD

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T- 10661

Project No. (II): Ph-161

Quadrangle Name (IV):

Field Office (II): Callao, Virginia

Chief of Party: Joseph K. Wilson

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: William E. Randall

Instructions dated (II) (III): 16 Sept. 1957 73/rab

Copy filed in Division of
Photogrammetry (IV)

Ltr. from Director dated 12/6/57

" " " " 5/5/58 732/rrj

" " Ch. Photo. Div., dated 7/23/58 73/rrj

" " Ass't Dir., 5/15/59 73/rab

Method of Compilation (III): Kelsh Plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6,000
(Pantograph ratio 3/5)

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

~~Mean Sea Level (MSL) datum~~

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): MT. AIRY, 1954

Lat.: 38° 10' 04.798" (147.9 m) Long.: 76° 46' 53.641" (1305.8 m)

Adjusted
~~unadjusted~~

Plane Coordinates (IV):

State: Virginia
Maryland

Zone: North

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.

FORM 181a
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

38° 11' 15"

Inapplicable

38° 07' 30"

Areas contoured by various personnel

76° 48' 45"

(Show name within area)

76° 45' 00"

(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

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Field Inspection by (II): J. K. Wilson

Date: 9/1957 thru
6/1958

Planetable contouring by (II): Inapplicable

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1955 Date of photography (Kelsh)
supplemented by 1958 photography.

Projection and Grids ruled by (IV): P. Dempsey

Date: 11/5/58

Projection and Grids checked by (IV): R. D. Shoup

Date: 11/12/58

Control plotted by (III): D. M. Brant

Date: 12/8/58

Control checked by (III): H. P. Eichert

Date: 12/8/58

~~Control checked~~ Stereoscopic

Control extension by (III): George M. Ball

Date: 9/10/58

Planimetry B. Kurs
Stereoscopic Instrument compilation (III):
Contours

Date: 1/29/59

Date:

Manuscript ~~documented~~ by (III):

scribed by: C. A. Lipscomb

Date: 10/7/60

Photogrammetric Office Review by (III): J. C. Richter

Date: 3/9/60

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

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... Camera (kind or source) (III): C&GS "S" & "W" cameras, 6" focal length.

PHOTOGRAPHS (III)					
Number	Date	Time E.S.T.	Scale	Stage of Tide	
55-W-2185	11/11/55	11:33	1:10,000	2.0'	above MLW
2186	"	"	"	"	"
2407	11/12/55	14:13	"	1.8'	"
2408	"	"	"	"	"
2213	11/11/55	11:58	"	2.0'	"
2214	"	"	"	"	"
57300	5/22/58	12:10	1:10,000	0.4'	"
57301	"	12:11	"	"	"

Tide (III)
(from Predicted Tables)

Reference Station: Washington, D. C.
Subordinate Station: Blakiston Is., Md.
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	2.9	3.3
.60	1.9	2.2

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): 8.5

Shoreline (More than 200 meters to opposite shore) (III): 8.3

Shoreline (Less than 200 meters to opposite shore) (III): 2.0

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 10 Recovered: 4 Identified: 2*

Number of BMs searched for (II): None Recovered: Identified:

Number of Recoverable Photo Stations established (III): None**

Number of Temporary Photo Hydro Stations established (III): None

Remarks:

* In addition, temporary station JOHNS 1957 was identified.

** Two stations searched for, not recovered.

Field Inspection Report

Project Ph-161

Maryland and Virginia

2. AREAL FIELD INSPECTION

This report is submitted for the southern portion of the project covering 10 maps along the Potomac River in Northumberland and Westmoreland Counties.

The work was accomplished during the period of September 1957 through June 1958. No work was accomplished on the project during the period of January 1958 through May 1958 as the party was engaged on an airport site at Chantilly, Virginia.

The area is sparsely settled and no major changes were noted with the exception of the erosion of the shoreline which is discussed under heading 3.

1955 ratio prints of 1:10,000 scale were adequate for all field inspection operations. New photography of 1:40,000 scale was obtained in December 1957. This photography relieved prior requirements for horizontal control within the project. No serious Photo-interpretation difficulties were encountered.

3. HORIZONTAL CONTROL

All horizontal control stations, as indicated on a special horizontal control diagram prepared by Washington, were recovered and identified with the following exceptions and additions:

Sheet T-10661

Triangulation station STRATFORD, 1954, was not identified due to thick woods and excessive distance to locate substitute point. A temporary station, JOHNS, 1957, was established nearby to control the two flight lines. This station was located by fix from four known triangulation stations. A cahier of computations are submitted with the project data.

Sheet T-10668

A substitute point for station STARTER, 1932, was located by sun azimuth. This is the only substitute point located by that method on this portion of the project.

Sheet T-10670

The location of a new station south of this sheet was not accomplished. See Director's letter of 5 May 1958, 732/rrj.

Boundary Monuments 15 and 16, 1929, have been destroyed by erosion. There were no new stations established in this area.

Sheet T-10671

There were no stations recovered within the area covered by this sheet. The Director's letter of 5 May 1958 canceled previous requirements for new stations.

An extremely high percentage of triangulation stations are reported lost or destroyed due to the excessive erosion of the Potomac River banks.

Stations reported on form 526 as "lost", "not recovered", or "destroyed" are:

BETTIE, 1932
 BOOZE, 1932 ✓
 BUCKNER, 1932
 BUSHFIELD, 1932 ✓
 FEDDLE, 1932
 GEORGE, 1918
 GLEBE, 1932
 GLORY, 1932
 GRANNY, 1932 ✓
 HENNOM, 1932 ✓
 HERBERT, 1932
 HOLLIS, 2, 1901
 JENKINS POINT, 1932 ✓
 LYNCH'S POINT STORE (Middle Chimney), 1901
 MAC, 1932
 NAVY, 1942
 PLUM (USE), 1932
 RAGGED POINT #, 1942
 RAVINE (USE), 1932
 SMARTS, 1932
 SNAKE, 1919
 THOMPSON, 1932
 MARYLAND-VIRGINIA BOUNDARY MONUMENT No. 15, 1929
 MARYLAND-VIRGINIA BOUNDARY MONUMENT No. 17, 1929
 MARYLAND-VIRGINIA BOUNDARY MONUMENT No. 22, 1929
 MARYLAND-VIRGINIA BOUNDARY MONUMENT No. 22B, 1932
 MARYLAND-VIRGINIA BOUNDARY MONUMENT No. 23, 1929
 MARYLAND-VIRGINIA BOUNDARY MONUMENT No. 24, 1929

Several stations, which were plotted on the special control diagram, were reported destroyed many years ago. These stations are not reported on form 526.

4. VERTICAL CONTROL

Vertical control was limited by Project Instructions to the recovery of existing tidal bench marks. There were no tidal bench marks in this portion of the project.

5. CONTOURS AND DRAINAGE

Contours are inapplicable.

The lower reaches of the supplemental drainage pattern is by means of ill-defined, small perennial streams and/or swamp and marsh; whereas, the upper reaches are generally well defined, in small perennial or intermittent streams. This drainage has been examined stereoscopically and has been classified and delineated throughout the limits of the maps with possibly a few exceptions. It is felt that the compiler will have little difficulty with the delineation. Intermittent drainage was not shown.

6. WOODLAND COVER

Woodland cover was classified in accordance with the Topographic Manual, Part II. Swamp has been outlined throughout the limits of the sheets. Adequate field inspection notes are shown on the photographs.

7. SHORELINE AND ALONGSHORE FEATURES

Shoreline inspection was accomplished from a skiff run close inshore. The area along the Potomac River is predominantly fast shoreline while the areas along the numerous creeks have considerable marsh along the shore.

An approximate low-water line has been indicated in a few places, but no special attempt was made. It is usually very close to and parallel to the mean-high water line.

The foreshore is composed of sand and shell. There are several steep bluffs along the Potomac River shore. None of these have been indicated as they are not of landmark value.

One submerged cable has been shown on photograph 55-W-2222 where it crosses Nomini Creek. All shoreline structures were inspected and are adequately covered by field inspection notes.

8. OFFSHORE FEATURES

Several pilings, wrecks, dolphins etc. have been shown on the photographs. The wreck and the four pilings shown on chart 558 near latitude 38-08 and longitude 76-45 no longer exist.

No other offshore features were noted.

9. LANDMARKS AND AIDS

A thorough inspection of landmarks for Nautical Charts was made. One previously charted landmark has been razed and two new landmarks are recommended. Form 567 is submitted for each.

All fixed aids to navigation were identified by the direct method on the 1:10,000 scale photographs. Form 567 is submitted for each aid.

There are no aeronautical aids or interior landmarks recommended.

10. BOUNDARIES, MONUMENTS AND LINES

Boundaries affecting these maps are the state line dividing Maryland and Virginia and the county line dividing Northumberland and Westmoreland Counties. These boundaries have not been delineated on the photographs; however, the boundary limits as shown on the three quadrangle maps Stratford, Blakiston Island and Yeocomico were verified in the field. No legal descriptions or maps were available but it was felt that the compiler would have no difficulty in their delineation as each boundary follows natural features. The Maryland and Virginia boundary follows the low water line of the Potomac River While the county boundary follows the center of the West Yeocomico River.

11. OTHER CONTROL

All previously marked topographic stations were searched for and reported on form 524. None of these stations could be found.

There were no marked topographic stations established.

To meet the minimum spacing requirements of one recoverable topographic or triangulation station about every two miles, prominent objects were used. See Director's letter of 6 December 1957, 73/rab.

The following prominent objects which were assigned topographic names are as follows:

STACK, 1958 T-10674	CHIMNEY SHIN, 1958 T-10674
GABLE BARN, 1958 T-10671	ROUND BUILDING OVAL, 1958 T-10670
ANTENNA ANTH, 1958 "	CHIMNEY SOOP, 1958 "
CHIMNEY CHEN, 1958 T-10674	CUPOLA, 1957 T-10662
CHIMNEY BLOC, 1958 "	SILLO, 1957 T-10674

12. OTHER INTERIOR FEATURES

All roads were classified in accordance with the Topographic Manual, Part II.

Buildings were inspected by two separate methods. Prior to receipt of Photogrammetric Instruction 54, dated 2 January 1958, the buildings were classified in accordance with the Topographic Manual, Part II and Project Instructions. Upon receipt of the new instructions, the old method was discontinued.

There are no airports or landing fields within the limits of these sheets.

Clearances of two bridges and sixteen overhead cables crossing navigable waters were measured during the field inspection. These clearances, as computed by the field party are as tabulated on the following pages.

13. GEOGRAPHIC NAMES

A systematic geographic names investigation was not required. However, the field inspector checked all names within the area and one discrepancy was found in sheet T-10670. The name GARDNER CREEK, as shown on both Nautical Chart 558 and Quadrangle Map, Yeocomico is incorrect. The name is GARNER CREEK. Five people were contacted in connection with this name and all persons contacted state that this name has been misspelled on the charts for years.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Forms, No. 526 will be transmitted to the Division of Geodesy at a later date.

A Coast Pilot Report will be submitted for the entire project at a later date.

Submitted by:

30 June 1958

Joseph K. Wilson
Joseph K. Wilson
Chief, Photo Party 723

TABULATION OF BRIDGE AND CABLE CLEARANCES

Waterway	Name or Location	BRIDGE CLEARANCES			Bridge Book		Map No.
		Type	Measured Horiz.	Vert.	Horiz.	Vert.	
Nomini Creek	Va. Dept. of Highways, Mount Holly	SW	40.0	5.7	39.3	5.7	T-10668
Nomini Creek	Va. Dept. of Highways, Mount Holly	Fixed	24.0	11.0	(Newbridge)		T-10668

Waterway	Latitude	CABLE CLEARANCES		Clearance	Map No.
		Longitude			
Glebe Creek	37-58.8	76-30.2		48.0	T-10675
Jackson Creek	38-06.0	76-36.5		33.0	T-10670
Lower Machodoc Creek	38-05.9	76-39.0		33.0	T-10669
Lower Machodoc Creek	38-05.9	76-39.4		35.0	T-10669
Doyle Cove	38-06.2	76-39.3		33.0	T-10669
Lower Machodoc Creek	38-05.9	76-39.5		40.0	T-10669
Glebe Creek	38-07.4	76-39.3		33.0	T-10669
Glebe Creek	38-07.3	76-39.4		33.0	T-10669
Aimes Creek	38-07.5	76-39.4		35.0	T-10663
Buckner Creek	38-07.5	76-41.3		30.0	T-10662
Nomini Bay	38-07.9	76-43.7		25.0	T-10662
Poor Jack Creek	38-08.1	76-44.8		45.0	T-10662
Poor Jack Creek	38-08.1	76-44.8		55.0	T-10662
Nomini Creek	38-04.7	76-43.3		26.5	T-10668
Nomini Creek	38-04.6	76-43.2		40.0	T-10668
Currioman Creek	38-08.8	76-45.9		45.0	T-10661

Cable clearances listed beginning with cable nearest eastern portion of project and proceeding west.

PHOTOGRAMMETRIC PLOT REPORT PH-161
Potomac River, Va.

21. AREA COVERED: Potomac River, Virginia lower south shore

T 10661-10664
T 10668-10670
T 10674-10675

22. METHODS

Single lens photos.

Strip No. 1 55 W 2402 - 55 W 2410, 1:30,000 bridged and adjusted on IBM (points pricked on ratio photos).

Strip No. 2 58 S 7492 - 58 S 7502, 1:40,000 bridged and adjusted on IBM (points pricked on contact photos)

Strip No. 3 55 W 2355 - 55 W 2359, 1:30,000 straight line method~~s~~ - points dropped to control strip No. 4

Strip No. 4 55 W 2279 - 55 W 2284, 1:30,000 straight line method

23. ADEQUACY OF CONTROL

(1) Lynch Pt. Store Middle Chimney 1901 Stations furnished by field party but station has no published position.

(2) S.S. Carey 1934, sub station was recovered and identified on '55 photos - point was hit on the bridge strip No. 2 ~~and point~~^{but} could not be seen on the 1:40,000 '58 photo *clearly*.

(3) S.S. Mt Airy 1954, point not visible on 1:30,000 ('55 photos) Strip No. 1. Note this point will be visible on North-South strip 55 W 2183-2187.

(4) Strip No. 2 1:40,000 (58 photo~~s~~) proved somewhat of a problem because control had been identified on '55 photos, hence ground sub stations were not easily visible.

24. SUPPLEMENTAL DATA: None

25. PHOTOGRAPHY

Photography was adequate

-2-

*

26. Shoreline Pts dropped on strip No. 1. These points have computed position and can be plotted if desired. Points were pricked on ration~~x~~ photos.

Approved

Morton Keller

Morton Keller

Submitted

George M. Ball
George Ball 9/10/58

△ ENGLED. PL. LIGHT

△ SS MURRY

SSW 2410 △ SS JOHN
STRIP #1

SSS 7452

△ SS BRADLEY

△ SS STONE

△ SS BURY
GEN 2402

△ SS (U4E) B

△ SS LANDINGS

△ SS KILTON

△ SS STATER

△ SS CHILTON

△ SS NAVY
OJOS 2355

△ SS STONE
STRIP #2

POTOMAC RIVER
STRIP #1 130000
STRIP #2 140000

SS DOWNING

△ SS BUNDICK
STRIP #3

SS MOCH

△ SSW 2284
STRIP #4

COPY

BRIDGING DIAGRAM

SCALE FACTOR 1.000

1 FT. = 3048006 METER
COMPUTED BY J. Steinberg
DATE 11/21/58
CHECKED BY Henry P. Eichert
DATE 12/4/58
COMM. DC-57843

COMPILATION REPORT
T-10661

31. DELINEATION

The Kelsh plotter was used for delineation. The map was edited using 1958 photographs. Minor changes were made.

32. CONTROL

Horizontal control was adequate.

33. SUPPLEMENTAL DATA

Geographic names standard dated 6/19/59.

34. CONTOURS AND DRAINAGE

Contours inapplicable.

It is believed that the drainage pattern was over-developed by the field party. Some of the very small stream branches were edited out to be consistent with other areas of the project.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate, except in the area of Nomini Cliffs. Due to the time of day and the high bluff, the shoreline was obscured by shadow on all photographs. With the field inspection as a guide, a satisfactory shoreline was delineated.

In some areas the narrow fringe of marsh indicated by the field inspector was too small to be shown and the shoreline was delineated as fast shoreline.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

No recoverable topographic stations were established.

An incomplete copy of this survey showing the shoreline along with a set of ratio photographs with pass points was prepared and submitted for the use of the hydrographic party.

In the area of Nomini Cliffs it was not possible to furnish shoreline passpoints sufficient for normal location of photo-hydro signals.

39. JUNCTIONS

Satisfactory junctions were made as follows:

North with T-10654, all water area.

East with T-10662.

South, no contemporary survey.

West, with T-10927, Ph-5901.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The Maryland-Virginia boundary line has been omitted. Refer to the amendment to the project instructions dated 15 May 1959.

42 thru 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

AMS STRATFORD, VA., sheet 5660 III NE, scale 1:24,000, 3rd edition, 1949. This map is based on Bureau survey T-8141 (1943) scale 1:20,000.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 558, scale 1:40,000, 4th edition 1959, corrected to 7/2/60.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted

Bernard Kurs

Bernard Kurs
Carto. (Photo.)

Approved and forwarded

William E. Randall
William E. Randall, CDR, USN
Baltimore District Officer

PHOTOGRAMMETRIC OFFICE REVIEW

T- 10661

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

4a. Classification label Pr

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads ✓ 28. Buildings ✓ 29. Railroads ✓ 30. Other cultural features ✓

BOUNDARIES

31. Boundary lines ✓ 32. Public land lines ✓

MISCELLANEOUS

33. Geographic names ✓ 34. Junctions ✓ 35. Legibility of the manuscript ✓ 36. Discrepancy overlay ✓ 37. Descriptive Report ✓ 38. Field Inspection photographs ✓ 39. Forms ✓

40. John C. Richter Joseph Steinberg
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:

48. Geographic Names:

Asparagus Point

Bettys Neck
Bryant Town

Chantilly Branch
Chantilly Hill
Chiltons
Chisford
Clifton Branch
Clifton Hill
Cold Harbor Creek
Currioman Bay
Currioman Creek
Currioman Farm
Currioman Landing

Goodrich Farm

Haulover Inlet
Haulover Point
Hollis Marsh

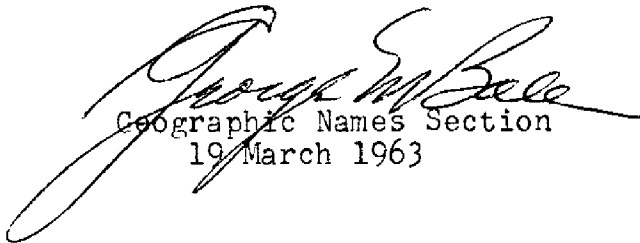
Mount Airy

Nomini Cliffs

Old Mill Branch

Poor Jack Creek
Potomac River

Williams Point


Geographic Names Section
19 March 1963

REVIEW REPORT
Planimetric Maps
T-10661 thru T-10664, T-10668 and T-10669

May 1963

61. General Statement

These are six (6) planimetric maps of project PH-161 Lower Potomac River, Md. and Va. These maps were prepared to furnish shoreline and control for hydrographic surveys and base maps for nautical charting.

62. Comparison with Registered Topographic Surveys

T-8139	1:20,000	1943
T-8140	1:20,000	1943
T-8141	1:20,000	1943
T-8145	1:20,000	1943

There are shoreline and cultural differences but in general, the agreement is good.

63. Comparison with Maps of Other Agencies

Stratford, Va.	1:24,000	U.S.G.S.	1943
Blackiston Is. Va.	1:24,000	U.S.G.S.	1943
Piney Point, Md.	1:24,000	U.S.G.S.	1943
Machodoc, Va.	1:24,000	U.S.G.S.	1943

These maps are based on Bureau surveys listed under item 62.

64. Comparison with Contemporary Hydrographic Surveys

H-8550	1:10,000	1960
H-8610	1:10,000	1961
H-8611	1:10,000	1961
H-8612	1:10,000	1961

Shoreline and control of subject surveys was furnished prior to hydrography therefore there is good agreement except that at Poor Jack Creek and Hollis Marsh (T-10662), some shoreline changes have been applied to H-8610. These changes probably are due to the difference in the survey time.

65. Comparison with Nautical Charts

558 1:40,000 Nov. 1962

There are no differences of importance between the chart and the subject manuscripts.

66. Adequacy of Results and Future Surveys

These surveys were prepared according to project instructions and are within the required accuracy for Nautical Charting.

Reviewed by L

L. C. Lande
L. C. Lande

Approved by:

S. L. E. Charles H. Brown Louise E. Taylor
Chief, Cartographic Branch Chief, Nautical Charts Division

J. E. W. 7/16/63 Horace B. Connelley
Chief, Photogrammetry Division Chief, Operations Division

