

5051

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton *Director*

State: New York

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. T5051

5051

LOCALITY

South Shore of Long Island.

Shinnecock Bay between Quogue

and Cormorant Pt.

1933

CHIEF OF PARTY

Roswell C. Bolstad, Jr. H. & C. E.

U. S. GOVERNMENT PRINTING OFFICE: 1921

5051

REPORT ON REVIEW OF SHEET

Air-photo topographic sheet, Reg. No. T5051, has been reviewed together with the Descriptive Report and all requirements are satisfied in accordance with requirements listed in the U. S. C. & G. S. pamphlet NOTES ON THE COMPILATION OF PLANIMETRIC LINE MAPS, 1933.

ADDITIONAL NOTES.

(1) Landmarks.

The list of landmarks for this sheet ~~were~~ not received until after the completion of the sheet and the Compiler's Report. All the necessary chartable landmarks were submitted by Lieut. A. P. Ratti, August 1, 1933 and includes only four objects:-

Shinnecock Bay Light House Old Tower
Hampton Bays Black Watertank
Belt's Windmill
East Quogue M. E. Church Steeple

The position of the latter landmark (East Quogue M. E. Church Steeple) was found to be slightly in error by the radial plot. Its correct position is as follows:

Latitude 40°- 50' - 915 m. ✓
Longitude 72°- 34' - 1222 m.

In addition to the above the enclosed list of Class (C) ~~landmarks~~ is submitted. These should not be charted but have been shown on this sheet (with a small black circle) as they are prominent enough on this scale (about 1:10,000) and may be used to obtain hydrographic "fixes". They were spotted on the photographs by the field inspection party and were also used for supplementary control (since many of them were located on the Aluminum Control Sheet).

(2) Control.

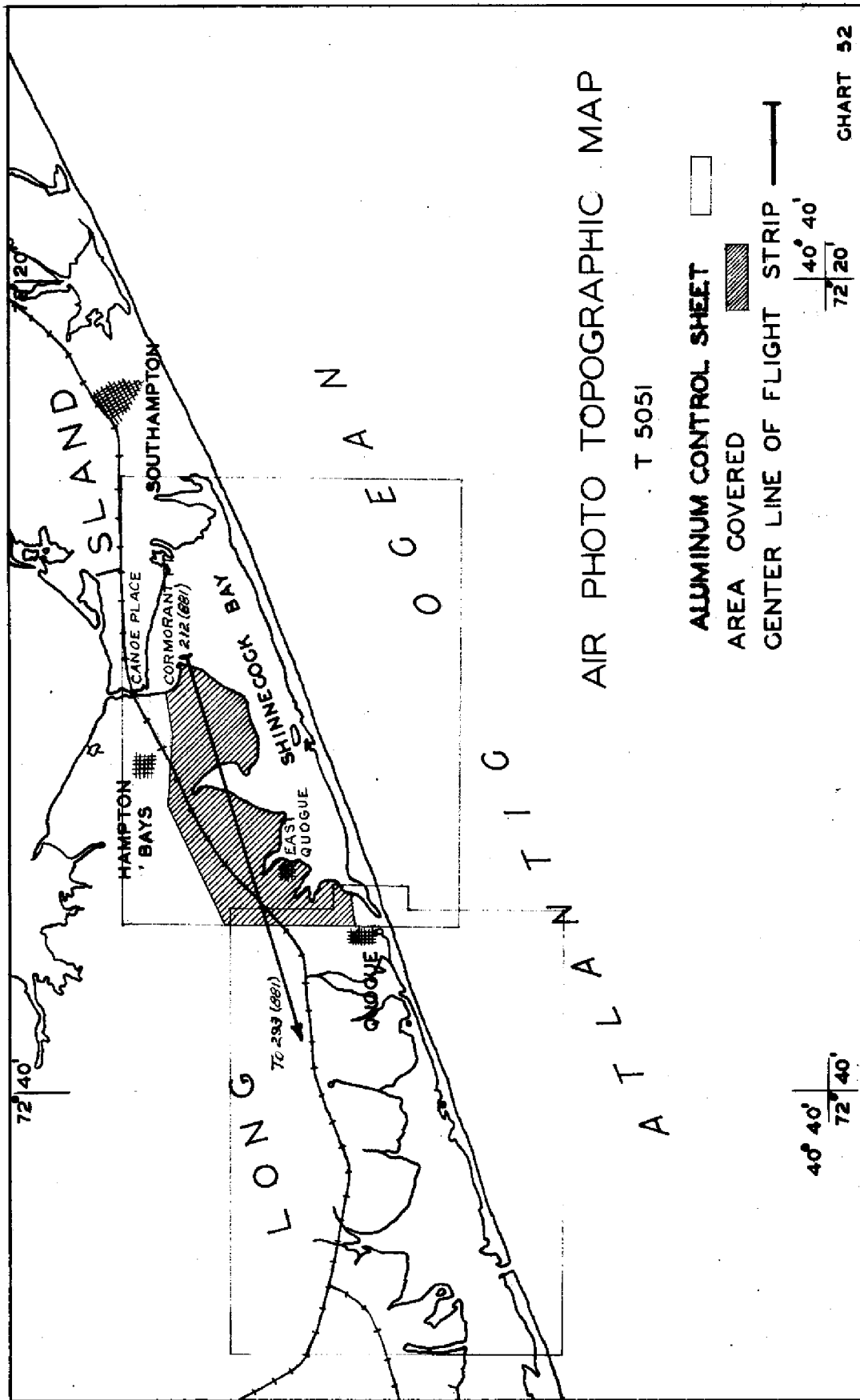
In regard to the last paragraph under CONTROL, (A) Sources, in the preceeding COMPILER'S REPORT, as the blue will not photograph during the photo-lithographic process no record of these topographic control signals (banners and flags) will appear on the finished sheet.

If it is the desire of the Chart Section to have these shown, they may be indicated in red ink with the usual circle and topographic name; this may best be done by draftsmen in the Washington Office as they will have all the data at hand.

(3) Names.

The name, Good Ground, was omitted from this sheet as the name is an old historical name and is not in common usage to-day. This information was obtained from several parties while stationed at Canoe Place on the 1933 party of Lieut. L. C. Wilder.

Roswell C. Bolstad
Roswell C. Bolstad, Chief of Party, C. & G. S.



AIR PHOTO TOPOGRAPHIC MAP

T 5051

ALUMINUM CONTROL SHEET

AREA COVERED

CENTER LINE OF FLIGHT STRIP

72° 40' 40' 20'

40° 40' 72° 40'

CHART 52

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.

State

General locality

Locality

Scale Date of survey, 19...

Vessel

Chief of party *Roscoe C. Bolster*

Surveyed by *P. A. Keely*

Inked by

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated, 19...

Remarks:

.....

FIELD REPORT
For
AIR PHOTO TOPOGRAPHIC SHEET NO. T5051.

In the absence of a report on this area by the chief of the field inspection party the following report is compiled by the aid of notes and sketches made on the field prints, in addition to a general knowledge of this locality obtained by myself while carrying out the field inspection for the adjoining territory.

GENERAL DESCRIPTION OF TOPOGRAPHY.

In general the waterfront is low, often rising from marsh, and extending back inland from flat into gradually rolling country covered principally with pine, oak and oak brush. In the vicinity of Cormorant Point however there is a slight bluff along the waterfront but this does not adhere to the usual trend of topography in this area.

The scarcity of large trees in this locality gives the impression this area may have been burnt over years ago.

CONTROL.

Triangulation and topography (1:10,000 and 1:20,000 scale aluminum control sheets, showing high water line and control signals) executed by the party of Lieut. A.P. Ratti in 1933 forms the basis of control for this area.

LIST OF NAMES.

No new names were submitted nor labeled on the field print photographs by the field inspection party.

LIST OF RECOVERABLE OBJECTS.

The topographic signals listed under LANDMARKS were spotted by the field party on the field prints and no description made except as noted on the list.

MISCELLANEOUS.

Any additional notes and requirements affecting this area are referred to Lieut. A.P. Ratti's reports covering the topography executed under his charge.

Submitted by

Russell E. Bolstad

- NOTES ON COMPILATION -

SHEET NO. 1

PHOTOS, NO. 212 (881) TO NO. 230 (881)

DATE OF PHOTOGRAPHS May 15, 1933 TIME 11:00 A.M.

	BY	DATE
ROUGH RADIAL PLOT	<u>J. P. Reynolds</u>	<u>8/30 - 9/2/33</u>
SCALE FACTOR (0.864)	<u>P. A. Kelly</u>	<u>9/4/33</u>
SCALE FACTOR CHECKED	<u>J. J. Langan</u>	<u>9/5/33</u>
PROJECTION	<u>S. E. Sherry Jr.</u>	<u>9/7/33</u>
PROJECTION CHECKED	<u>T. M. Price</u>	<u>9/7/33</u>
CONTROL PLOTTED	<u>S. E. Sherry Jr.</u>	<u>9/9/33</u>
CONTROL CHECKED	<u>P. A. Kelly</u>	<u>9/9/33</u>
TOPOGRAPHY TRANSFERRED	<u>P. A. Kelly</u>	<u>9/14 - 9/18/33</u>
TOPOGRAPHY CHECKED	<u>E. L. Fitch</u>	<u>9/15 - 9/18/33</u>
SMOOTH RADIAL LINE PLOT	<u>P. A. Kelly</u>	<u>9/11 - 9/14/33</u>
RADIAL LINE PLOT CHECKED	<u>E. L. Fitch</u>	<u>9/14/33</u>
DETAIL INKED	<u>P. A. Kelly</u>	<u>9/19 - 10/21/33</u>

AREA OF DETAIL INKED 9.81 sq. Statute Miles (Land Area)

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

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

GENERAL LOCATION South Shore of Long Island

LOCATION Shinnecock Bay between Quogue and Cormorant Pt.

DATUM North American 1927

STATION Pine Neck 1933 Latitude 40° 50' 19.023" (586.8 m.)
Longitude 72° 33' 04.937" (115.7 m.)

COMPILER'S REPORT
for
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 1

GENERAL INFORMATION.

The only report available affecting this sheet is the preceding report by Lieut. (j.g.) R. C. Bolstad on field inspection. However, in the absence of a detailed report no great difficulty was encountered in interpreting the photographic detail for the compilation. Sufficient notes were labeled on the field prints by the inspecting party and questionable areas were cleared up by Mr. Bolstad as he is familiar with this locality.

The accompanying NOTES ON COMPILATION lists all specific data in connection with the compilation of this sheet.

There is very little tide in Shinnecock Bay and its affect on interpretation of high water was neglected.

This sheet was compiled from photographs taken by the U. S. Army Air Corps' five lens camera, model T-3A, No. 31-78, photograph numbers 212 (881 - 14) to 230 (881 - 14), May 15, 1933.

CONTROL.

(A) Sources.

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

- (a) Triangulation by A. P. Ratti in 1933.
- (b) 1933 Aluminum Control Sheet, Reg. No. 4764
- (c) 1933 Aluminum Control Sheet, Reg. No. 4765
- (d) Portion of L.I.R.R. track traverse data.

The field party's geographic positions were used; these are on the N. A. 1927 Datum. The difference between the unadjusted and the final adjusted positions would be unplotable at the scale of this compilation (1:11,574).

In addition to the triangulation, and the high water line from the Aluminum Control Sheets, the following topographic signals (shown on the Aluminum Control Sheets) were spotted on the photos and were used in controlling this sheet:-

WIN	EWE	BO	RED
NAN	ADD	AXE	FAD
HIB	BIT	MOB	SPY
FIG	DID	HEW	ELL
TOW	RIB	EYE	MIX
BID	LUG	CHIM	

They have been shown on the celluloid topographic sheet by a double blue circle (⊙) together with the name (as shown on the Aluminum Control Sheets) in blue.

(B) Errors.

No errors in the control stations were discovered in compiling this sheet.

(C) Discrepancies.

The Long Island Railroad track traverse data, as listed by them, was found to be in error. The true azimuth is about $80^{\circ} - 05'$ to the left (counter-clockwise) of the azimuth determined by them. The distances to cross roads, etc., in the traverse checked out correctly with the radial plot. It appears that the railroad traverse azimuth may have been based on a poor magnetic azimuth determined years ago.

No other scaleable discrepancies in the control positions were discovered.

COMPILATION.(A) Method.

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

(B) Adjustments of Plot.

Along the junction line with sheet (field no. 15) Register No. T5065 between longitudes $72^{\circ} - 31.7'$ and $72^{\circ} - 33.5'$ an adjustment (about 15 meters to the south) was necessary and the radial plot had to be "squeezed" slightly to accomplish this. This area is strongly controlled by the railroad traverse which was carried off from the adjoining sheet and tied in strongly in the vicinity of Tiana Bay. The railroad traverse checks all right for distance but their azimuth had to be revised as explained on the preceeding page under CONTROL, paragraph (C) Discrepancies.

With the exception of the above adjustment no great difficulties were experienced and a satisfactory final smooth plot was accomplished after plotting through several times.

(C) Remarks on Adjustment.

It was later discovered, soon after the completion of this sheet, that a shrinkage in the mounted photos (or expansion in mounting card) had occurred which had shifted the wing photos out away from the center print. If this was the case at the time the smooth plot was made it would account for the discrepancy mentioned above.

(D) Interpretation.

Only 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.

In the case of sand dunes the exact boundaries could not always be determined as the relief of such

is small and does not always show up clearly under the stereoscope.

The double full line was used to indicate first order roads and the double broken line used 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.

All boundaries of shoal water areas (shown by single broken line) on this sheet were so indicated because of appearance on the photographs and they may be expected to have departure from actual conditions.

(E) Information from Other Sources.

The highwater line together with some of the topographic signals was obtained from the aluminum control sheets as mentioned in paragraph (A) of CONTROL.

In addition a short portion of the L.I.R.R. track traverse was used extending from near Tiana Bay to the eastward and on to adjoining sheet. The railroad traverse was only used for this portion because of the difficulty in making the radial plot and to assist in providing a strong agreement with the adjoining sheet. It was not thought practical to use the railroad traverse for the balance of the sheet however, because of its proximity with established control, the inconsistency of the data and the time involved to plot up the questionable data in the absence of a definite tie in point at the western extremity of the sheet.

(F) Conflicting Names.

There are no names on the sheet conflicting with names shown on the U.S.C. & G.S. Charts of this area. All new names shown were taken from the recent editions of U. S. Geological Survey Maps of that locality.

COMPARISON WITH OTHER SURVEYS.

The junctions with all adjoining sheets are satisfactory.

The high water line as shown on the aluminum control sheets agrees very well with that obtained from the photographs except in a few localities where there are slight differences. At Cormorant Pt. there is a slight deviation; also at the mouth of Smith Creek and in the upper reaches of Weesuck Creek. At the mouth of the creek between Weesuck Creek and Phillips Creek the Marsh line was shown incorrectly on the aluminum control sheet; in this locality the largest discrepancy was found, about 17 meters. In general the high water line agrees very closely with the exception of stretches along a rugged waterfront where is may be expected to show de-

viation due to the sketching of such detail by the topographer in the field.

LANDMARKS.

No landmarks or recoverable objects were reported by the field inspection party. A party under the supervision of Lieut. A. P. Ratti carried on combined operations in this area and submitted Shinnecock Bay L. H., old tower, as a landmark. In addition, the objects listed under LANDMARKS (form enclosed) are submitted; their choice is governed by stereoscopic prominence and inasmuch as these objects were located by the topographic party as signals it is known that they may be readily seen from the water.

The description of topographic signal "Tow" was not labeled on the field print by the inspecting party however, under the stereoscope, it appears to be a tank so it was listed as such.

The landmarks herewith submitted cover all the landmarks within the boundaries of this sheet. They are grouped according to the following classification.

Classification (A) Extremely prominent - can be seen from a long distance - to be shown on both large and small scale charts.

Classification (B) Prominent - can be readily identified at close range but may lose prominence at a distance (about 3 miles) - to be shown on large scale charts only.

Classification (C) ~~Landmarks~~ ^{objects} of minor prominence - these are recoverable objects which can be identified at close range (about 1 to 2 miles) and may be used by the Light House Service - these should not be charted except on exceptionally large scale charts or where the hydrography is to be done on the regular air-photo topographic sheet.

There are also many other objects (such as houses, ends of docks, etc.) which are located within the accuracy specified in the following chapter, 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 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, bridges, railway track yards 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.

P. A. Kelly
Submitted by P. A. Kelly

Draftsman

Roswell C. Boistad
Assisted by Roswell C. Boistad, Jr. H. & G. E.

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

objects
CLASS (C) ~~LANDMARKS~~

Description	Position				Datum	Method of deter- mination
	Latitude		Longitude			
	°	'	°	'		
			D.M. Meters	D.P. Meters		
(Win) Windmill (C) 40° 51			(919.7) 931.1	(1231.2) 174.3	N.A. 1927	1933 A. C. S.
(Man) So. Gable Large Ho. (C) 40 51			(1639.9) 210.9	(475.3) 930.2	"	"
(Hib) Water Tank at West end bldg. (C) 40 51			(1566.9) 283.9	(481.8) 923.7	"	"
(Fig) Chim. east end of Ho. (C) 40 51			(1528.5) 322.3	(148.6) 1256.9	"	"
(Bid) Peak of roof of small shack (C) 40 51			(1619.0) 231.8	(1197.5) 208.0	"	"
(Tow) Tank * (C) 40 51			(1316.2) 534.6	(1255.1) 150.4	"	"
(Ewe) Peak of roof of mansion (C) 40 51			(1680.7) 170.1	(640.5) 765.0	"	"
(Bit) Spire So. side of Ho. (C) 40 51			(1806.4) 44.4	(20.1) 1385.4	"	"
(Add) Windmill with Tank (C) 40 51			(1764.7) 86.1	(52.4) 1353.1	"	"
(Axe) So. gable of house (C) 40 50			(503.8) 1347.0	(1171.2) 234.4	"	"
(Bo) So. gable of boat Ho. (C) 40 50			(514.0) 1336.8	(1319.5) 86.0	"	"
(Fad) Wind- mill (C) 40 50			(1724.0) 126.8	(445.0) 960.8	"	"
(Ell) Wind- mill (C) 40 49			(1818.8) 32.0	(271.5) 1134.0	"	"
(Mix) Chim. on house (C) 40 51			(50.0) 1800.8	(482.3) 922.8	"	"
(Hew) West gable of boat Ho. (C) 40 51			(1419.0) 431.8	(64.0) 1341.4	"	"

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

objects
CLASS (C) LANDMARKS

Description	Position						Datum	Method of deter- mination
	Latitude			Longitude				
	o	'	D.M. Meters	o	'	D.P. Meters		
(Did) Wind- mill (C)	40	51	(291.4) 1559.4	72	32	(1245.2) 160.0	N.A. 1927	1933 A. C. S.
(Rib) Tank and tower (C)	40	51	(1185.8) 665.0	72	32	(106.0) 1299.3	"	"
(Lug) Peak of Ho. roof (C)	40	51	(1345.2) 505.6	72	32	(292.0) 1113.4	"	"
(Mob) So. gable of house (C)	40	51	(1697.8) 153.0	72	32	(81.0) 1324.5	"	"
(Eye) Wind* mill (C)	40	50	(820.0) 1030.8	72	33	(40.0) 1365.8	"	"
(Chim.) Chim. on So. E. end of bldg. (C)	40	50	(212.0) 1638.2	72	34	(560.1) 845.4	"	"
(Red) Gas pumps on pier (C)	40	50	(550.0) 1300.8	72	34	(900.6) 505.0	"	"
Flagpole, Quogue Field Club (C)	40	49	289.9	72	35	1151.0	"	1933 TPI.

Note: A. C. S. stands for Aluminum Control Sheet.


Name preceeding description in parenthesis indicates
topographic name shown on Aluminum Control Sheet.

* Description determined by aid of stereoscope.

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T 5051

- ✓ Title (Par. 56) (See enclosed title sheet)
- Chief of Party Roswell C. Bolstad Compiled by (See enclosed sheet)
- ✓ Project New York Air-photo Compilation Instructions dated Nov. 15, 1932.
Party No. 12.
- ✓ 1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.) Paragraph 8 applicable to party furnishing control.
 - ✓ 2. The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
 - ✓ 3. The control and adjustment of the radial plot were adequate. (Par. 12, 29.)
 - ✓ 4. There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 28.) *None submitted*
 - ✓ 5. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
 - ✓ 6. The representation of low water lines, ^{sand bars, shoal areas} ~~reefs, coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) *See Par. D under Compilation, page 5 of the base report*
 - ✓ 7. Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front. No changes in such details have been noted on this sheet.
 - ✓ 8. The span, draw and clearance of bridges are shown. (Par. 16c.)
 - ✓ 9. The data furnished by the Field Inspection is adequate. (See inclosed Field Report)


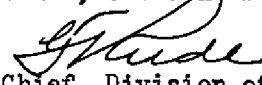
NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

10. The descriptive report covers all details listed in the Manual, so far as they apply to this survey. (Par. 64, 65 and 66.)
11. The descriptive report also contains all additional information required in photo topography as prescribed in the instructions and in the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs". *Exempt for descriptions on form 524. See Par. 12 below.*
12. The descriptions of recoverable stations and references to shore line were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.) (See inclosed Field Report). *the unrecoverable topographic stations shown on this sheet were located on aluminum plane table which reg. Nos. 4765 of A.P. Ratti 1933. No descriptions on form 524 have been submitted by Lieut. Ratti.*
13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) *a list of landmarks for this area was submitted by A.P. Ratti 1933. See also Par. headed "land marks" on page 7 of the descriptive report and also next page.*
14. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.) (See paragraph CONTROL in Compiler's Report)
15. Junctions with contemporary surveys are adequate.
16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 66k.)
17. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.)
18. No additional surveying is recommended.
19. Remarks: Any additional notes and requirements affecting this area are referred to Lieut. A. P. Ratti's reports covering the topography executed in 1933 under his charge. *See also next page*
20. Examined and approved: 
Roswell C. Bolstad
Chief of Party
21. Remarks after review in office:

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

Examined and approved: 
Chief, Section of Field Records

K.T. Adams
Asst Chief, Division of Charts


Chief, Section of Field Work

Chief, Division of
Hydrography and Topography.