

5551

U. S. COAST & GEODETIC SURVEY  
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U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

APR 1 1936

Acc. No. ....

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Sheet No. 5551  
~~Hydrographic~~

State North Carolina

LOCALITY

~~North Carolina East Coast~~

Pungo River

~~Durants Point~~  
Lower Downy Point

19354

CHIEF OF PARTY

S. B. Grenell

5551

Applied to chart No. 832, Jan 1937  
P.L.G.  
Applied to cor. of chart 1231 April 9, 1937 Hem.

DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ....

REGISTER NO. 5551

State..... North Carolina .....

General locality..... Pungo River.  
~~North Carolina River~~ .....

Locality..... ~~Pungo River~~ Duquats Point Lower Downy Point.  
photos. ....

Scale 1: 10,000 ..... Date of ~~survey~~ 10-9-34 ....., 19.....

~~Vessel~~ Air Photo Compilation Party No. 18 .....

Reviewed and recommended for approval:

Chief of party..... Lieut. (j.g.) S. B. Grenell *S. B. Grenell* .....

Photos plotted by:

~~Surveyed by~~..... F. B. Hickman .....

Inked by..... J. B. Williams, Jr. .....

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated..... Dec. 14, 1934 ....., 19.....

Remarks: Compilation of aerial photos Nos.: (M-78) 21 to 35;

77 to 89; 133 to 137

*Blueprint on scale 1:10 000*

--NOTES OF COMPILATION--

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnell will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the chart compiled is based upon the information contained herein.

SHEET No. 5551

	M-79		M-78
PHOTO NO.	21 77 133	to PHOTO NO.	35 89 137
BY		START	FINISH
ROUGH RADIAL PLOT	<u>S. B. Grenell</u>	<u>2-24-35</u>	<u>2-26-35</u>
SCALE FACTOR (1.000)	<u>S. B. Grenell</u>	"	"
SCALE FACTOR CHECKED	<u>F. B. Hickman</u>	"	"
PROJECTION	<u>A. M. Gruber</u>	<u>3-1-35</u>	<u>3-1-35</u>
PROJECTION CHECKED	<u>G. F. Lenoir, Jr.</u>	"	"
CONTROL PLOTTED	<u>F. B. Hickman</u>	<u>3-6-35</u>	<u>3-6-35</u>
CONTROL CHECKED	<u>H. B. Riner</u>	"	"
TOPOGRAPHY TRANSFERRED	_____	_____	_____
TOPOGRAPHY CHECKED	_____	_____	_____
SMOOTH RADIAL LINE PLOT	<u>F. B. Hickman</u>	<u>3-20-35</u>	<u>4-3-35</u>
RADIAL LINE PLOT CHECKED	<u>S. B. Grenell</u>	"	"
DETAIL INKED	<u>J. B. Williams, Jr.</u>	<u>4-4-35</u>	<u>5-27-35</u>
AREA DETAIL INKED	<u>21.9</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m.	<u>15.1</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m.	<u>11.6</u>	Statute Miles	
GENERAL LOCATION	<del>North Carolina East Coast</del> <u>Pungo River</u>		
LOCATION	<del>Pungo River</del> <u>Durants Point</u>		
DATUM STATION	<u>Lower Dowry - 2, 1914</u>	LATITUDE	<u>35 - 31 - 45.29 (1395.8m)</u>
	<u>1914-33-35</u>		
DATUM	<u>N. A. 1927</u>	LONGITUDE	<u>76 - 33 - 27.97 (704.7m)</u>
			<u>(unadjusted)</u>

Note See report T 5550 pages 5 to 8b  
for discussion of difficulty with photos  
in this area. Additional ample control  
for the photos mentioned on opposite  
page has been furnished by a traverse  
along the road on across top of  
this compilation. The traverse stations  
are not marked and are not  
necessary and are not shown  
on the printed copies of this  
compilation. The points are marked  
on the celluloid and marked  
on the field inspection prints.

B.G. Jones

REPORT OF COMPILATION:

COMPILATION METHOD:

The same difficulty was experienced with pictures 19 to 36 as discussed on sheet #5550. "C" print seems to be out - also "D" out in scale. Some "C" prints fit O.K. Cuts were taken when control all held; if control did not hold only cuts through center of print were used. The same method was used on "D" prints. Some "C" prints were oriented individually by locating focal center of wing and re-radial lining.

Intersections were checked by placing J. A. Bond's aluminum sheet underneath. Shoreline seems to check O. K.

"C" prints 19 to 26 inclusive, were moved over 15 meters but this did not hold in all cases.

ADJUSTMENT OF PHOTOGRAPHS:

The photographs for this compilation were without excess tilt and some of the wings were exceptionally free from tilt out to the extreme edge. The radial points were well selected and spaced and it was only necessary to interlace in a few cases. One of these ~~was~~ was to obtain points to put in the upper part of the Pungo River at Long. 76° - 31; Lat. 35° - 34 which was very far out on the wing and past the limit established for this compilation.

No unusual difficulties were encountered.

INTERPRETATION:

The pictures were clear and the detail well defined with the exception of houses that fell far out on the wings, these were blurred and were not put on the compilation.

There were a few old abandoned tramroads on this compilation. These tramroads now have no tracks or ties and are grown up with brush and trees. A combination of tree, sand and brush symbols were used to show this feature.

The standard topographic symbols were used on this compilation.

COMPARISON WITH CONTEMPORARY SURVEYS:

All junctions with adjoining sheets are complete and satisfactory. Checked shoreline and detail from topographic sheets "B", "C" and "H", Chief of Party, J. A. Bond, 1934. The shoreline on this compilation agrees with the above topo sheets. T-6338(B); T-6339(C); T-6344(H)

COMPARISON WITH OTHER SURVEYS:

T-6340 and T-6343 are graphic control surveys which cover portions of this compilation. See review at back of this report for comparison with T-6340 and T-6343 as well as the others mentioned here.

This compilation is in agreement with all charted detail on hand.

ACCURACY AND COMPLETENESS:

This compilation is accurate and complete within the prescribed limits, with a probable error of not more than 10 meters on all well defined detail and not over 20 meters on all less well defined detail.

PHOTOGRAPHS;

M-78 133 to 137 incl.

unknown.

Oct 9, 1934

Photos (M-78) 138 to 141 missing.

M-78 77 to 89 "

10:58 - 11:08

10-9-34

periodic tide

M-78 21 to 35 "

10:35 - 10:53

10-9-34

negligable

Field reviewed by: *A. M. Gruber*  
A. M. Gruber, Surveyor

*J. B. Williams Jr.*  
J. B. Williams, Jr., Draftsman



NAMES

C Charted  
 W. E. Well Established  
 L. N. Local Name  
 O. S. On Old Survey Sheets

Bay Shore	W. E.
Bay Shore Landing	W. E.
Bay Point	W. E.
Crooked Creek	W. E. - O. S.
Upper Dowry Creek	O. S. - C.
Fork Ditch	L. N.
Flax Pond	L. N.
Flax Pond Creek	L. N.
Lower Dowry Point ✓	C. Known locally as Haystack Point
Sandy Gut	L. N.
Lower Dowry Creek	O. S. - C.
Duran Point	Charted as Durants Pt. and on old topo sheets as N Duran's Pt.
Deep Pt.	L. N.
<del>Jarvis Creek</del> *	L. N.
Fishing Creek	W. E. - O. S.
<del>Quilley Pt.</del> *	O. S. - C.
Neal Creek	On old topo sheets as Tooley Cr, not known locally as Tooley Cr.
Becky Creek	L. N.

\* This name falls without the limits of this compilation, on compilation T-5555.

\* APPEAR ON T 5551 BUT NOT ON CHART 1231

*etc*

Remarks

Decisions

	Remarks	Decisions
1		
2		
3	<i>Not Leachville</i>	
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15	<i>Not within limits of T 5551.</i>	
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		



GEOGRAPHIC NAMES  
 Survey No. T-5551

Name on Survey	Sources											
	A	B	C	D	E	F	G	H	K			
<u>Haslin Corner</u>			✓	✓								1
<u>Lower Dowry Creek</u>	✓											2
<u>Leachville</u>			✓				✓					3
<u>Sandy Gut</u>												4
<u>Lower Dowry Point</u>	✓		✓									5
<u>Flax Pond Creek</u> *												6
<u>Flax Pond</u> *												7
<u>Upper Dowry Creek</u>	✓		✓									8
<u>Bay Shore</u> *												9
<u>Bay Shore Landing</u> *												10
<u>Pungo River</u>	✓		✓									11
<u>Durants Point</u>	✓		✓									12
<u>Fishing Creek</u>												13
<u>Deep Point</u>												14
<del>Leachville Creek</del>												15
<u>Neal Creek</u> *												16
<u>Becky Creek</u> *												17
<u>Cracked Creek</u>			✓									18
<u>Bay Point</u>												19
<u>NC. STATE HW #91.</u> *												20
												21
												22
												23
												24
												25
												26
												27

*O. E. ...* 2/23/36

REVIEW OF AIR PHOTO COMPILATION T 5551 (1935)  
Scale 1:10,000

Comparison with Graphic Control Surveys

(1) T 6338 (1935), 1:10,000

The recoverable station "Gable of barn" was transferred in this office by L. A. M., checked by R. M. B.  
*L.A.M.* *R.M.B.*

(2) T 6339 (1935), 1:10,000

One group of piles in Upper Dowry Creek was transferred from T 6339 to the compilation (lat.  $35^{\circ} 32.8'$ , long.  $76^{\circ} 31.65'$ ). The shorelines of Upper Dowry Creek are not in agreement and the differences are from 0.5 to 1.0 mm. This difference is due to a swing in azimuth and not to the approximate sketching of shoreline on the planetable survey. The compilation is controlled both at entrance and at head of the creek and the azimuth error is most likely in the planetable survey where control was available only at the entrance. It is recommended that the planetable signals be swung slightly on *H-5697* to fit the compilation shoreline. The photo plot has been checked in this office.

(3) T 6340 (1935), 1:10,000

Only a small portion of T 6340 at Durants Point covers the compilation. There are no discrepancies.

(4) T 6343

Small portion of T 6343 south of Durants Point covers the compilation. Shoreline at hydrographic signal "Lok", lat.  $35^{\circ} 29.5'$ , long.  $76^{\circ} 33.8'$ , is not in agreement and the position of this signal may be in error on T 6343. This difference applies also to the small dock and is apparently due to slight error in azimuth of the planetable traverse. The photo plot has been checked in this office.

(5) T 6344

Only that portion of T 6344 shown in Neal Creek covers the compilation. There are no discrepancies.

(6) The surveys T 6338, 6339, 6340, 6343 and 6344 located the shoreline in pencil with an accuracy only adequate for boat sheet purposes. Recoverable details and the planetable stations have been located with usual standards of accuracy on the graphic control surveys and check with the compilation except as noted above. All detail on these surveys over the respective common areas is shown on this compilation except buoys, non-recoverable plane table positions and the magnetic declination.

Comparison with Previous Topographic SurveysT 1273 (1872), 1:20,000

There have been many changes of topography since the time of the survey for T 1273. Several farms, farm buildings and roads have been abandoned and are now covered with woods. The compilation is complete and adequate to supersede that portion of T 1273 which it covers.

T 1310 (1873), 1:20,000

There have been many changes of topography since the time of the survey for T 1310. New clearings of woodland have been made while other farms have been abandoned. State Highway No. 91 has been re-aligned. Some roads have been abandoned while others appear too narrow to be shown except as trails. This compilation is complete and adequate in order to supersede that portion of T 1310 which it covers.

Comparison with New Hydrographic SurveysH 5697 (1935), 1:10,000

There is good agreement of the shoreline of H 5697 and this compilation. The error inherent in the planetable survey T 6339 in Upper Dowry Creek was not carried forward to the hydrographic survey H 5697. *as mentioned on preceding page*

Comparison with the chart

See section of chart 1231 filed at back of this report for road changes.

The report for this compilation does not mention landmarks. The landmarks and non-floating aids to navigation lists which were to have been submitted in a separate report by the parties making the graphic control surveys cannot be found in the files of this office. The list would presumably be filed as a chart letter. *How?* All recoverable objects shown on the graphic control surveys in this area are on the compilation.

The old wharf just east of Lower Dowry Point is no longer in existence.

The group of buildings at lat. 35° 32.0', long. 76° 32.6' have been changed. Some buildings shown on this chart on the south shore of Pungo River between Durants Point and the eastern limits of this compilation are no longer in existence.

March 17, 1936.

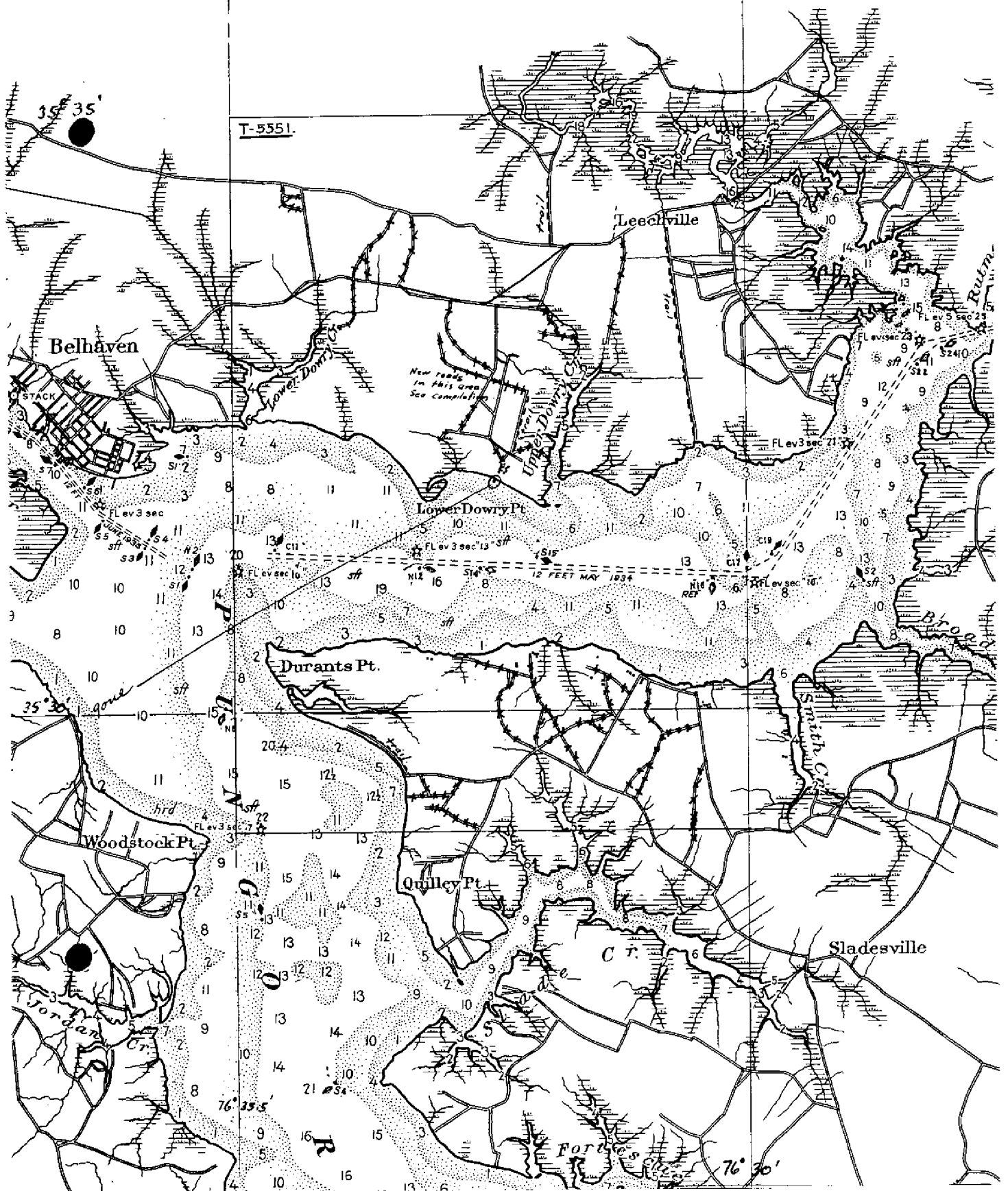
*Leonard A. McSauer,*  
*Bygonas*

Section of Chart 1231.

76° 35.5'

LEGEND

- XXXX Road abandoned.
- New road.
- - - trail.



REVIEW OF AIR PHOTO COMPILATION NO. **T 5551**Chief of Party: **S. B. Grenell**Compiled by: **J. B. Williams Jr.**Project: **Inland route North Carolina** Instructions dated: **Dec. 14 1934**

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b, c, d, e, g and 1; 26; and 64) ✓
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g, n) ✓
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d, e) *None*  
*T-6338, T-6339, T-6340, T-6343, T-6343, plane table surveys made in 1935 cover the entire shoreline of this compilation* ✓
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28) *None transmitted* ✓
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report. *None* ✓
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c, h, i) ✓
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44) ✓  
*There is no sand beach in this area.* ✓

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs." M-87



8. ~~The representation of <sup>high</sup> low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)~~  
*None shown ✓*
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)  
~~Submitted by J. A. Bond 1935~~  
*No recoverable objects have been located and described. ✓*
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)  
*To be submitted by Lt. J. A. Bond 1935.*  
*No list has been attached to any of the graphic control surveys which cover this area, this compilation. ✓*
11. ~~All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16e)~~  
*None ✓*
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k) ✓
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted. ✓
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) ✓
15. The drafting is satisfactory and particular attention has been given the following:
1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
  2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine black dots. ✓✓
4. Closely spaced lines are drawn sharp and clear for printing. ✓✓
5. Topographic symbols for similar features are of uniform weight. ✓✓
6. All drawing has been retouched where partially rubbed off. ✓✓
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. ✓✓

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time. ✓✓

17. Remarks:

18. Examined and approved;



Chief of Party

19. Remarks after review in office:

Reviewed in office by: Leonard A. McSann, March 17, 1936.  
✓ B. G. Jones

Examined and approved:



Chief, Section of Field Records



Chief, Division of Charts



Chief, Section of Field Work



Chief, Division of Hydrography and Topography.