

12130

12131

12130 12131

Diag. Cht. No. 1219.

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No. Ph-6105	T-12130 & Office No. T-12131
LOCALITY	
State	Delaware
General locality	Indian River Bay
Locality	
19 61-62	
CHIEF OF PARTY	
J.K.Wilson, Photo. Party No. 720	
J.E.Waugh, Photo. Off., Wash., D.C.	
LIBRARY & ARCHIVES	
DATE	December 1967

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T-12130 and 12131

PROJECT NO. (II):

PH-6105

FIELD OFFICE (III):

Photo Party 720

CHIEF OF PARTY

J. K. Wilson

PHOTOGRAMMETRIC OFFICE (III):

Washington, D. C.

OFFICER-IN-CHARGE

J. E. Waugh

INSTRUCTIONS DATED (II) (III):

Instructions, FIELD AND OFFICE, Project PH-6105 Shoreline
Surveys, Indian River Inlet, Delaware, 19 June 1961

METHOD OF COMPILATION (III):

Graphic and B-8 stereoplotter

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

1927 North American

VERTICAL DATUM (III):

MEAN SEA LEVEL EXCEPT AS FOLLOWS:

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):

LAT.:

LONG.:

☐ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

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.

DESCRIPTIVE REPORT - DATA RECORD

T-12130 and T-12131

FIELD INSPECTION BY (II):		DATE:
J. K. Wilson		Jan.-Feb., 1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Field inspection - January and February 1962		
PROJECTION AND GRIDS RULED BY (IV):		DATE
J. D. Clark		6/23/61
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
J. H. Frazier		6/23/61
CONTROL PLOTTED BY (III):		DATE
R. A. Carter		March 1962
CONTROL CHECKED BY (III):		DATE
J. B. Phillips		March 1962
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
J. D. Perrow and J. P. Battley		1961-1962
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	R. A. Carter R. L. Sugden	Mar.-April 1962
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
R. A. Carter and R. L. Sugden		Mar.-April 1962
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
J. P. Battley		April 1962
REMARKS		

DESCRIPTIVE REPORT - DATA RECORD

T-12130 and T-12131

CAMERA (KIND OR SOURCE) (III): RC-9 Super Wide Angle, 3 1/2" F.L. (approximately)
RC-8 Wide Angle, 6" F.L.

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE *
61-M-1608 - 1609	10/17/61	09:03-10:07	1:50,000	0.2' above MLW
1656 - 1657	10/17/61	09:03-10:07	1:50,000	0.1' above MLW
61-S-9009 - 9015	5/24/61	08:00-08:03	1:25,000	0.6' above MLW
9022 - 9025	5/24/61	08:12-08:14	1:25,000	0.6' above MLW
62-S-2254 - 2257	5/15/62	12:23	1:20,000	0.2' above MLW

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: SANDY HOOK			
SUBORDINATE STATION: OAK OCHARD		0.9	1.1
SUBORDINATE STATION: MAPLE		1.0	1.2
SUBORDINATE STATION: INDIAN RIVER INLET (bridge)		2.6	3.1

WASHINGTON OFFICE REVIEW BY (IV): S.G. BLANKENBAKER DATE: AUG., 1967

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

IDENTIFIED:

NUMBER OF BM(S) SEARCHED FOR (III):

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

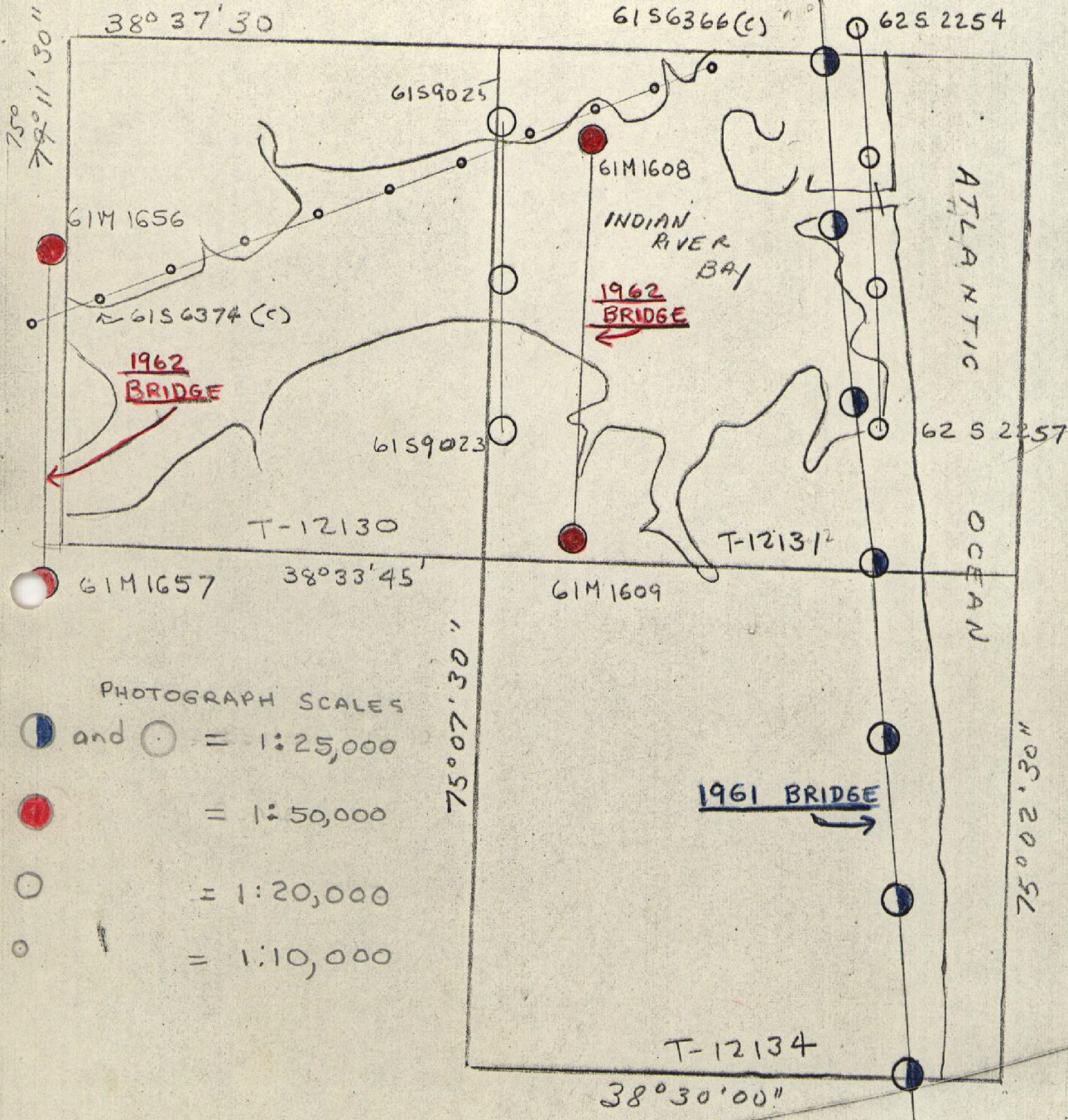
REMARKS:

*predicted tides

PH-6105

61 S 9007

(4)



PHOTOGRAPH SCALES

● and ○ = 1:25,000

● = 1:50,000

○ = 1:20,000

○ = 1:10,000

75°07'30"

75°07'30"

38°30'00"

Job PH-6105
SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS
T-12130, T-12131 (combined) and T-12134

August 22, 1967

Originally this job was comprised only of shoreline surveys T-12131 and T-12134. These maps, based on a 1961 stereoplani-graph bridge, were compiled in 1961 in the Baltimore office in support of a John Hopkins University research work (refer to project instructions dated June 19, 1961, included in the Descriptive Report). *Shoreline from 1961 compilation was applied to H-8596 as being contemporary with hydro. T-12131 shows 1962 H.W.L.*
Additional project work, for which no written instructions exist, was done in the Washington office in 1962. The new work included the revision of T-12131 and the compilation of T-12130. Available at this time were the results of an analytic bridge, covering the areas of T-12130 and T-12131, accomplished for Job PH-6107, a 1:40,000 scale chart topog-raphy job.

No datum differences were found to exist between the 1961 and 1962 bridges in the common area (eastern half of T-12131). Maps T-12130 and T-12131 were reduced and applied to the manu-script for T-12509, scale 1:40,000 (PH-6107). The outer coast area of T-12509 was revised from 1964 photography -- not available for PH-6105 compilation.

Project field work (maps T-12131 and T-12134) consisted only of the identification of horizontal control and the identifi-cation of landmarks and aids. There are differences in land-mark elevations between the Forms 567 submitted for Job PH-6107 and the field data shown on photographs submitted for Job PH-6105. Landmarks and aids were not mapped on T-12509 (PH-6107) as explained in project instructions dated May 27, 1966. A copy is included in the Descriptive Report for T-12509. Landmarks and aids were located during bridging for Job PH-6105.

Some of the records for PH-6105 have been lost. Data records and a compilation report could not be found for T-12134. Forms 567, the Field Inspection Report and control station identification cards could not be found for T-12131 and T-12134 (T-12130 was not a party of the project at the time of field inspection).

Job PH-6105 photographs that include bridge points, landmarks and aid information and horizontal control identification are stored with Job PH-6107 data in the Federal Records Center.

S. J. Blankinship

(6)

PHOTOGRAMMETRIC PLOT REPORT
Project PH-6105
Rehoboth Bay, Delaware

21. Area Covered

The area covered in this report involves Topographic Surveys T-12131, and T-12134, and extends along the Delaware coast from an area approximately two miles north of Indian River Inlet southward to an area approximately three miles south of Bethany Beach.

22. Method

A single strip consisting of 8 models (61-S-9008 through 9016) was bridged on the C-8 stereoplanigraph to provide pass points for Kelsh compilation, positions of landmarks, and photo-hydro stations. This strip was adjusted on the IBM 650.

23. Adequacy of Control

Control used in the adjustment of this strip consisted of six triangulation stations. Three of these stations had alternate substitute stations. Also a check was obtained by an office identification of station "Indian River, Coast Guard Flagpole, 1934".

The adjustment had larger than usual discrepancies and indicates a possibility of some error in positions on the south end of the strip. The maximum discrepancy to control was at station "Tunnel 2, 1909". Here Sub. Sta. 2 was missed by 13.9 feet and Sub. Sta. 1 was missed by 8.6 feet. Sub. Sta. 2 had poor image quality which could effect its accuracy. Sub. Sta. 1 is within accuracy requirements at 1:10,000 scale. The mean discrepancy to control was 2.15 feet.

It is believed that positions are satisfactory to control hydrography at 1:10,000 scale.

24. Supplemental Data

None

25. Photography

Photography was adequate as to coverage, overlap, definition, and quality.

Approved:

Everett H. Ramey
E.H. Ramey

Submitted by:

John D. Perrow, Jr.
John D. Perrow, Jr.

1961

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PROJECT PH-6105
Rehoboth Bay, Delaware
NOTES TO COMPILER

All Non floating Aids or Landmarks for charts were located during the bridging with the exceptions of (1) Light, Entrance Light North Breakwater, Indian River Inlet and (2) Light, Entrance Light South Breakwater, Indian River Inlet. These two aids were not identified on the photography. The field has taken cuts to these lights from photo-hydro stations and they can be positioned. The south breakwater light is in place and could be checked by the Kelsh.

The north breakwater light base is in place but the light was destroyed during the winter of 1960-1961 and has been replaced by a temporary wooden structure approximately 50 - 75 feet west of the original structure. The above information is the personal knowledge of the writer of this report who visited this spot on May 26, 1961 and again on June 26, 1961. It could not be determined if the temporary light was positioned by the field party, and it should be checked by the hydrographer.

Photo-hydro station FAR was of very poor image quality. Three different spots were recorded which could be the station. It is recommended that the station not be used unless essential.

Submitted by:

J. D. Perrow Jr.
J. D. Perrow, Jr.

Approved:

EHR
Everett Ramey, Chief
Aerotriangulation Section
Photogrammetry Division

(8)

AEROTRIANGULATION REPORT
DELAWARE

Vicinity of Cape Henlopen

Project PH-6107 * > * > *

December 1966

1. General

This was a pilot project undertaken to determine whether small-scale super-wide-angle photography combined with block analytic aerotriangulation with minimum control would fulfill the needs of nautical charting at a scale of 1:40,000. Nautical Chart 411 extended from Delaware Bay southward a distance of approximately 25 miles and westward nearly 20 miles and fulfilled the requirements for such a project. This is the first experience of the Coast and Geodetic Survey in the solution of multi-flight block analytic aerotriangulation for an area as extensive as this one.

Originally this phase of the project was deferred pending the receipt of supplemental photography and supplemental control data. Because of changes in priorities and plans for this project, the supplemental data was never furnished. Meantime, the compilation which involved the use of this aerotriangulation data has been completed. This is a summary report covering the aerotriangulation phase of this project.

2. Photography

The project consists of three north-south flights of pan-chromatic super-wide-angle photographs at a scale of 1:50,000. Photographs (total of 31) used in the problem are numbered 61-M-1604 thru 1612 and 61-M-1638 thru 1659. Overlap of over 50% and sidelap greater than 30% was maintained.

In addition to these photographs at 1:50,000 scale, color photographs were taken for some areas at 1:5,000 and 1:10,000. An attempt was made to furnish control for these photographs in the aerotriangulation phase with the 1:50,000 scale photography. This entailed selecting a number of photo points on the color photographs which would be common to the aerotriangulation.

Pairs of passpoints at critical locations in the model were drilled and transferred by the Wild PUG instrument. Also, passpoints were selected common to overlapping flights.

* This bridge was used in part in the compilation of PH-6105 maps (T-12130 and T-12131) - Refer to the SUMMARY for this Descriptive Report.

3. Control and Accuracy of Results

Twenty triangulation stations identified either directly or by the substitute station method comprised the horizontal control. Spot elevations and contours selected from USGS topographic maps were used as vertical control.

The distribution of horizontal control was not ideal for this problem. Also the quality of identification varied greatly as is depicted in the final closures in the block adjustment (see attached "List of Control"). Because this was the first such analysis, the highest quality control, ideally distributed and with much redundancy, would have been preferred. However, the control was adequate for this project and furnished enough redundancy to insure accuracy at this scale.

4. Procedures in Adjustment

The strips were first adjusted individually to obtain approximate ground positions for the block adjustment. The block adjustment involved a simultaneous solution with all photographs. Before adjusting the entire block, geodetic control was transformed to a local secant plane system. The block solution comprised the determination of values of nearly 1,100 unknowns.

Different types of weighting were used in the solution. The observation equations for the tie points between strips were repeated in order to compensate for systematic effects which tended to separate the strips. The observation equations for photo points to be located by the aerotriangulation were multiplied by a factor of 1/2 to reduce their effect in the solution. The parameters themselves were adjusted by arbitrarily assigning weights based on an estimate of the relative accuracy of the control.

The block adjustment was done with two solutions using different control patterns and weights. Whether the optimum solution was obtained is not certain. The lack of control through the area did not justify continuing the problem. The patterns of plate residuals indicate a good adjustment.

5. Data

Sketch with accompanying control list is attached. List of final positions for the project is also attached.

E. H. Ramey
By S. G. Blumberg
Everett H. Ramey

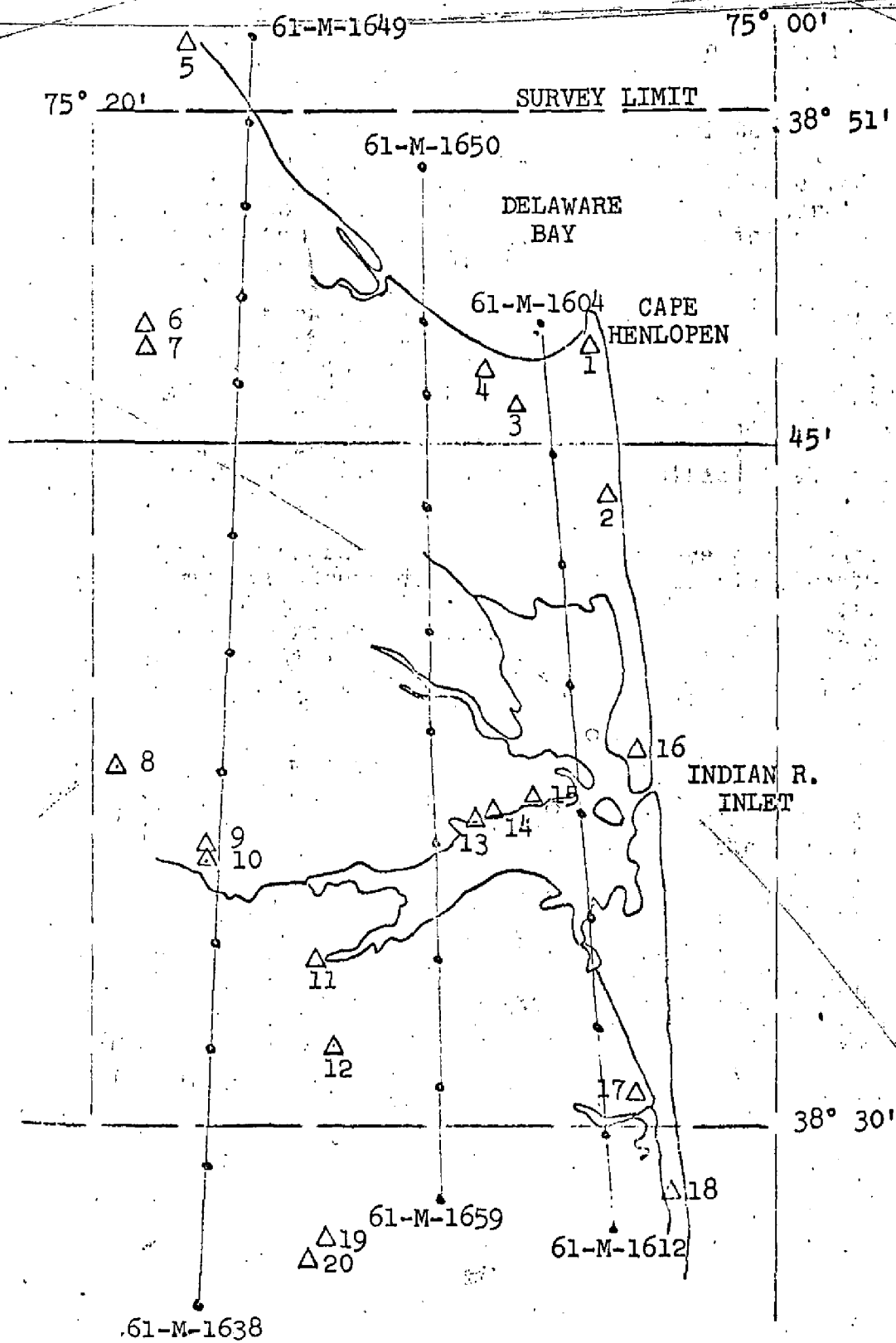
(10)

LIST OF CONTROL WITH CLOSURES

Diagram No.	Name	Closure (feet)	
1	RADIO 1932	0.0	0.0
		- 2.5	- 7.2
2	REHOBOTH BEACH STANDPIPE 1922	+ 2.2	- 4.0
		+ 0.5	- 2.0
		+ 0.9	- 2.0
3	LEWES PRES. CHURCH SPIRE 1896	- 2.1	- 2.5
4	DEVRIES 1933	+ 6.4	-11.4
		- 0.3	+ 1.5
5	DOCTOR 1949	- 2.6	+ 0.5
		0.0	+ 0.1
6	MILTON, BLACK W. T. 1933	+ 1.2	+ 1.5
		- 1.9	- 4.4
7	MILTON CHURCH SPIRE 1896	+ 0.1	+ 0.1
8	COLONY 1932	- 0.6	- 0.2
		- 0.2	- 0.3
9	MILLSBORO, MUN. ALUM. W. T. 1932	+ 2.4	- 1.6
10	MILLSBORO, HOUSTON WHITE CO. TANK 1932	+ 6.1	+ 2.5
11	FIRE TOWER 1932	+ 3.0	+ 3.9
12	FRANKFORD, W. T. 1934	+ 4.1	+ 1.9
		+ 2.9	+ 6.5
13	SPEAR'S BATHHOUSE SOUTH GABLE 1934	+11.0	+ 2.8
		+13.7	+13.0
14	OAK ORCH. W. GABLE, E. HOUSE 1934	+ 4.8	- 6.4
		+ 4.3	- 5.0
15	HIGGINS HOUSE, W. CHIMNEY 1934	+ 0.4	- 1.5
16	INDIAN R. COAST GUARD CUPOLA 1909	+ 0.1	- 0.1
17	MILLER CREEK 2, 1929	+ 6.0	- 5.6
		+10.4	- 6.5
18	FENWICK ISLAND LIGHTHOUSE 1909	+ 0.2	0.0
19	SELBYVILLE MUN. W. T. 1942	+12.8	+ 4.2
20	NORMAN 1932	0.0	+ 0.2

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AEROTRIANGULATION DIAGRAM
PROJECT PH-6107
DELAWARE



Delaware, PH: 6107, Chart 411, Revision

October 11, 1962

Notes to Compiler

1. Suggest plotting only one of pair of pass points in each of 6 positions of a model.
2. Do not plot positions of "Color Control Points". In very near future the strips are going to receive another adjustment, because of new positions received from Geodesy on October 9, 1962. This added control will provide additional accuracy in positioning of "Aids to Navigation" in this project.
3. In most instances compilation using the color photographs probably will require a graphic plot to establish enough scale points to set individual models. For control, use the points from the main bridge (refined to final position as noted unded 2.) and make the best fit to all the points. It would be erroneous to hold some absolutely and let others drift as might be done with identified field positions.
4. Many items to be reported on Forms 567 were positioned by triangulation methods in 1962. Advance field positions are now available and will be converted to mercator coordinates to reach you within a few days. Comparison of bridge coordinates to some of these positions indicates close agreement. Identification forms for Form 567 stations.
5. The report and manuscripts covering T-12130 and T-12131 are being sent to you. Note that these positions are subject to change by adjustments made after these were compiled. In which case you should revise the compilations and report.

Everett H. Ramey

MAP T-12130, 31, 34 PROJECT NO. Ph G 105 SCALE OF MAP 1:10,000 SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM G.A.D OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Miller Creek 2, 1929	PC-32 G.P. 87		181, 037.88 ✓ 599, 593.01 ✓				
" " SS #1	Comp.		181, 117.7 ✓ 599, 853.5 ✓				
" " SS #2	Comp.		181, 019.0 ✓ 599, 674.2 ✓				
Auditorium Center of Bldg. 1909	PC-29 G.P. 79		196, 512.84 ✓ 602, 410.90 ✓				
Indian River Coast Guard Cupola	PC-34 G.P. 94		230, 946.71 ✓ 599, 790.75 ✓				
Bethel Church Spire, 1909	PC-29 G.P. 77		198, 195.57 ✓ 592, 892.05 ✓				
Tunnel 2, 1909	PC-29 G.P. 78		187, 017.3 ✓ 596, 385.2 ✓				
" " SS #1	Comp.		187, 049.4 ✓ 596, 386.3 ✓				
" " SS #2	Comp.		187, 143.3 ✓ 596, 390.9 ✓				
Cotton Bldg., 1909	PC-2 G.P. 6		211, 289.92 ✓ 602, 131.05 ✓				
" " SS #1	Comp.		211, 561.6 ✓ 602, 044.0 ✓				
" " SS #2	Comp.		211, 455.7 ✓ 602, 290.5 ✓				

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

COMPILATION REPORT
T-12130 and T-12131

August 22, 1967

Maps T-12130 and T-12131 are two of the three maps comprising Job PH-6105. Project maps were compiled at Baltimore and Washington. This report is principally concerned with the work accomplished at the Washington office. The Descriptive Report Summary includes a detailed breakdown of the project work accomplished in each office and an account of the analytic and instrument aerotriangulation accomplished for the subject job.

The photographs indicated on the sketches for Job PH-6105 included in this report were used in compilation. Five-time enlargements of the 1:50,000 scale photography were prepared for hydro support.

Field inspected landmarks and aids were located during bridging and plotted on maps T-12131 and T-12134 (map T-12130 was not a part of the job at the time of field inspection) in the Baltimore office. Refer to the Summary concerning landmarks and aids.

Limited PH-6107 shoreline field inspection along the northern shore of the bay was applied to T-12130 and T-12131. The geographic names for these maps were checked in conjunction with PH-6107 names by the Office of the Geographer, August 10, 1967.

Submitted by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

K. N. Maki
By S. G. Blankenbaker
K. N. Maki
Chief, Compilation Section

REVIEW REPORT
T-12130, T-12131 and T-12134

August 22, 1967

61. General Statement

Some project data are lost; and, in addition, differences were noted in field landmark information between Jobs PH-6105 and PH-6107. Refer to the Summary and the Compilation Report.

62. Comparison with Registered Topographic Surveys

T-8503	1:20,000	1943	{war mapping}
T-8504	1:20,000	1943	{war mapping}

The prior surveys are outdated.

63. Comparison with Maps of Other Agencies

T-8503 and T-8504 were published by the Geological Survey.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

No. 411, scale 1:40,000

No significant differences were noted.


66. Adequacy of Results and Future Surveys

These maps meet the National Standards of Map Accuracy and Bureau requirements.

Reviewed by:



S. G. Blankenbaker

Approved by:


Chief, Photogrammetric Br.


Chief, Photogrammetry Div.

11-22-67


Chief, Marine Chart Div.

6311/lrw
19 June 1961

(16)

To: Mr. Elgan T. Jenkins
Chief, Photo Party 726
Coast and Geodetic Survey
General Delivery
Millville, Delaware

Chief, Cartographic Branch

Baltimore District Officer
Coast and Geodetic Survey
518 East 32nd Street
Baltimore 18, Maryland

Subject: Instructions, FIELD and OFFICE, Project PH-6105
Shoreline Surveys, Indian River Inlet, Delaware

1. Purpose

A grant has been made to the John Hopkins University for sandwave morphology research in an area along the Delaware coast just south of Indian River Inlet. The grant will be supported with hydrography and shoreline surveys. The purpose of these instructions is to provide for the shoreline surveys and photo hydro support.

2. Assignments

The following assignments apply:

- .01 Field inspection and photo hydro support operations are assigned to Photo Party 726.
- .02 Aerotriangulation is assigned to the Cartographic Branch.
- .03 Compilation is assigned to the Baltimore District Office.

3. General Plan of Operations

Coastal mapping of this area is scheduled in our long range program, supporting our nautical charting program. The present photogrammetric surveys will be restricted to the immediate requirements for shoreline and photo hydro support and will cover only the coastal flight strip, exposures 61-S-9007 thru 9016.

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3. General Plan of Operations continued

The field operations will consist of three phases, namely: 1. horizontal control identification; 2. shoreline inspection, pre-selection of photo hydro signals and location of aids to navigation and landmarks; and 3. photo hydro support which will include both locations and signal building. Field phase 1 shall be completed and data forwarded to Washington before 26 June. Phase 2 shall be complete as soon as practicable and data forwarded to the Baltimore District Office. Field phase 3 shall start about 28 July and be completed by 7 August.

Stereoplanigraph bridging will be completed in Washington and all data forwarded to Baltimore for compilation before 5 July. That office will compile shoreline and locate signals by Kelsh Plotter methods. They will also prepare a special set of office photographs for field location of additional signals as required by the hydrographer. Reproduction copies of all photo hydro support data shall be prepared in Baltimore and forwarded to Washington not later than 24 July. In addition to the usual items, these shall include 2 each cronaflex positives and 1 negative each. The cronaflex positives will be forwarded one each to the hydrographer and photogrammetrist. Blue-line tracings will be processed from the negatives and forwarded later to the hydrographer for transfer of shoreline to the boat and smooth sheets.

4. Maps

The project is covered by two 3 3/4 x 3 3/4 minute shoreline surveys Nos. T-12131 and T-12134. These shall be field inspected and compiled at 1:10,000 scale.

5. Aerial Photography

The area is covered by 1:25,000 scale panchromatic photography taken in May 1961. Color photography at 1:10,000 and 1:20,000 scales taken in April 1961 is also available but will not be furnished for field use. The color photography will be furnished to the Baltimore District Office for interpretation purposes and will be used to aid compilation. The seas were rough when that photography was taken, and it is not suitable for depth penetration studies. One set of contact prints will be furnished for identification of horizontal control. One set of 1:10,000 scale ratio prints will be furnished for field inspection and selection of signals.

6. Field Operations

All field inspection data including project diagram, special horizontal control requirements diagram, control data and photographs have been furnished.

Identify horizontal control in accordance with Photogrammetry Instructions No. 22, Revised 1 November 1959. Two substitute stations are required for each marked station that is identified.

Prior to compilation, pre-select and photoidentify as many photo hydro signal sights as time permits. Signals will be required for hydrography in the Atlantic Ocean from Indian River Inlet southward to the southern neat line of sheet T-12134. The spacing between signals should not exceed $\frac{1}{4}$ mile.

The Ship EXPLORER is scheduled to begin hydrography on 7 August. Photo Party 726 will furnish photo hydro support and will have completed signal building operations on that date. The Chief, Photo Party 726, shall inform the Commanding Officer, Ship EXPLORER, 102 West Olney Road, Norfolk, Virginia, of his address on the working grounds and furnish information for establishing contact upon arrival of the ship.

7. Costs

All field and office costs shall be charged to Cost Code 47,600 except the cost of hydrographic signal building materials. These costs shall be charged to Cost Center 233, Code 20,200. The proper accounting forms shall be prepared in accordance with all applicable regulations and forwarded on the 25th of the month to the Commanding Officer, Ship EXPLORER, 102 West Olney Road, Norfolk 10, Virginia.

8. Travel and Per Diem

Reimbursement for travel and per diem is authorized in accordance with Chapter T-8 of the Bureau Finance Manual for personnel of Photo Party 726 assigned to field duty on this project.

9. Standby Orders

In the event of an enemy attack, the Chief, Photo Party 726 will immediately contact his nearest District Officer

9. Standby Orders continued

and furnish him the mailing and telegraphic addresses and telephone number at which the Chief of Party can be reached, and stand by for further instructions.

If the personnel of Photo Party 726 are needed to assist in Civil Defense activities during the survival phase of the emergency, the Chief of Party shall inform the District Officer and request permission to assist the Civil Defense authorities. If he cannot be reached, the Chief of Party shall comply with the requests of Civil Defense authorities.

10. Modification of Instructions

Please make appropriate recommendations if field experience indicates that changes in procedures as outlined herein are advisable.

11. Receipt

Receipt of these instructions shall be acknowledged.

Charles Price

Deputy Director

cc: 20, 21, 211, 6311,
632, 83, 8311,
EDO, Wilson,
CO Ship EXPLORER

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-12130 & T-12131

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]