

12087

12087

FORM C&GS-504	
U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE (PHOTOGRAMMETRIC)
Field No.	Office No. T-12087
LOCALITY	
State	Maryland
General locality	Chincoteague Bay
Locality	Tingles Island
1961-1962	
CHIEF OF PARTY	
W. M. Reynolds, Chief of Field Party	
Miller J. Tonkel, Baltimore District Office	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T - 12087

PROJECT NO. (II):

PH-6103

FIELD OFFICE (III):

Snow Hill, Maryland

CHIEF OF PARTY

W. M. Reynolds

PHOTOGRAMMETRIC OFFICE (III):

Baltimore, Maryland

OFFICER-IN-CHARGE

Miller J. Tonker

INSTRUCTIONS DATED (II) (III):

II 20 November 1961
III 24 October 1962
26 July 1963 - Amendment I

METHOD OF COMPILATION (III):

Kelsh Plotter

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:3,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

NA 1927

VERTICAL DATUM (III): MHW

~~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):

NORTH 2, 1959

LAT.:

38°08'11.60690"

LONG.:

75°10'44.85438"

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

115,650.98

X = 1,323,730.58

STATE

Maryland

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.

FORM C&GS-181b
(3-66)U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II): William M. Reynolds		DATE: May-July 1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Kelsh Plotter using field inspection. photographs.		
PROJECTION AND GRIDS RULED BY (IV): A. Roundtree		DATE 8-28-62
PROJECTION AND GRIDS CHECKED BY (IV): I.Y. Fitzgerald		DATE 9-10-62
CONTROL PLOTTED BY (III): L.A. Senasack		DATE 11-30-62
CONTROL CHECKED BY (III): E.L. Rolle		DATE 11-30-62
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): L.W. Fritz L.A. Senasack		DATE 10-31-62 6-6-63
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY L.O. Neterer	DATE 1-29-63
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): J. Councill		DATE 2-20-63
SCRIBING BY (III): J. Cregan		DATE 3-19-63
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): E.L. Rolle		DATE 3-23-63
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild RC-8

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
6253170-3174	24Mar1962	1010	1:15,000	2.7ft. above MLW
62W3824-3828	28Apr 1962	0950	1:15,000	0.9 ft. above MLW

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Sandy Hook, New Jersey		4.6	5.6
COORDINATE STATION: North Beach Coast Guard Station, Maryland		3.4	4.1
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet, AMC

DATE:
Jan. 1972

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

2

RECOVERED:

2

IDENTIFIED:

1

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

0

RECOVERED:

0

IDENTIFIED:

0

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

0

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

0

REMARKS:

COMPILATION RECORD

COMPLETION DATE

REMARKS

Compilation Complete	May 1963	
Final Review	Jan. 1972	

CHINCOTEAGUE BAY

PROJECT PR 6108

PLANIMETRIC MAPPING

SCALE, 1:10,000

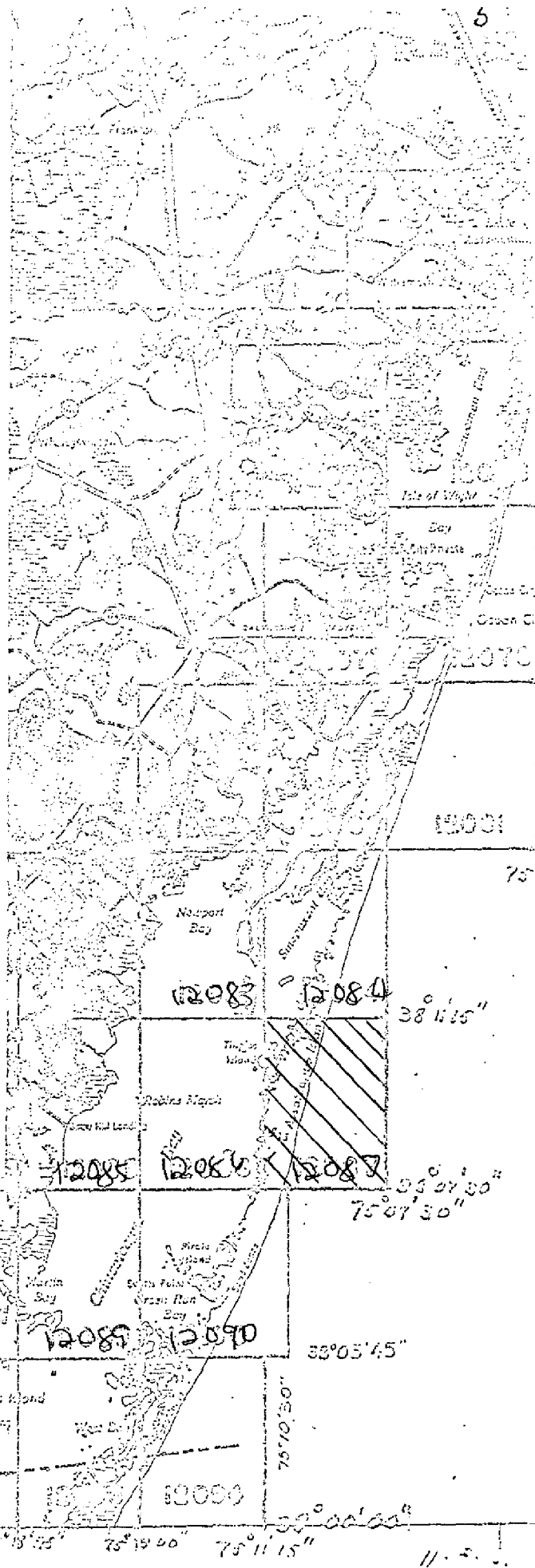
OFFICIAL MILEAGE

SHEET NO.	AREA SQ. MI.	LINEAR MI. SHORELINE
12074	16	30
12075	16	13
12076	4	32
12077	14	14
12078	5	20
12079	14	9
12080	14	28
12081	2	10
12082	14	3
12083	2	12
12084	3	16
12085	3	8
12086	3	4
12087	3	10
12088	9	14
12089	2	12
12090	4	10
12091	14	5
12092	3	10
12093	3	12
12094	3	12

TOTAL

153.3

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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12087

Shoreline survey T-12087 covers a part of Assateague Island. It is one of twenty-one similar maps in project PH-6103. The primary purpose of the survey was to provide new shoreline for nautical charts and special charts for the State of Maryland, Department of Tidewater Fisheries.

Field operations preceding compilation included recovery and identification of horizontal control, field and shoreline inspection, selection of landmarks for charts and of fixed aids to navigation.

Compilation was at 1:10,000 scale using the panchromatic photography of March and April 1962. The manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 3 minutes 45 seconds in longitude. After scribing the survey was reproduced on cronaflex. Final review was in the Atlantic Marine Center in January 1972. One cronaflex positive and a negative are forwarded for record and registry.

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FIELD INSPECTION REPORT
MAPS T-12080, T-12081, T-12084, and T-12087
PROJECT PH-6103

2. Areal Field Inspection.

Those maps are located along the eastern shore of Maryland. The land area consists of the northeasterly part of Assateague Island and the mainland along the northwest side of Sinopuxent Bay.

Assateague Island is a long, low, narrow, strip of sand which separates the Atlantic Ocean from Chincoteague and Sinopuxent Bays. The island is un-inhabited except for several cottages which are used during the summer season only. The island was under development and had a goodly number of summer cottages together with several miles of blacktop highway. The Coastal Storm of March 6-7, 1962 completely destroyed the road and many of the cottages. Most of the sand dunes were also leveled.

Chincoteague and Sinopuxent Bays are unimportant, shallow bodies of water. They are navigable for shallow draft boats only. They are used primarily by clam, crab, and oyster fishermen.

Field inspection is believed complete and was performed on the following photographs; 61W6247, 61W6267 through 61W6272, 61W6328 through 61W6336, 61S9054, 61S9059, 61S9090, 61S9092, 61S9078A through 61S9082A, 61S9085A, 6233159 through 6233174, and color photographs 6828 through 6852. Photography was of good quality and no difficulty was encountered in their interpretation in the field. No items were deliberately left for field edit.

3. Horizontal Control.

All Coast and Geodetic Survey Stations were searched for. Stations were identified in accordance with a special copy of the project diagram.

All stations located on Assateague Island, except NORTH BEACH 2 1962, were marked with black targets prior the 1962 photography. These black targets were then pricked direct to identify the stations.

NORTH BEACH 2 1962 was established by Geodesy in July 1962.

The following stations were reported lost:

T-12080

T-12081

BAR 1908
ELLPOW 1908
ELLPOW ECCENTRIC 1908
NELLYS 1908

BEACH 1908	SOUTH 1928
KEYPOST 1929	SOUTH 2 1962
SEASIDE 1908	SOUTH 3 1962
SHORE 1908	SWAN 1928
TRIPOD 1929	

3. Horizontal Control (Cont'd.).

T-12084

GREEN 1953
INGRAYA 1907
MUD 1908

SALT 1908
SAMPOL 1908
NORTH BEACH LIFE
SAVING STATION 1907

T-12087

NORTH 1953

4. Vertical Control.

Inapplicable

5. Contours and Drainage.

Contours are inapplicable.

Drainage is primarily run off from the island into the bay or ocean.

6. Woodland Cover.

Woodland was inspected and had been classified on the photographs.

7. Shoreline and Alongshore Features.

A severe storm passed through the area in March 1962. Considerable damage was done to the shoreline along the ocean. This shoreline was rephotographed after the storm and the outside shoreline has been located by measurement from identifiable points on these photographs. Little damage was suffered by the inside shoreline. The 1961 and 1962 photographs were compared in the field and where noticeable changes had taken place the 1962 photographs were used.

A traverse was run northward from triangulation station SOUTH 3 1962 to provide hydrographic control for the ship HYDROGRAPHER. A hub was set every 1200 feet for hydro signals. Angles and distances were taken from the hubs to the mean high water line. These hubs and the mean high water line were plotted on a mylar projection of map T-12081 and turned over to the HYDROGRAPHER. The outside shoreline northeast of SOUTH 3 1962 can be taken from this projection.

The low water line was not located.

The foreshore is sand. There are no bluffs or cliffs.

All docks, piers, wharves or landings have been indicated on the photographs.

7. Shoreline and Alongshore Features. (Cont'd.)

Two submarine cable signs were located by sextant.

There are no other shoreline structures.

8. Offshore Features.

There are none.

9. Landmarks and Aids.

All landmarks for nautical charts and fixed aids to navigation are adequately covered by Form 567 which is included with this report.

10. Boundaries, Monuments and Lines.

The entire area is within Worcester County, Maryland and is not affected by any boundaries.

11. Other Control.

There were no Recoverable Topographic Stations established for T-12080 and T-12087.

Two previously established Recoverable Topographic Stations were recovered and identified in map T-12081. They are COPPIN POINT WINDMILL (1942) 1962 and WOCABE CHIMNEY (1942) 1961.

Three Recoverable Topographic Stations were recovered in map T-12084. They are BEACON 25 (1942) 1962, GREEN 2 1959, AZIMUTH MARK and PAL (1942) 1961.

In addition to the above copperweld rods were placed in identifiable photo points to be located for control for the Maryland Department of Tidewater Fisheries. These points were selected so that together with natural objects and triangulation stations a fix could be observed any place in the bay. A total of 27 points were established.

12. Other Interior Features.

The road on Assateague Island, visible on the 1961 photographs is not to be mapped. It was completely destroyed by the March 1962 storm.

Roads on the mainland in map T-12080 have been classified on the photographs.

All landmark buildings have been indicated on the photographs.

Overhead cables across Sinepuxent Bay have been indicated on the photographs.

One small airport in map T-12080 has been indicated on the

12. Other Interior Features (Cont'd.).

photographs.

13. Geographic Names.

See "Special Report Geographic Names Project Ph-6103, Chincoteague Bay" submitted to Washington 11 July 1962.

14. Special Reports and Supplemental Data.

"Special Report Geographic Names Project Ph-6103 Chincoteague Bay", submitted to Washington 11 July 1962.

Form 567 submitted with this data.

Color photographs numbered 61W6828 through 61W6852, submitted to Washington 23 March 1962.

Letter of Transmittal submitted with this data.

Submitted,

William M. Reynolds
Sub-Unit Photo Party 720

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PHOTOGRAMMETRIC PLOT REPORT
Project 21039 (PH-6103)
Chincoteague Bay, Md.
Surveys Nos. T-12086 thru T-12094

21. AREA COVERED

This radial plot covers the areas of the surveys listed above. These are shoreline surveys along Chincoteague Bay and Assateague Island. This radial plot was needed for the compilation of the area and islands west of the Aerotriangulation Bridge Strips 10 and 11 and east of Strip 13B. This includes Tingle Island, Pirate Islands southward to the project limits on the eastern side of Chincoteague Bay. On the western side of Chincoteague Bay the radial plot starts just south of Snow Hill Landing and continues southward to the project limits.

22. METHOD-RADIAL PLOT

Map manuscripts:

Vinylite sheets, with the polyconic projections in black, Maryland Grid in red and/or Virginia South Zone in green which were furnished by the Washington Office.

The positions of all triangulation stations, substitute points and Aerotriangulation Bridge points were plotted on the manuscripts with the coordinatograph.

A sketch showing the layout of the surveys and photograph centers is attached to this report.

Photographs:

Thirty (30) photographs ratioed to the scale of 1:10,000 were used in this plot and are numbered as follows:

61-S-9066	thru	9068
61-S-9298	"	9302
62-W-3757	"	3764
62-W-3786	"	3793
63-W-3382	"	3388

All photographs were printed on single weight paper with the exception of the flight 62-W-3786 thru 3793 which were on cronapaque.

Templets:

Vinylite templets were made of all photographs. No master templet was available for these single lens photographs.

Closure and Adjustment to Control:

The radial plot was constructed directly on the map manuscripts. The construction began with the flight 62-W-3786 thru 3793, which held to the stereo-points as dropped in bridge strips number 10 and 11. Flight 62-W-3757 thru 3764 was then laid using common points between flights. Flight 63-W-3382 thru 3388 was then laid tying into what was believed to be common stereo-bridge points on bridge 13B. The templets of photos on bridge 13B were added to give stronger position for lights which are aids to navigation.

While laying the templets for photos 61-S-9298 thru 9302, it was noted that it was impossible to make a tie across Chincoteague Bay. The error was as much as from 2 to 3 millimeters. Since this flight did not have any images of the aids to navigation on them and since they were printed on light weight paper, the error could be paper distortion. Since we only needed this flight for delineation of the western shore of Chincoteague Bay, the rays were cut off the templets on the eastern side of the bay. The centers will be only good for delineation on the western side of the bay. All of these centers fall in the water area, and for this reason they are dashed centers on the map manuscripts.

Transfer of Points:

The position of all photogrammetric points and photograph centers were pricked on the top templet and drilled down through the templets and map manuscripts.

23. ADEQUACY OF CONTROL

The density and distribution of identified control and stereo-bridge points was adequate.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

The photography was adequate as far as coverage, overlap and image definition. There could be only one suggestion that could be made, and that is where there is a need for a radial plot there is also a need for the photographs to be printed on double weight paper so that the photograph will lay flat and would not distort due to the paper shrinking and expanding and warping.

26. POSITIONS OF AIDS TO NAVIGATION

After all of the templets were taped down onto the map manuscripts the various field cuts to the lights in the area were checked with the radially plotted positions of the office identified lights, which were pricked using as an aid Chart 1220, Revised date 8/6/62. The following is a list of lights and how they were held as comparison with the field angles from the List of Direction. This was done to verify the radial plot.

Chincoteague Bay Light 18 - Without the aid of a radial plot it would have been impossible to locate this point. The cuts as given by the fieldman could have been any of five different points. The cuts from Photo 12 and Boundary Monument Pope Island, 1907 Ecc. missed by approximately 1.5 mm to the southeast and 4.0 mm to the east respectively. The difference between the intersection of the cuts from Photo Point 09 and Photo Point 08 and the radially plotted position was approximately 0.5 mm. An average point was pricked and drilled.

Chincoteague Bay Light 17 - The image for this light did not fall on any of the 1963 photographs. The field cuts from Photo Point 09, Boundary Monument Pope Island, 1907, Ecc. and Cord (VFC), 1933 made a fairly good intersection. The point pricked and drilled was the mean intersection of these three cuts. The cut from Photo Point 08 fell approximately 2.6 mm to the south and was disregarded.

Chincoteague Bay Light 16 - The cuts from Photo Points 03, 11 and 12 fell within .3 mm of the radial plotted position. The point pricked and drilled was the mean of the afore mentioned. The field cut from Photo Point 08 fell approximately 1.3 mm to the east, and the cut from Boundary Monument Pope Island, 1902 Ecc. fell approximately 3.0 mm to the north. These two cuts were disregarded.

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Johnson Bay Light 1 - The field cuts from Photo Points 08 and 11 agree with the strong radial plotted position. The cut from Photo Point 12 was disregarded because it fell approximately 0.7 mm to the east.

Johnson Bay Light 3 - The intersection of field cuts from Photo Points 11 and 12 fell approximately 0.7 mm from a good three cut radial plotted position. The point pricked and drilled was the mean of these two intersections. The field cut from Photo Point 08 fell approximately 1.0 mm to the south and was disregarded.

George's Island Landing Light 2 - The field cuts from Photo Point 12 and Cord (VFC), 1933 agreed with the radial plotted position. The intersection of these five rays was pricked and drilled. The field cut from Photo Point 03 fell approximately 1.0 mm to the south while the field cut from Photo Point 13 fell approximately 4.6 mm to the west. These two cuts were disregarded.

George's Island Landing Light 4 - The field cuts from Photo Points 03, 12 and Cord (VFC), 1933 agreed with the four ray intersection of the radial plot. The only bad ray, which was disregarded, came from Photo Point 13 which fell approximately 5.3 mm to the southwest.

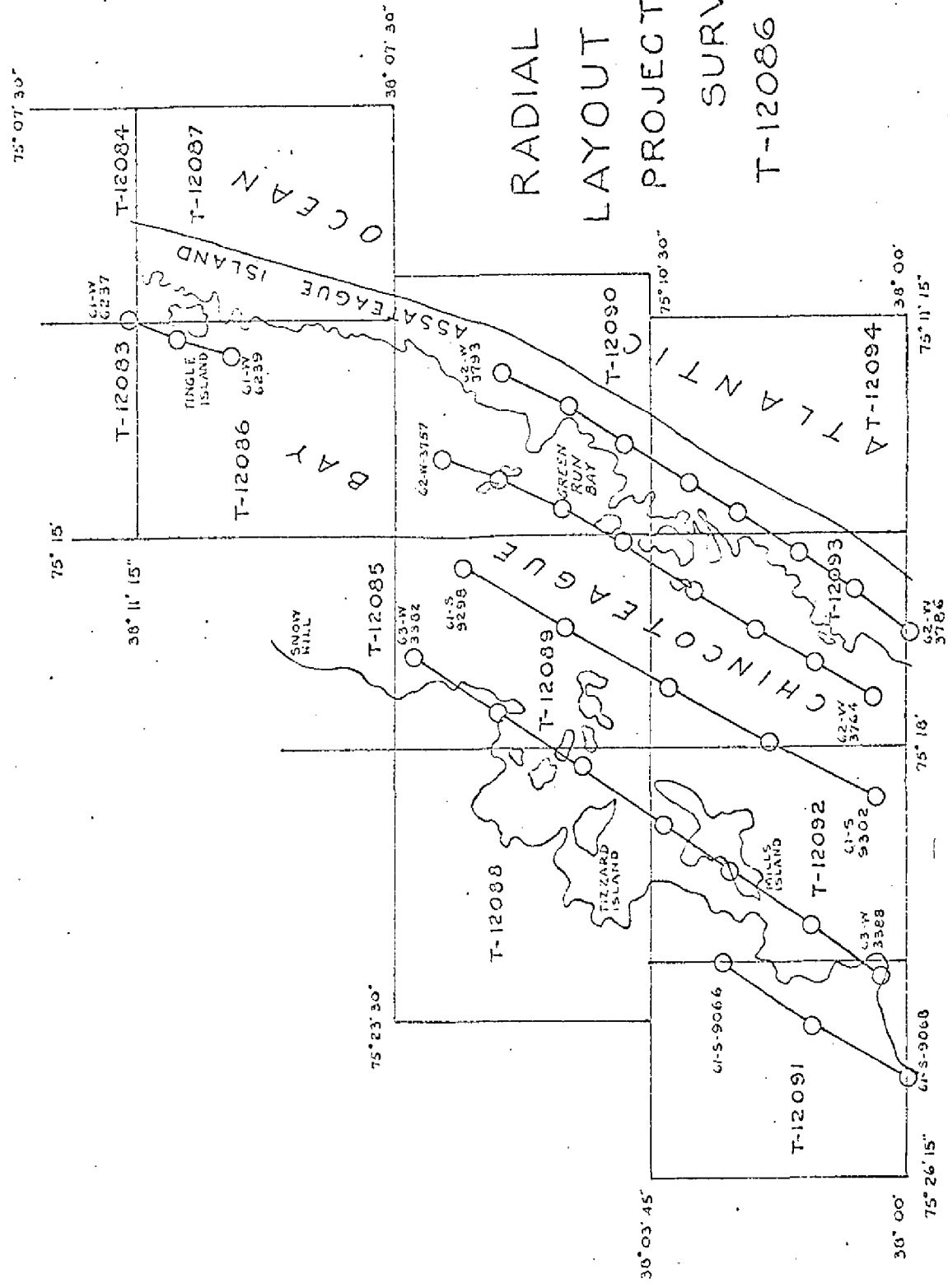
Greenbackville Light 1 - The position of the intersections of the radial plot, the field cuts and the position for this light as shown on Survey No. T-11660 (Project PH-5907) are all in agreement with each other.

Greenbackville Light 3 - The field cuts from Photo Points 00, 02 and 06 agree with the radially plotted position. This point was pricked and drilled. The position as shown on Survey No. T-11660 (Project PH-5907) falls 0.8 mm to the west. The field cut from Cord (VFC), 1933 fell approximately 0.5 mm to the south. These latter two were disregarded.

Respectfully submitted
July 8, 1963

Leroy A. Senasack
Cartographer (Photo)

RADIAL PLOT LAYOUT SKETCH PROJECT PH-6103 SURVEYS T-12086 thru T-12094



COMPILATION REPORT

T-12087

There was no compilation report with the data for this survey at the time of final review.

January 14, 1972

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6103 (Maryland & Virginia)

T-12087

Assateague Bay

Assateague Island

Atlantic Ocean

Straight Marshes

Tingles Island

Tingles Narrows

Winter Quarter

Approved by:

A. Joseph Wraight
A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

49. NOTES TO THE HYDROGRAPHER

No new hydrographic surveys are planned for this area.

PHOTOGRAMMETRIC OFFICE REVIEW

T. 12087

1. PROJECTION AND GRIDS ELR	2. TITLE ELR	3. MANUSCRIPT NUMBERS ELR	4. MANUSCRIPT SIZE ELR
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ELR	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) ELR		7. PHOTO HYDRO STATIONS XXR
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT ELR	11. DETAIL POINTS ELR
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE ELR	13. LOW-WATER LINE ELR	14. ROCKS, SHOALS, ETC. XXR	15. BRIDGES XX
16. AIDS TO NAVIGATION ELR	17. LANDMARKS ELR	18. OTHER ALONGSHORE PHYSICAL FEATURES ELR	19. OTHER ALONGSHORE CULTURAL FEATURES ELR
PHYSICAL FEATURES			
20. WATER FEATURES ELR		21. NATURAL GROUND COVER ELR	22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES ELR
CULTURAL FEATURES			
27. ROADS ELR	28. BUILDINGS ELR	29. RAILROADS XX	30. OTHER CULTURAL FEATURES ELR
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES ELR		34. JUNCTIONS ELR	35. LEGIBILITY OF THE MANUSCRIPT ELR
36. DISCREPANCY OVERLAY ELR	37. DESCRIPTIVE REPORT ELR	38. FIELD INSPECTION PHOTOGRAPHS ELR	39. FORMS ELR
40. REVIEWER E.L. Rolle		SUPERVISOR, REVIEW SECTION OR UNIT	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER		SUPERVISOR	
43. REMARKS			

FIELD EDIT REPORT

T-12087

This survey was not field edited.

REVIEW REPORT T-12087

SHORELINE

JANUARY 6, 1972

61. GENERAL STATEMENT

See Summary, which is page 6 of the descriptive report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with a copy of T-8128, a 1:20,000 scale survey made in 1941. The surveys appear to be in good general agreement except for along the outer coast. Here the shore has eroded approximately 40 meters since the date of the older survey.

Shoreline survey T-12087 supersedes T-8128 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. TINGLES ISLAND, MD., 1:24,000 scale quadrangle, edition of 1942. The two surveys are in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There are no contemporary hydrographic surveys in this area.

65. COMPARISON WITH NAUTICAL CHARTS

A visual comparison was made with Chart 1220, 18th edition, July 17, 1971. No discrepancies were noted.


66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.


Reviewed by:


Leo F. Beugnet
Cartographer


Approved for forwarding:



Melvin J. Umbach, CDR, NOAA
Chief, Photogrammetry Division, AMC

Approved:


Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

Approved:


Chief, Photogrammetric Branch
JMS


Chief, Coastal Mapping Division