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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New York

DESCRIPTIVE REPORT

Photo
Topographic
Hydrographic

Sheet No. T5337

LOCALITY

Eastern Long Island

Pesonic to Southold and Vicinity

1934

CHIEF OF PARTY

R. C. Bolstad, Jr. H. & G. Engr.

Applied to chart 299 Mar 5, 1936 J.M.A.

" " " 298 " " " J.M.A.

" " " 1212 Apr. 1936 J.M.A.

Applied to Chart 363 Jan 1948 E.B.H.

-1-
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. 20E

REGISTER NO. T5337

State New York **5337**

General locality Eastern Long Island

Locality Poconic to Southold and Vicinity

Scale 1:10,000 Date of photographs April 21, 1933
Date of survey Aug. 3, 1934

~~Vertical~~ Air Photo Compilation Party No. 12, New York City

Chief of party Roswell C. Bolstad

Surveyed by See data sheet enclosed in Descriptive Report for this sheet.

Inked by W. E. Brown

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

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

Instructions dated November 15, 1932

Remarks: Compiled on scale of 1:10,776 and enlarged and
printed on scale of 1:10,000 by Photo Lithography.

- STATISTICS -

on

SHEET, FIELD NO. 20E, REG. NO. T5337

PHOTOS, NO. M32 (880-14) TO NO. M41 (880-14) TIME 10:00 A.M.

PHOTOS, NO. M1 (8811-8) TO NO. M7 (8811-8) TIME 10:00 A.M.

DATE OF PHOTOGRAPHS M32 - M41, Five lens, April 21, 1933

DATE OF PHOTOGRAPHS M1 - M7, Single lens, Sept. 19, 1933

See par. GENERAL INFORMATION, BY DATE
page 3 regarding dates following.

	BY	DATE
		From To
ROUGH RADIAL PLOT	<u>S.E. Sperry, Jr.</u>	<u>8/28 - 8/28/33</u>
	<u>J. REYNOLDS</u>	
SCALE FACTOR (0.928)	<u>J. Reynolds</u>	<u>8/28 - 8/28/33</u>
	<u>J. C. HARMON</u>	
SCALE FACTOR CHECKED	<u>J.C. Harmon</u>	<u>10/2 - 10/2/33</u>
	<u>J.P. O'Donnell</u>	
PROJECTION	<u>J.P. O'Donnell</u>	<u>10/26 - 10/26/33</u>
	<u>J.P. JONES</u>	
PROJECTION CHECKED	<u>J.P. Jones</u>	<u>10/26 - 10/26/33</u>
	<u>J.P. JONES</u>	
CONTROL PLOTTED	<u>J.P. Jones</u>	<u>10/27 - 10/27/33</u>
	<u>J.J. Langan</u>	
CONTROL CHECKED	<u>J.J. Langan</u>	<u>10/27 - 10/27/33</u>
	<u>J.J. Langan</u>	
TOPOGRAPHY TRANSFERRED	<u>J.J. Langan</u>	<u>12/22 - 12/23/33</u>
	<u>W.E. Hackett</u>	
TOPOGRAPHY CHECKED	<u>W.E. Hackett</u>	<u>12/23 - 12/23/33</u>
	<u>J.J. Langan</u>	
SMOOTH RADIAL LINE PLOT	<u>J.J. Langan</u>	<u>1/2 - 1/27/34</u>
	<u>J.P. O'Donnell</u>	
RADIAL LINE PLOT CHECKED	<u>J.P. O'Donnell</u>	<u>1/27 - 1/29/34</u>
	<u>W.E. Brown</u>	
DETAIL INKED	<u>W.E. Brown</u>	<u>4/15 - 8/3/34</u>
	<u>A.K. Spalding</u>	
PRELIMINARY REVIEW	<u>A.K. Spalding</u>	<u>9/12 - 9/14/34</u>
	<u>J.P. O'Donnell</u>	<u>9/24 - 9/27/34</u>
	<u>J.P. O'Donnell</u>	

AREA OF DETAIL INKED 11.5 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED 0.4 sq. Statute Miles (Shoals in water area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)
12.9 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)
7.5 Statute Miles

LENGTH OF ROADS, STREETS, TRAILS, RAILROADS 67.0 Statute Miles

GENERAL LOCATION Eastern Long Island

LOCATION Peconic to Southold

DATUM North American 1927

Latitude 41°- 02'- 25.35" (782.0 m.)

STATION Golf 1933

Longitude 72°- 24'- 55.89" (1305.4 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 20E

GENERAL INFORMATION

The AIR PHOTO FIELD INSPECTION REPORT, 1933, of Lieut. L.C. Wilder for Eastern Long Island, N.Y. furnished the necessary field data for the compilation of this sheet. Additional information was obtained from the field prints and, in questionable areas, from Lieut. (j.g.) R.C. Bolstad, who is familiar with the topography of this area.

The accompanying STATISTICS SHEET details all data in connection with the compilation of this sheet. Sheets 20E and 20W, separated after the detail was completed, have the same compilation dates, page 2 from ROUGH RADIAL PLOT to PRELIMINARY REVIEW, since it was impossible to allot the actual time to each half of the sheet.

According to the Predicted Tide Tables of the U.S. Coast & Geodetic Survey the tide, between Cutchogue Harbor and Southold, at the time both the five lens and single lens photographs were taken was practically at high water. See page two for the times and dates.

The five lens photographs, M32 to M41 (880-14), inclusive, taken by 2nd Lieut. James F. Olive, Jr. of the U.S. Army Air Corps with camera Model T-3A, No. 31-78, formed the principal source of data for this compilation and was supplemented by photos M1 to M7 (8811-8) inclusive, which were taken to strengthen the marginal area along the southerly border over the westerly side of Hog's Neck.

The scale factor of the single lens flight was different from that of the five lens and, although an accurate smooth plot was made without great difficulty, it was necessary to have a photostat made of photo M1 (8811-8) to the scale of the projection so as to accurately draw in the detail in the water area at the southwesterly end of Hog Neck.

CONTROL

(A) Sources

The following sources of control were used in the compilation of this sheet:

- (a) Triangulation by Lieut. L.C. Wilder, in 1933, field positions unadjusted.
- (b) Triangulation by Lieut. C.D. Meaney, in 1932.
- (c) Triangulation in 1867, Station "Case Cupola".
- (d) 1933 Aluminum Control Sheet (Lieut. L.C. Wilder, Field Sheet "C", Reg. No. T-6019).

All control was placed on the North American 1927 Datum before beginning the compilation. The adjustment was approximate, however, any final office adjustments should be unplotable at this scale (1:10,776).

The above control forms the basis of control in this area. In addition to this the following topographic

signals (shown on the aluminum control sheet, Field Letter "C") were spotted on the photographs and used as control.

Lum ✓✓	Cut ✓✓
Bud ✓✓	Tak ✓✓
For ✓✓	Zam ✓✓
Gray ✓✓	Elk ✓✓
Gab Gap ✓✓	Ame ✓✓
	Amo ✓✓

These signals have been indicated on the celluloid topographic sheet by a double blue circle, thus (⊙), and the name (as shown on aluminum control sheet) also in blue ink. Since blue ink will not photograph in the photo lithographic process, no record of these topographic signals (banners and flags) will appear on the finished sheet.

If it should be desired by the Chart Section to have these signals shown, the usual circles and names may be inked in red by draftsmen in the Washington Office, since they will have all of the data at hand.

In the compilation, all of the control stations shown on the aluminum control sheet were not used as control because the field inspection was done before the aluminum control sheets had been finished by the field party which, at that time, had not established all the control of the area. However, many natural objects used as control on the aluminum control sheets could be definitely spotted in the office with the aid of the stereoscope and these were used as supplementary control.

All control stations taken from the aluminum control sheet were plotted from the positions obtained by scaling directly from the control sheet.

The Long Island Railroad track traverse data was used for supplementary control but required slight adjustment as stated under paragraph (C) Discrepancies in this report.

(B) Errors

In making the radial plot for this sheet the following relocations of spotted aluminum control signals resulted:

- ① Lum - Lat. $41^{\circ}-01.7'$, Long. $72^{\circ}-26.7'$ - new position as determined by radial plot lies 8 meters distant on azimuth 40° (from north) from the position as given on the aluminum control sheet. This station, which is a windmill, was picked up by the field inspection party and marked with a penciled circle on field print "C" M31 (880-14). When viewed under the stereoscope it appears to stand out fairly clear and it is believed that the position, as spotted on the photographs, is correct. The correct position of this signal, which has been listed by Lieut. L.C. Wilder, November 4, 1933, as a landmark, will be found under paragraph on LANDMARKS in this report.

- ⑥ Bud - Lat. $41^{\circ}-04.0'$, Long. $72^{\circ}-24.5'$ - new position as determined by the radial plot lies 7 meters distant on azimuth 205° (from north) from the position as given on the aluminum control sheet. This signal is a red and white flag at the end of a pier. It was spotted in the field and verified by a member of the 1933 Hydrographic Party under Lieut. L.C. Wilder operating in this locality.
- ⑥ Zam - (End of concrete bulkhead) - Lat. $41^{\circ}-02.8'$, Long. $72^{\circ}-23.2'$ - new position as determined by the radial plot lies 10 meters distant on azimuth 320° (from north) from the position as given on the aluminum control sheet. This signal was not spotted by the field inspection party because of its proximity to triangulation station "Paradise", 1933. The position of this signal was spotted in the office by the aid of the stereoscope and since the end of the bulkhead is somewhat indefinite the spotting is therefore not positive. ✓

The control, on this sheet, is in general strong and the radial plot gave good intersections so it is believed that the stations are in error as stated. It is to be noted that the aluminum control sheet was executed on a scale of 1:20,000 whereas this sheet is on a scale of 1:10,776.

(C) Discrepancies

The Long Island Railroad track traverse data, as listed by them, was found to be in error. The true azimuth is about $7^{\circ}-58'$ in a westerly direction (counterclockwise) from the azimuth determined by them. It appears that the railroad traverse azimuth may have been based on a poor magnetic azimuth determined some years ago.

No other control stations, established by other organizations and used in this compilation, were found to be in error.

COMPILATION

(A) Method

The usual radial line method of plotting was used in the compilation of this sheet.

(B) Adjustments of Plot

The photographs of this area appear to have a great deal of tilt and scale fluctuation due to variation in altitude of the airplane, making it necessary for the detailer to do a considerable amount of proportioning between radial points.

In general, no unusual difficulty was experienced in holding to control or tying in with the railroad traverse, with the exception of the area covered by photographs M28 to M32 (880-14). In this area the photographic image of the railroad, although fairly close to the center of the "B" prints, did not parallel the plotted traverse position

of the railroad; the photographs showing evidence of tilt. Holding the control at the limits of this area, it was found impossible to adjust the plot so as to bring the azimuth into better alignment. It is to be noted that the two topo signals "Bert" and "Lum" which were found in error by the radial plot (by approximately the same amount and direction) were cut in mainly by radial lines from these photos. One of these topo stations, "Lum", is a landmark and the new position by air photo topography has been given under paragraph LANDMARKS. Inasmuch as this discrepancy with the Railroad traverse exists and these two topo positions did not check, the radial plot in this area had better be verified in the Washington Office. This check would be made in the New York Office except for the fact that the photographs have been crated for shipment.

Handwritten: This 5070
resubmitted 5/20/50
comp. by [signature]

However, adjustments were carefully made, except as stated in the paragraph above, and by holding to all the available control for this sheet excessive adjustment, to the extent of causing any appreciable error, was not necessary.

It was necessary to adjust the Long Island Railroad track traverse for the amount of the error stated under (C) Discrepancies, page 5 of this report. The distances, as obtained from the track traverse data, to road intersections with the railroad checked well with those obtained from the radial plot after the correction in azimuth was made. There was a variation in the distances which is believed to be due to the expansion of the railroad track traverse sheet.

(C) Interpretation

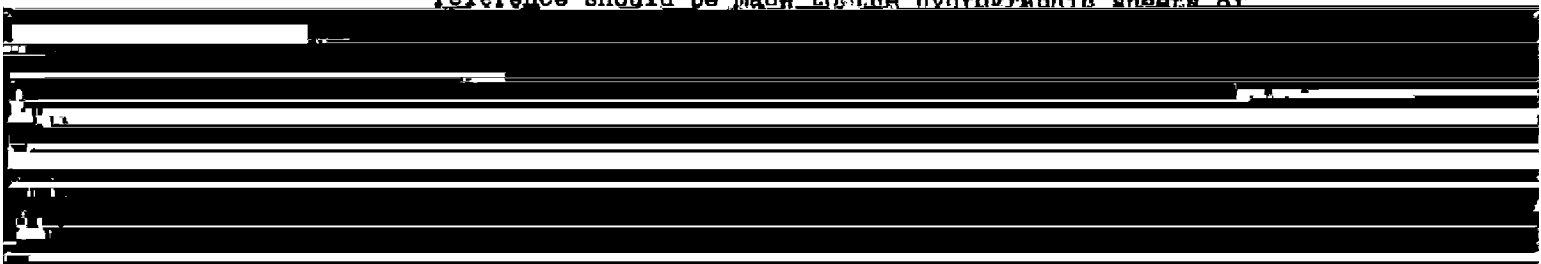
The usual graphic symbols were used as approved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail.

The double full line was used to indicate first order roads and the double broken line for private driveways and roads of lesser importance. An exceedingly poor road or trail was shown as a single dashed line. In most cases, unless labeled on the field inspection prints, the classification had to be determined by the appearance under the stereoscope and the similarity with labeled roads.

There are numerous rocks scattered off shore. Some of these have been shown but because of difficulty in distinguishing them definitely on the photographs it is believed that some have been omitted. For more accurate data concerning these rocks reference should be made to the hydrographic sheets of this area. H-5380 - H-1591

See Review

There are no bridges of importance to navigation within the area of this sheet. There is no data available in this office pertaining to the lift bridge at Goose Creek. For further information regarding this bridge reference should be made to the hydrographic sheets of



(D) Information from Other Sources

The Long Island Railroad track traverse data was used as supplementary control as stated under CONTROL (A) Sources, page 4 and (C) Discrepancies, page 5.

The transmission line traverse of the Long Island Lighting Company was used in locating the transmission line and interpreting the detail, on this sheet, in the vicinity of the transmission line.

(E) Conflicting Names

The following new names, which were picked up by the field inspection party and verified by the native inhabitants of the locality, are shown on this sheet.

Town Creek
~~Iskey Creek~~

The junctions with all adjoining sheets are satisfactory. The Long Island Railroad track traverse data was found to be in error as stated under CONTROL (C) Discrepancies, page 5 of this report.

No errors were found in the transmission line data of the Long Island Lighting Company.

LANDMARKS

The list of landmarks for this area, including those to be expunged, has been previously submitted, November 4, 1933, by Lieut. L.C. Wilder.

* Note: "Horton Point Light House" was submitted by Lieut. L.C. Wilder as a landmark but its position was to be determined by air photo topography.

There are many other objects (such as houses, ends of docks, etc.) which are located within the accuracy specified under the following heading RECOMMENDATIONS FOR FURTHER SURVEYS and may be used to obtain hydrographic "fixes". Care should be taken in using the houses to use the center as the size shown on this sheet may be expanded somewhat.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of not over 2 meters in well defined detail of importance for charting and of 4 meters for other data. It is understood that the widths of roads and similar objects may be slightly expanded in order to keep the detail clear and to keep it from photographing as a solid area in the photo-lithographic process.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Submitted by

William E. Brown

W. E. Brown

Draftsman

Assisted by

J. P. O'Donnell
J. P. O'Donnell

Surveyor

A. K. Spalding
A. K. Spalding
Surveyor

GEOGRAPHIC NAMES

Survey No. T-5337

Date. 1-19-35

Chart No. 299 - 1212

Diagram No. _____

* Approved by the Division of Geographic Names, Department of Interior.

Ø Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	✓ <u>Horton Point</u> *				
	✓ <u>Lily Pond</u>				
	✓ <u>Horton Beach</u> *				
	✓ <u>Great Pond</u>				
	✓ <u>Southold</u> *				
	✓ <u>Southold Bay</u> *				
	✓ <u>Founders Landing</u> Ø	<u>Southold Landing.</u>			
	✓ <u>Town Creek</u>			✓	
	✓ <u>Jockey Creek</u>			✓	
	✓ <u>Peconic</u>				
	✓ <u>Goose Creek</u>				
	✓ <u>Corey Creek</u>	(Corey's Creek on T-1577b)		✓	
	✓ <u>Great Hog Neck</u>			<u>Reydon</u> (not used)	
	✓ <u>Paradise Point</u> *				
	✓ <u>Cedar Beach Point</u> *				
	✓ <u>Richmond Creek</u>				
	✓ <u>Hog Neck Bay</u>				
	✓ <u>Long Island Sound</u>				
	✓ <u>Little Peconic Bay</u>				
	✓ <u>Cedar Beach Creek</u>				
	See pencil note on T-1577, concerning Budds Pond. Ø				
	Should this go on record? NO.				
	APPROVED NAMES UNDERLINED IN RED H. L. Flemer.				

REVIEW OF AIR PHOTO COMPILATION T-5337

Scale 1:10,000.

Comparison with Graphic Control Survey T-6019 (1933) 1:10,000.

See pages 4 and 5 of the preceeding report for discussion of differences in location of stations IUM, ZAM, BUB. The difference in location of station BUB amounts to only .35 millimeters on the plane table survey. The compilation position is accepted as correct, but the station is a temporary object and is not shown. The compilation has been corrected to agree with the plane table position of station IUM (windmill). The photos are not distinct and the windmill cannot be seen clearly. The plane table position of station ZAM is accepted as correct. This station is not shown on the compilation, *as it is not removable.*

Except for the differences mentioned above, T-6019 and the compilation are in agreement.

Comparison with T-1577b (1884) 1:10,000, shows minor changes are in shoreline and additional construction. The compilation is adequate to supersede T-1577b except for rocks listed below. These rocks shown on T-1577b do not appear on the last Hydrographic Survey H-5380 or on T-6019 (1933). The rocks do not appear on the photos but are not disproved as T-1577b is not clear as to whether the rocks are covered at some stages of the tide. See H-5380 for development in the vicinity of these rocks.

Lat. 41°03.1'	Long. 72°24.5'
41°05.3'	72°25.1'
41°05.4'	72°25.3'
41°05.2'	72°25.4'
41°05.2'	72°25.5'
41°05.3'	72°25.6'
41°05.2'	72°25.8'
41°05.3'	72°26.0'
41°05.2'	72°26.1'
41°05.2'	72°26.5'
41°05.2'	72°26.6'
41°05.0'	72°26.9'

Remarks.

The discussion at the bottom preceding page 5 is ~~not~~ indefinite. The ^{plot} print has been examined in this office and no error noted in the area in question.

The projection has been checked in this office and is correct.

Data for bridge clearances were taken from H-5380.

A better estimate of the accuracy of location given on page 8 is

3 to 4 meters from intersected points and 3 to 10 meters for other detail.

9/20/34

✓Bg. Jones.

Approved
K.T. Adams

REVIEW OF AIR PHOTO COMPILATION NO. T5337

Chief of Party: Roswell C. Bolstad

Compiled by: (See page 2,
Des. Report)

Project: New York Air Photo Compilation Instructions dated: Nov. 15, 1932
Party No. 12

- ✓ 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 i; 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)
See paragraph (C) Interpretation, page 6.
- ✓ 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)
See paragraph CONTROL (A), page 3.
- ✓ 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)
See paragraph CONTROL (A), page 3.
- ✓ 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.
See paragraph (B) Errors, page 4.
- ✓ 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)
See paragraph CONTROL (A), page 3 and paragraph COMPILATION (B), page 5.
- ✓ 7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

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."

8. The representation of low water lines, ~~reefs~~, ~~coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
✓ See paragraph COMPILATION (C), Interpretation, page 6 regarding rocks.
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)
✓ See report of Control Party, Lieut. L.C. Wilder in 1933.
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)
✓ Previously submitted by 1933 Field Party under Lieut. L.C. Wilder.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if ^{no} a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)
✓ There are no bridges of importance to navigation shown on this sheet.
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)
✓ See paragraph (E) page 7.
13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927
✓ See page 2.
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: Any additional notes and requirements affecting this area are referred to Lieut. L.C. Wilder's Reports covering the topography executed in 1933 under his charge.

18. Examined and approved;

Preliminary Review:

J. P. O'Donnell *A. K. Spalding*
J. P. O'Donnell and A. K. Spalding
 Surveyor Surveyor
Roswell C. Bolstad
Roswell C. Bolstad
 Chief of Party

19. Remarks after review in office:

Reviewed in office by: *B. G. Jones*

Examained and approved:

K. T. Adams
 Asst Chief, Section of Field Records
 Division of Charts
L. O. Solbert
L. O. Solbert
 Chief, Division of Charts

F. S. Borden
 Chief, Section of Field Work
G. H. Hilde
G. H. Hilde
 Chief, Division of Hydrography
 and Topography.