

8194

Original

8194

Form 504 U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE DESCRIPTIVE REPORT	
Type of Survey <u>Air Photographic Topographic</u>	
Field No.	Office No. <u>T-8194</u>
LOCALITY	
State <u>North Carolina</u>	
General locality <u>Columbus & Brunswick Counties</u>	
Locality <u>Freeland, N. C.</u>	
<u>1943</u>	
CHIEF OF PARTY	
<u>Fred. L. Peacock</u>	
LIBRARY & ARCHIVES	
DATE <u>June 6, 1946</u>	

ON
Diag ch. 1110

DATA RECORD

T- 8194

Quadrangle (II): Project No. (II):
 Freeland 7 $\frac{1}{2}$ minute Quadrangle CS-284
 Field Office: Chief of Party:
 Myrtle Beach, S. C. F. L. Gallen
 Compilation Office: Chief of Party:
 Baltimore, Maryland Fred. L. Peacock
 Instructions dated (II III): Copy filed in Descriptive
 July 15, Oct. 19;) Report No. T- (VI)
 Oct. 23, 27;) 1942
 Completed survey received in office: *6/43*

 Reported to Nautical Chart Section: *1/45*
 Reviewed: *9/43* Applied to chart No. Date:
 Redrafting Completed: *12/43*
 Registered: *5/46* Published: *11/44*
 Compilation Scale: 1:20,000 Published Scale: *1:31680*
 Scale Factor (III): none
 Geographic Datum (III): N. A. 1927 Datum Plane (III): Mean Sea Level
 Reference Station (III): ASH, 1942
 Lat.: 34° 02' 06.689" 206.1 Long.: 78° 31' 47.742" 1224.7 Adjusted
(1642.6)m (314.5)m ~~Unadjusted~~
 State Plane Coordinates (VI): *North Carolina*
None Published as of 8/23/43
 X = Y =

 Military Grid Zone (VI) *B*
Zone "B"

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
8183 to 8186 Inc.	4/1/42	2:44p.m.	1:20,000	There are no navigable waters within the limits of this quadrangle.
8155 to 8157 Inc.	4/1/42	1:30p.m.	1:20,000	
8225	4/2/42	11:24a.m.	1:20,000	

Tide from (III): No tide computation necessary

Mean Range:

Spring Range:

Camera: (Kind or source) U. S. Coast & Geodetic Survey Nine Lens camera, (focal length $8\frac{1}{4}$ ")

Contouring and
Field Inspection by: H. M. Eldridge

date: Feb., Mar.,
1943

Field Edit by:

date:

Date of Mean High-Water Line Location (III):

Projection and Grids ruled by (III) Washington Office date: Jan. 22, 1943

" " " checked by: Washington Office date: Jan. 22, 1943

Control plotted by: Henry P. Eichert date: Feb. 23, 1943

Control checked by: Joseph Steinberg date: Mar. 13, 1943

Radial Plot by: Joseph Steinberg and J. Edward Deal, Jr. date: Mar. 31, 1943

Detailed by: M. Eleanor Herzog date: Apr. 22, 1943
to June 16, 1943

Reviewed in compilation office by: Henry P. Eichert date: June 9 to 17,
1943

Elevations on Field Edit Sheet
checked by: *Arthur G. Carroll* date: 9-21-43

STATISTICS (III)

Land Area (Sq. Statute Miles): 60

Shoreline (More than 200 meters to opposite shore): none

Shoreline (Less than 200 meters to opposite shore): none

Number of Recoverable Topographic Stations established:

3 Azimuth Reference Marks

Number of Temporary Hydrographic Stations located by radial plot:

none

Leveling (to control contours) - ^{Statute} /miles: 40

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

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

Remarks:

General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C.S.284, was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000.

Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, drive-ways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templates) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the Baltimore-Tampa Photogrammetric Office.

FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.

Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

PROCESSING IN THE WASHINGTON OFFICE

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blue-line" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

FIELD INSPECTION REPORT
QUADRANGLE T-8194
PROJECT CS-284
F. L. Gallen, Chief of Party.

1. DESCRIPTION OF THE AREA:

The area covered by this Quadrangle in general is poorly developed with farms on the higher ground, the lower ground comprising about all swamp, being covered by a dense growth of trees, principally gum, cypress and water oak in the swamp areas, and pine and oak on the higher ground. The western portion is very flat and poorly drained, the central section being all swamp. The southeastern section is quite hilly and is very well drained.

Drainage for this area follows a well defined pattern. Waccamaw River enters the Quadrangle on the north, flows in a southwesterly direction and leaves the Quadrangle on the west near the southwest corner. Seven Creeks Swamp enters the west side of area and flows into the Waccamaw River. Bear Branch, Wet Ash Swamp and Sippew Swamp, which are all tributaries to the Waccamaw River, make up the rest of the drainage for the area.

There are numerous ditches in the cultivated areas and the most important of these are shown.

2. COMPLETENESS OF THE FIELD INSPECTION:

Same as Report for T-8195.

3. INTERPRETATION OF THE PHOTOGRAPHS:

Dark tones on the photographs indicate pine trees on the higher ground, but they may also indicate heavy brush in the wet weather swampy areas. There is one area which is not typical for this section. This has been noted on the photograph. Lighter tones indicate deciduous trees as in swamps.

4. HORIZONTAL CONTROL:

Same as for Report for T-8195.

5. VERTICAL CONTROL:

Same as Report for T-8195.

6. CONTOURING AND DRAINAGE:

Contouring was accomplished by a four-man party using the regular planetable equipment.

All contouring was done directly on the photographs and the orientation taken from identifiable points and also by using the declinoire, when traverses were run through the wooded areas. The hand level

was used on very short traverses into the bottom of some intermittent streams, but these were held to a minimum.

Streams were all located by field inspection.

A declination was established on all the photographs by using a long straight stretch of road in the center chamber of the photograph and the time and date is given.

7-13. These items do not apply to this area.

14. ROAD CLASSIFICATION:

Same as Report for T-8195.

15. BRIDGES AND CULVERTS:

Same as Report for T-8195.

16. BUILDINGS:

Same as Report for T-8195.

17. BOUNDARIES AND LINES:

This Quadrangle lies in Columbus and Brunswick Counties, North Carolina, and their boundaries have been indicated. Political boundaries will be added by the Field Edit Party.

18. GEOGRAPHIC NAMES:

Same as Report for T-8195. *RA*

19. JUNCTIONS:

Junctions with Quadrangle T-8188 on the north have been made and checked in the field.

Junctions with Quadrangle T-8193 on the east have been made and checked in the field.

Junctions with Quadrangle T-8201 on the south have been made and checked in the field.

Junctions with Quadrangle T-8195 on the west have been made and checked in the field.

Approved and forwarded:

F. L. Gallen
F. L. Gallen,
Chief of Party.

Respectfully submitted,

Henry M. Eldridge per F. L. G.
Henry M. Eldridge,
Photogrammetric Aid.

26 CONTROL:

Three U. S. Coast & Geodetic Survey Triangulation Stations and one U. S. Geological Survey Primary Traverse Station lie within the limits of this map manuscript. They are:

ASH, 1942
BUG HILL, 1942
BRITTON, 1942
P. T. 29-J, 1918 (U.S.G.S.)

Six U. S. Coast & Geodetic Survey Triangulation Stations that lie just outside the limits of the map manuscript were also used as control for secondary and detail points. They are:

EXUM, 1942
JUNIPER, 1942
DOCK, 1942
NAKINA, 1942
HUGHES, 1932
PIVER, 1932

The field inspection party established field inspection stations at easily identified points near three of the triangulation stations, namely, HUGHES, 1932, PIVER, 1932 and BUG HILL, 1942. This assured greater accuracy in picking the points on the photographs. These stations are shown with a small orange circle on the reverse side of the map manuscript.

27 RADIAL PLOT:

The radial plot for this map manuscript is described in Section 2 of the Descriptive Report of the radial plots for Projects CS-275, and CS-284, which will be submitted in the near future.

28 DETAILING:

Detailing in this area was done from the nine lens office photographs. It was possible to detail a large portion of this map manuscript from the center chamber of the office photographs. All office photographs were suitable for detailing except No. 8157 which was found to be tilted 2° 19'. This made it necessary to detail the area in the center chamber of photograph No. 8157 from the outer chambers of surrounding photographs.

The field inspection for the entire area was, in general, satisfactory.

28 DETAILING: (cont'd)

Drainage and the limits of swamps were verified by stereoscopic examination of the office photographs and found to be in fair agreement with the field inspection.

In the northwestern section of this map manuscript, there is some drainage not shown on the field inspection but shown on the North Carolina State Highway and Public Works Commission maps for Columbus and Brunswick Counties, submitted by the field inspection party showing geographic name inspection. It is believed, that this drainage does not follow a definite course. Nevertheless, this compilation office has shown, by the dot-dash symbol, a probable, approximate course for the drainage in this area.

29 SUPPLEMENTAL DATA:

There are no previous surveys covering the area of this map manuscript available to this compilation office. Two maps, Columbus County and Brunswick County, North Carolina, State Highway and Public Works Commission, were available.

37 GEOGRAPHIC NAMES:

A list of undisputed, disputed and recommended geographic names in this area have been shown on a list attached to this report.

38 DISCREPANCY OVERLAY:

A discrepancy overlay has been prepared to accompany this map manuscript. On it are notes, calling attention of the field edit party to omissions of tree and road classification made during the field inspection and such notes as are deemed likely to be of assistance during the field edit. The numbers of all Bench Marks are indicated for the use of the Baltimore Field Office in scaling their geographic positions from the red-line print. A set of General Notes on this discrepancy overlay will serve as a guide in the interpretation of symbols shown on the map manuscript.

39 HORIZONTAL ACCURACY:

Horizontal accuracy of the location of well-defined and less well-defined points of detail is believed to be within the limits as set forth in the instructions for Project CS-284, paragraph 59, dated July 15, 1942.

40 RECOMMENDATION FOR FUTURE SURVEYS:

The planimetry as presented on this map manuscript is believed to be complete, but is subject to field edit for corrections, additions, and deletions.

41 JUNCTIONS:

Complete, satisfactory junctions have been made with the following quadrangles:

To the North -- T-8188
To the South -- T-8201
To the East -- T-8193
To the West -- T-8195

42 REMARKS:

The field inspection party has submitted an adequate description of the area covered by this map manuscript, in the field report, which is attached to this compilation office descriptive report.

43 AZIMUTH REFERENCE MARKS:

Three azimuth reference marks, namely, ASH AZIMUTH, 1942, BRITTON, AZIMUTH, 1942, and BUG HILL AZIMUTH, 1942, have been established by radial ^{intersections} ~~resections~~ and their descriptions and scaled geographic positions have been submitted on Forms No. 524 accompanying this report.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

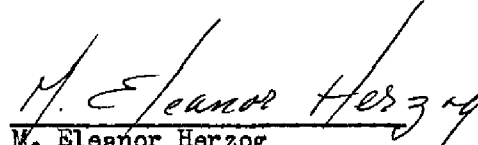
No topographic quadrangles in this area were available to this compilation office. Comparison was made, however, with the Columbus and Brunswick County, North Carolina State Highway and Public Works Commission maps, scale 1" to the mile.

Lack of minute detail on these maps made accurate comparison difficult. In general, there is a fairly good agreement of roads.


45 COMPARISON WITH NAUTICAL CHARTS:

There are no nautical charts which cover the area of this map manuscript.


Respectfully submitted:
June 16, 1943


M. Eleanor Herzog
Junior Photogrammetric Aid


Map Manuscript, Discrepancy
Overlay and Descriptive Re-
port Reviewed by:


Henry F. Eichert
Junior Photogrammetric Eng.


Compilation of Map Manuscript
Supervised by:


Joseph Steinberg
Asst. Photogrammetric Eng.

and


J. Edward Deal, Jr.
Asst. Photogrammetric Eng.

Approved & Forwarded:
June 19, 1943


Fred. L. Peacock, Commander
C. & G. Survey
Officer-in-Charge
Baltimore Field Office

LIST OF GEOGRAPHIC NAMES

Undisputed

- | | |
|-----------------------|-----------------------------|
| ✓ Ash | ✓ Longwood |
| ✓ Ash Road | ✓ Longwood Road |
| ✓ Bear Branch | ✓ New Britton Bridges |
| ✓ Bear Branch Bridge | ✓ Pireway Ferry (abd.) |
| ✓ Beech Island | ✓ Project Road |
| ✓ Bee Tree Swamp | ✓ Reeves |
| ✓ Brunswick County | ✓ Reeves Ferry (abd.) |
| ✓ Butler's Pond | ✓ Reeves Ferry Road |
| ✓ Columbus County | ✓ Regan Branch <i>Regan</i> |
| ✓ Cow Pen | ✓ Regan Bridge |
| ✓ Flat Branch | ✓ River Swamp |
| ✓ Freeland | ✓ Sand Hill |
| ✓ Freeland Branch | ✓ Seaside Road |
| ✓ Gore Branch | ✓ Scippeco Swamp |
| ✓ Gore Creek | ✓ Scippic Bridge |
| ✓ Gore Lake | ✓ Seven Creeks |
| ✓ Hog Swamp | ✓ Simmons Bay |
| ✓ Horse Pen Swamp | ✓ Simmons Bay Creek |
| ✓ Joe Lake | ✓ Simmons Bay Road |
| ✓ Kings Bridge (abd.) | ✓ Soldier Bay |
| ✓ Kings Swamp | ✓ Soldier Bay Road |
| ✓ Little Prong | ✓ Waccamaw River |
| ✓ Long Bays | ✓ Ward Branch |
| | ✓ Wet Ash Bridges |

LIST OF GEOGRAPHIC NAMES

Disputed

Recommended

Possum Branch

Regan

Wet Ash Swamp

Disputed

Burton Branch

Regans Crossroads

Ash Swamp

FIELD EDIT REPORT
T-8194
PROJECT CS-284

46. The field edit was accomplished by visual inspection making all corrections, additions, and deletions on the map manuscript in the field, and transferring all detail to a smooth copy while inking.

The following color scheme was used:

FEATURES	COLORS
Additions, bench marks, wye level elevations and crosses	Red
Deletions	Green
Contours	Brown
Civil Boundaries	Violet

47. The position and amount of detail is believed to be complete and adequate.

48. Three horizontal accuracy tests were run in adjacent quadrangles.

Vertical accuracy tests are the subject of a special report for project CS-284.

Submitted by

Louis Levin per F.L.G.
Louis Levin

Photogrammetric Aid

Approved and forwarded

F. L. Gallen

F. L. Gallen
Chief of Party

T-8194

No. 1

Remarks.

Decisions

	Remarks.	Decisions
1		U.S.G.B.
2		
3		
4		
5		
6		
7		
8		Road Maps
9		
10		340785
11		"
12		339785
13		340785
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		340784
23		340785
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8194

FREELAND quadrangle

1 Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
Waccamaw River	✓		✓						1
Brunswick County	✓		✓						2
Columbus County	✓		✓						3
Shalotte Twp	(Brunswick Co.)		✓	✓					4
Waccamaw Twp	"		✓	✓					5
Bug Hill Twp	(Columbus Co.)		✓	✓					6
Lees Twp	"		✓	✓					7
State Highway No. 130			✓						8
									9
Long Bays	✓		✓						10
Longwood	✓		✓						11
Longwood Road	✓		✓						12
Seaside Road	✓		✓						13
Butler Pond	✓		✓						14
Flat Branch	✓		✓						15
Wet Ash Bridges	✓		✓						16
Wet Ash S. amp	✓		✓						17
Ash Road	✓		✓						18
Ash	✓		✓						19
Gore Branch	✓		✓						20
Soldier Bay	✓		✓						21
Soldier Bay Road	✓		x						22
Project Road	✓		✓						23
Sand Hill	✓		✓						24
Bear Branch	✓		✓						25
Bear Branch Bridge	✓		✓						26
Possum Branch	✓		✓						27

T-8194

No. 2

Remarks

Decisions

1		340785
2		"
3		"
4		"
5		"
6		"
7		"
8		339786
9		340785
10		"
11		"
12	Pending with USGB	"
13		340786
14		"
15		"
16		"
17		340785
18		340786
19		340785
20		341785
21	Limits are very vague: see line 3 above	341786
22		341785
23		"
24		340785
25	<i>Apply to bridge at Waccamaw R.</i>	341785
26		"
27		340785

GEOGRAPHIC NAMES

Survey No. T-8194

2	Name on Survey	Source of Information											
		A	B	C	D	E	F	G	H	K			
	Gore Creek	✓		✓									1
	Gore Lake	✓		✓									2
	Cow Pen Island	✓		✓									3
	Ward Branch	✓		✓									4
	Regan	✓		✓									5
	Regan Branch	✓		✓									6
	Regan Bridge	✓		✓									7
	River Swamp	✓		✓									8
	Reeves Ferry (Abd.)			X									9
	Scippio Swamp	✓		✓									10
	Scippio Bridge	✓		✓									11
	Seven Creeks	✓		✓									12
	Beech Island	✓		✓									13
	Joe Lake	✓		✓									14
	Pireway Ferry (Abd)			X									15
	Reeves	✓		✓									16
	Reeves Ferry (Abd) Road	✓		✓									17
	Simmons Bay Road	✓		✓									18
	Simmons Bay Creek	✓		✓									19
	Simmons Bay	✓		✓									20
	Cow Pen			X									21
	King Swamp	✓		✓									22
	Hog Swamp	✓		✓									23
	Bee Tree Swamp	✓		✓									24
	New Britton Bridge 1 ✓			✓									25
	King Bridge (Abd.)			X									26
	Freeland Branch	✓		✓									27

T-8194

No. 3

Remarks.

Decisions

	Remarks.	Decisions
1		341785
2		"
3		"
4		"
5		341784
6	Very little of feature on this quadrangle	"
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GEOGRAPHIC NAMES

Survey No. T-8194

3	Name on Survey										
		A	B	C	D	E	F	G	H	K	
		On Chart No.	On previous survey No.	On U. S. Quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
	<u>Freeeland</u>	✓		✓							1
	<u>Horse Pen Swamp</u>	✓		✓							2
	<u>Clayton Bay</u>	✓		✓							3
	<u>Little Prong</u>	✓		✓							4
	<u>Ridge Road</u>	✓		✓							5
	<u>Horse Pen Bay</u>	✓		✓							6
	<u>Gore Creek Bridge</u>	✓		✓							7
	<u>Sweetgum Island</u> LK	✓		✓							8
											9
											10
											11
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											27

James W. declined to read approved
 by L. Heck on 10/20/43

RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

Registered and Filed in the Vault

Cloth-mounted copy of the published quadrangle.

published quadrangle at 1:20,000 scale
Black and white cloth-mounted copy of the/~~map~~
~~manuscript~~. This copy is filed to preserve
original survey detail shown on the manuscript
at 1:20,000 scale which may not have been shown
on the published sheet. For ~~political-boundaries~~,
woodland, marsh, ~~and-swamp-limits~~, refer to the
published quadrangle for the finally adopted
positions.

Descriptive Report.

Division

Filed in the Photogrammetric Section--Surveys-Branch

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Reviewing Unit.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Original celluloid manuscript.

Copies of specifications and all instructions to field parties and field offices.

Filed in Reproduction Branch

Glass negatives of the color separation drawings.

Filed in the Library

~~Special report on field work by Commander K. T. Adams, 1944.~~

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. -L. Gallen, 1944.

~~Season's report on field work by Commander R. L. Schoppe, 1944.~~

Delivered to the Army Map Service in accordance with the contract

Film negatives and film positives of the color separation drawings.

All color separation drawings.

~~Original celluloid manuscript.~~

A correction sheet consisting of a copy of the first edition of the quadrangle with notes in red indicating changes desirable at the next printing.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-8194

FREELAND QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy

The closest horizontal accuracy test is on survey No. 8193.

The closest vertical accuracy test is on survey No. 8188.

Previous Surveys

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

There are no previous topographic surveys in this area.

Comparison with Nautical Charts Nos.

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

There are no nautical charts which cover the area of this map manuscript.

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

Only changes of a minor nature were necessary during the review of this map manuscript.

Reviewed Sept. 21, 1943 By Arthur W. Carr
under direction of D. H. Benson *per W.M.*

Inspected by B. G. Jones *B.G. Jones 6/46*

Examined and approved:

K. T. Adams
Chief, ~~Surveys Branch~~
Division of Photogrammetry

~~Chief, Topography Section~~

Robert W. Knox
Chief, Div. of Charts
Robert W. Knox
Chief, Nautical Chart Branch

Raymond B. Egan
Chief, Div. of Coastal
Surveys