

11135
N&S

Diag. Chto Nos. 1203-2 and 1204-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-104 Office No. T-11135

LOCALITY

State Maine

General locality Muscongus Bay

Locality Allen and Monhegan Islands

1945-55

CHIEF OF PARTY

Paul Taylor, Chief of Field Party
E.H.Kirsch, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE May 12, 1958

11135

DATA RECORD

T - 11135

Project No. (II): Ph-104

Quadrangle Name (IV):

Field Office (II): Rockland, Maine

Chief of Party: Paul Taylor

Photogrammetric Office (III): Balto. Photo. Office

Officer-in-Charge: E. H. Kirsch

Instructions dated (II) (III):

13 April 1953

29 April 1953 (Supplement I)

(711 aal, 3 March 1954

(73 mkl, 29 Dec. 1953)

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Air Photographic (Multiplex & Kelsh Plotter)

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

1:10,000

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 29 Jan 1958

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 1927

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): MONHEGAN, 1858

Lat.: 43° 46' 16.297"

Long.: 69° 18' 18.541"

Adjusted

~~bradistock~~

Plane Coordinates (IV):

State: Maine

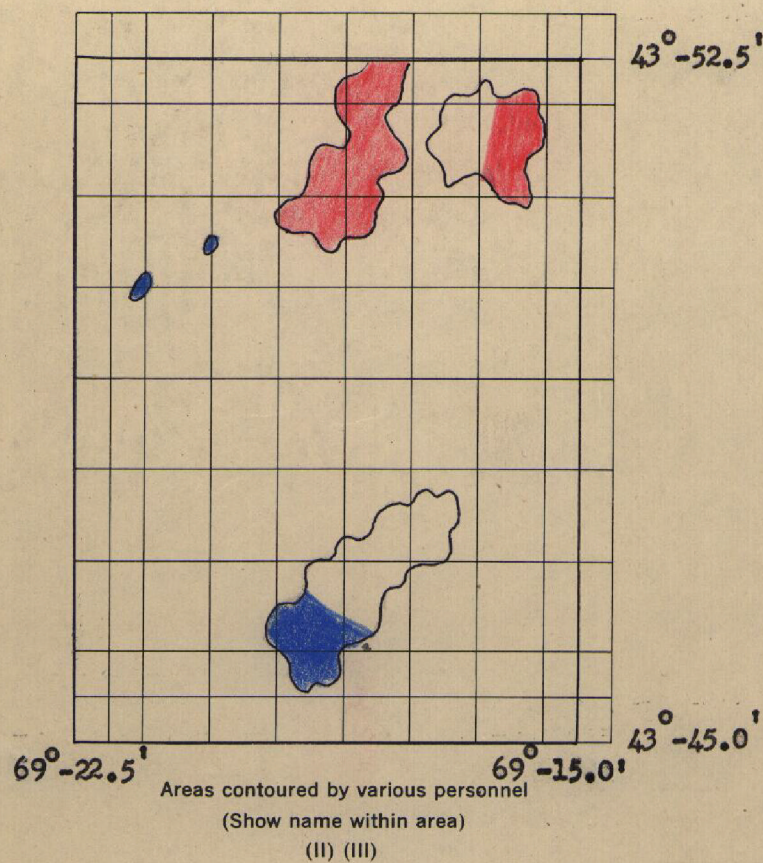
Zone: east

Y=

X=

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.



Contouring in blue: by Mr. John R. Smith
" " red: " Mr. Martin C. Moody

Area left blank: ~~to be done by Compilation Office~~
J. C. Richter (Kelsh Plotter)

DATA RECORD

Field Inspection by (II): Mr. John R. Smith, Carto. Surv. Aid Date: August, 1953
Mr. Martin C. Moody, Carto. Surv. Aid

Planetable contouring by (II): Mr. John R. Smith, Carto. Surv. Aid Date: July-August, 1953
Mr. Martin C. Moody, Carto. Surv. Aid

Completion Surveys by (II): *Geo. E. Varnadoe* Date: *August 1955*

Mean High Water Location (III) (State date and method of location):

See Paragraph No. 35 of this report.

Projection and Grids ruled by (IV): Austin Riley Date: 2 Oct. 1953

Projection and Grids checked by (IV): H. D. Wolfe Date: 8 Oct. 1953

Control plotted by (III): E. H. Taylor Date: 18 Dec. 1953

Control checked by (III): H. P. Eichert Date: 18 Dec. 1953

Radial Plot or Stereoscopic E. L. Rolle Date: 8 Jan. 1954
Control extension by (III):

Planimetry J. C. Richter Date: 5 Feb. 1954
Stereoscopic Instrument compilation (III):
Contours J. C. Richter Date: 5 Feb. 1954

Manuscript delineated by (III): J. Y. Council N/2 Date: 6 Apr. 1954
A. K. Heywood S/2 4 June 1954

Photogrammetric Office Review by (III): A. K. Heywood N/2 Date: 5 July 1954
H. P. Eichert S/2 5 July 1954

Elevations on Manuscript A. K. Heywood Date: 1 July 1954
checked by (II) (III):

U.S.G.S. Single lens 6" Focal Length.
 Camera (kind or source) (III): U.S.C.&G.S. Single lens 6" Focal Length Type J.

Number	Date	Time	Scale	Stage of Tide
GS-PE-1-179 - 1-184	4/3/53	11:03	1:10,000	5.6 above MLW
1-186 - 1-187	"	11:11	"	6.0 " "
52-J-2639 - 2643	7/13/52			At or about MLW
2558 - 2562	"			
2566 - 2558	"			
2609 - 2611	"			
3100 - 3107	"			

Tide (III)

Reference Station: Portland, Maine
 Subordinate Station: Monhegan I
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	8.8	10.1

Washington Office Review by (IV):

Date: Feb 1956

Final Drafting by (IV):

Date: 12-27-57

Drafting verified for reproduction by (IV):

Date: 1-3-58

Proof Edit by (IV):

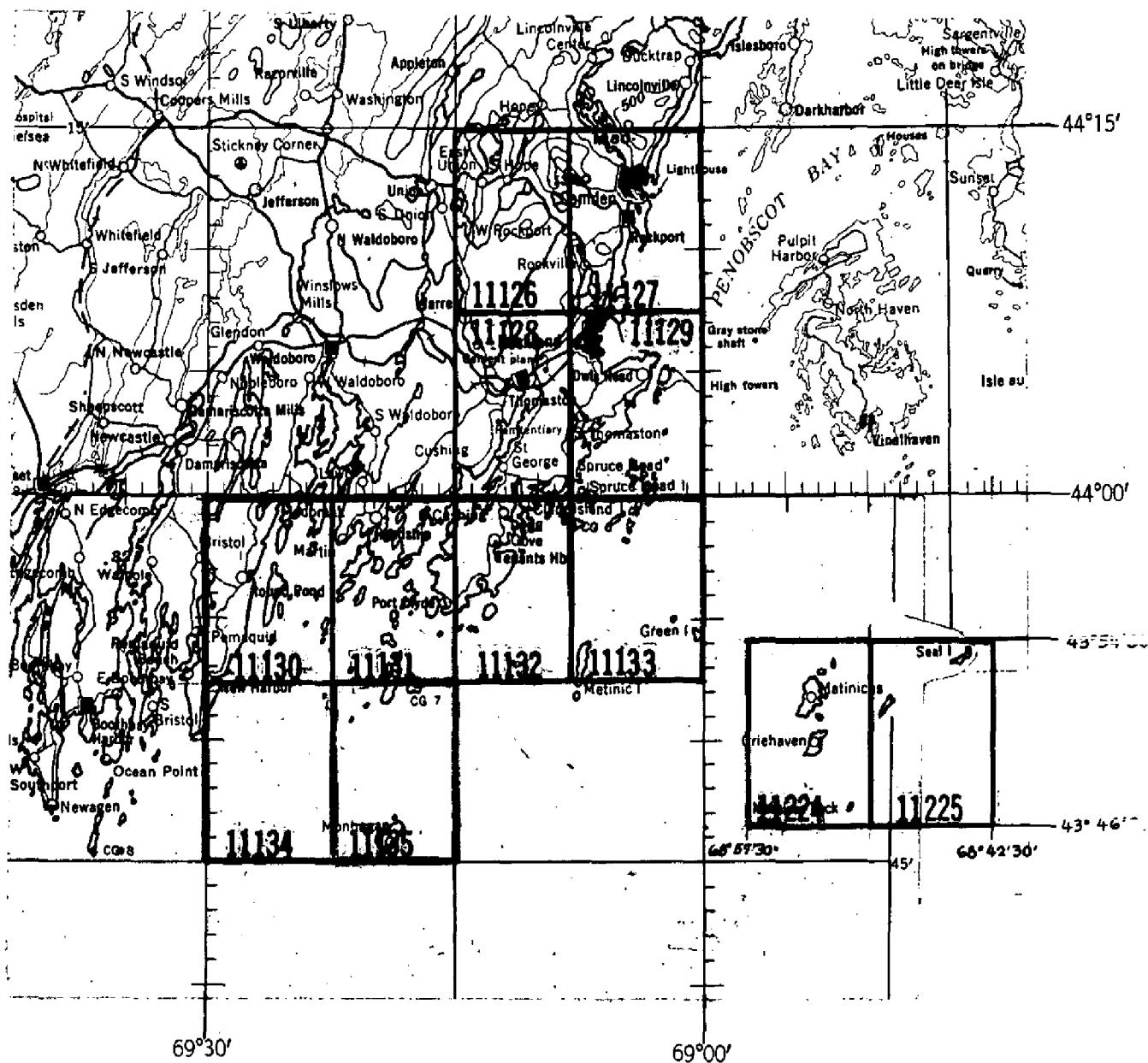
Date:

Land Area (Sq. Statute Miles) (III): 3
 Shoreline (More than 200 meters to opposite shore) (III): 12
 Shoreline (Less than 200 meters to opposite shore) (III):
 Control Leveling - Miles (II):
 Number of Triangulation Stations searched for (II): 4 Recovered: 3 Identified: 3
 Number of BMs searched for (II): 6 Recovered: 6 Identified: 2
 Number of Recoverable Photo Stations established (III): None
 Number of Temporary Photo Hydro Stations established (III): None

Remarks:

TOPOGRAPHIC MAPPING PROJECT PH-104

ROCKLAND, MAINE and VICINITY



OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Sq. St. Miles	Lin. Miles Shoreline
11126	51	18
11127	27	25
11128	46	45
11129	14	30
11130	24	40
11131	15	57
11132	14	30
11133	3	17
11134	1	4
11135	3	12
11224	3	13
11225	1	7
TOTALS	202	298

FIELD INSPECTION REPORT
 Quadrangle T-11135
 Project Ph-104 (Section "A")

The phases listed below are in addition to those phases listed on pages 2 and 3:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Joseph K. Wilson, Cartographer	Horizontal Control, Shoreline	August, 1953

2. AREAL FIELD INSPECTION

The quadrangle is comprised of a group of several islands which are about six miles off the mainland. Monhegan Island, the largest of the group, is one of the important landmarks for vessels bound along the coast. Monhegan is a village of fishermen and summer residents.

The U. S. Coast Guard maintains a light station on Monhegan, a fog signal station on Manana, and a lifeboat station at Burnt Island. The Coast Guard also has telephone communication connecting Whitehead Island and Burnt Island and from Burnt Island to Monhegan.

The large islands in this group are heavily wooded and are very sparsely settled with the exception of Monhegan. The shorelines along the islands are quite rocky, with high bluffs in places.

Single-lens photographs taken by the U. S. Geological Survey and low-water photographs taken by this Bureau were used. No difficulty was encountered in their interpretation.

3. HORIZONTAL CONTROL

(a) OLD MAN LEDGE DAYBEACON and DUCK ROCKS DAYBEACON were located by third-order methods and described on Form 525b.

(c) All stations were established by the U. S. Coast and Geodetic Survey.

(e) All Coast and Geodetic Survey stations, which were plotted on the project index, were recovered in good condition.

(f) Three stations were identified on the photographs.

4. VERTICAL CONTROL

(a) Six tidal bench marks, established by the U.S.C. & G.S. were recovered.

(b) Vertical control for the planetable contouring was provided by the water surface corrected for stages of tide from a special predicted tide curve.

Several additional elevations were requested by the photogrammetrist from Baltimore. These elevations were obtained by planetable using the vertical angle. Permanent level notes were retained.

(c) The first and last level points are 35-1 and 35-4.

5. CONTOURS AND DRAINAGE

The contouring was done by planetable on copies of loftrite prints of the planimetric maps, at an interval of ten feet. Parts of Monhegan and Burnt Island are to be contoured by stereoscopic instruments. The portion of Allen Island in this quadrangle has been contoured by planetable. Allen Island and Monhegan Island are about one hundred thirty feet above sea level. It was difficult to work these islands, since they were heavily wooded and had considerable underbrush. The topographer, however, has taken a great number of elevations and used the stereoscope regularly. It is believed the contours are of good quality.

There is little definite drainage found on the islands of this area. The terrain is generally rolling.

6. WOODLAND COVER

A field edit was made of the woodland in accordance with project instructions. Spruce trees are predominant on the larger islands.

7. SHORELINE AND ALONGSHORE FEATURES

The shoreline was inspected in accordance with project instructions. A field edit of the high-water line was made throughout the area and adequate notes made on the loftrite sheets. The low-water line, rocks awash, small islands, etc. have been delineated on the low-water photographs in red. Several islands which were not shown on the planimetric sheets have been added.

The U. S. Coast Guard submarine telephone cable has been shown on photographs 52-J-2558 and 52-J-3101.

8. OFFSHORE FEATURES

The low-water line was done by visual inspection at low-water. The entire area was inspected for additions.

9. LANDMARKS AND AIDS

(a) Three landmarks are recommended on Form 567 for charting. There are no new landmarks recommended.

(b) No interior landmarks are recommended.

(c) There are no aeronautical aids.

(d) Three fixed aids are listed on Form 567.

10. BOUNDARIES, MONUMENTS AND LINES

See Special Boundary Report, which will be submitted at a later date. Allen and Burnt Islands are in Knox County, while Monhegan Island is in Lincoln County.

11. OTHER CONTROL

Two previously established monumented topographic stations were recovered and reported on Form 524.

12. OTHER INTERIOR FEATURES

A field edit was made of the planimetric maps and any changes found have been noted on the loftrite sheets.

There are no bridges over navigable waters.

13. GEOGRAPHIC NAMES

See Special Geographic Names Report, which will be submitted at a later date.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Special reports will be submitted for Geographic Names, Boundary Investigation, and Notes for the Coast Pilot.

25 September 1953
Submitted by:

Joseph K. Wilson
Joseph K. Wilson,
Cartographer

30 September 1953
Approved and Forwarded:

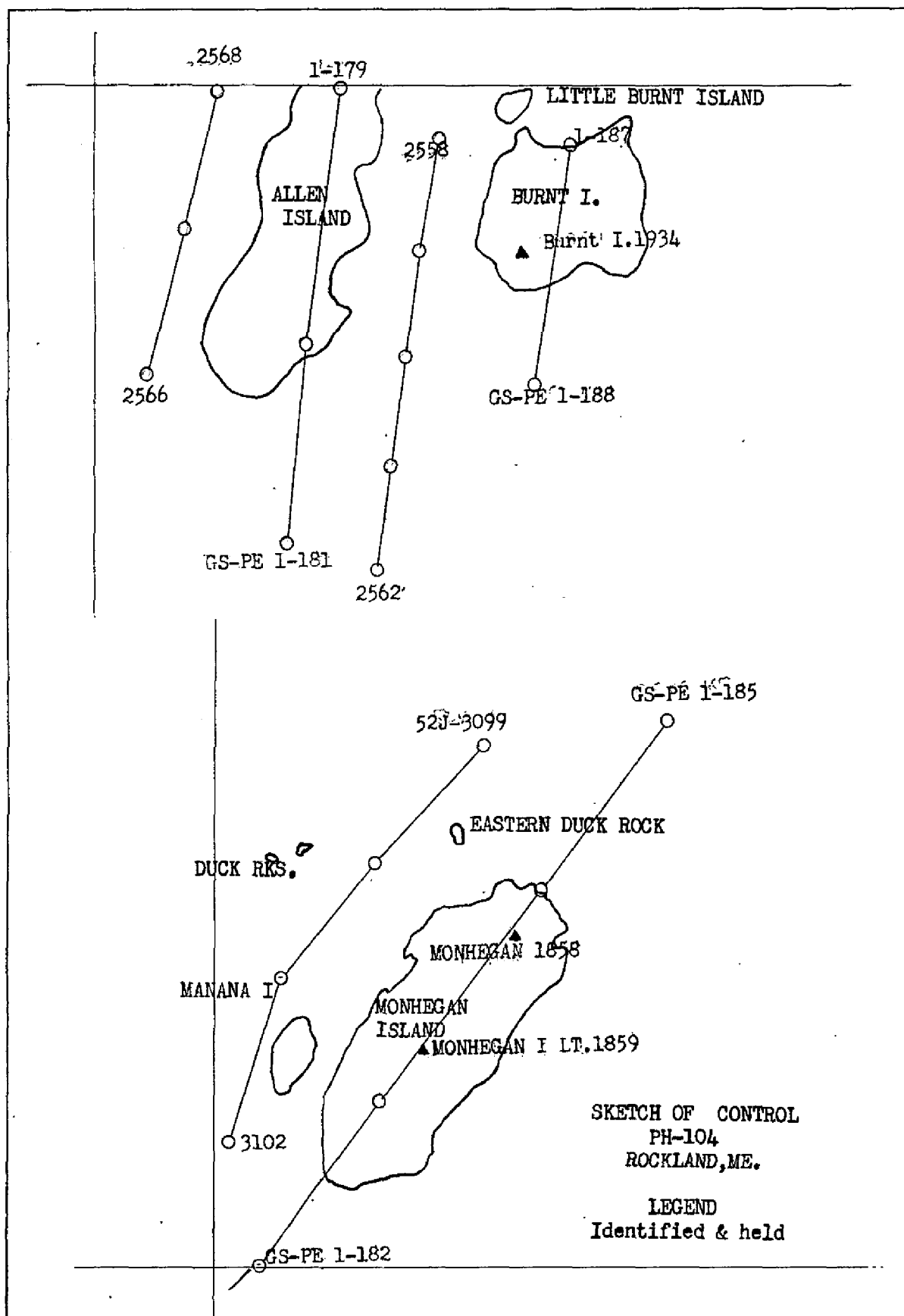
Paul Taylor
Paul Taylor
Commander, USC&GS
Chief of Party

SCALE FACTOR

COMM-DC-57843

SCALE FACTOR

[illegible]



COMPILATION REPORT
Project Ph-104
T-11135

Photogrammetric Plot Report

No separate photogrammetric Plot Report is to be submitted for this quadrangle. All side headings of the report applicable are covered adequately in the compilation report.

31. DELINEATION

Loftrite sheets of the planimetric surveys at a scale of 1:10,000 were furnished by the Washington office. These planimetric surveys from Project CS-272-C were used as a base for the compilation. Revisions of culture, shoreline and addition of contours were accomplished by the Kelsh instrument. Information from the planimetric survey, revisions, contours from the Kelsh and contours furnished by the field party, were then composited and conventional manuscripts were prepared.

Field inspection was adequate.

32. CONTROL

The horizontal control was adequate and complied with project instructions. The base compilation plus the identified horizontal control was used in setting our models.

The land area consists of three main islands. The control (horizontal and vertical) will be discussed for each island separately.

Monhegan Island

Horizontal Control:

A small multiplex bridge was run on this island holding the following identified points: MONHEGAN ISLAND LT., 1859 and MONHEGAN, 1858.

Vertical Control:

The southern one-third of this island was contoured by the field party. Planetable elevations used in the compilation of these contours were used as level points in the compilation of the remainder of the island by Kelsh.

Allen Island

Horizontal Control:

Although this island was contoured in the field it was necessary to set the model to furnish detail points for the hydrographic party. There was no horizontal control on the island useful in setting the model and, consequently, the MHWL was used as horizontal control in the dropping of detail points.

32. CONTROL (cont'd)

Allen Island

Vertical Control:
See preceding page.

Burnt Island

Horizontal Control:

The model was held using the field identification of BURNT ISLAND 2, 1934 and office identification of the topo station, N. GABLE COAST GUARD HOUSE, 1943.

Vertical Control:

The eastern half of this island was contoured by the field and the western half contoured by the Kelsh using the planetable elevations as vertical control.

33. SUPPLEMENTAL DATA

Planimetric survey T-5620 for Project CS-272-C was used as a base for these manuscripts. All planimetry was accepted except where changes were either noted by the inspection party or obvious during compilation of contours.

34. CONTOURS AND DRAINAGE

The quality of both photographs and diapositives was fair.

Except in areas where contours were furnished by the field, as described in paragraph 32, all contours were delineated by the Kelsh.

35. SHORELINE AND ALONGSHORE AREAS

All shoreline was examined during compilation. In the absence of field inspection shoreline changes were kept to a minimum.

A low water line was furnished by the field party on low water photographs.

36. OFFSHORE DETAILS

Refer to paragraph No. 49 of this report.

37. LANDMARKS AND AIDS

There are three aids to navigation and three landmarks for charts within this survey area.

38. CONTROL FOR FUTURE SURVEYS

A list of recoverable topographic stations has been prepared and included in paragraph No. 49 of this report.

Refer to paragraph No. 20, Project Instructions dated 13 April 1953 and special instructions, 73-mkl, 29 December 1953, paragraph No. 10.

There are four topographic stations shown on this manuscript. The field party submitted cards for two recovered stations which were transmitted on 7 July 1954.

39. JUNCTIONS

Junction was made to the north with T-11131 S. The other edges of the sheet are bounded by water.

40. HORIZONTAL AND VERTICAL ACCURACY

See paragraph No. 32 of this report.

41. BOUNDARIES

Boundaries were compiled from information furnished by the field party on General Highway Maps of Lincoln County and Knox County scale 1/2" per mile.

42. - 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U. S. G. S. quadrangle, Monhegan, Me., scale 1:62,500, Edition of 1906, reprinted 1950.


47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 313, scale 1:40,000, Feb. 1949, 10 Edition, 1/8/52.

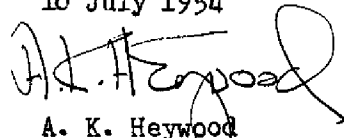
Items to be applied immediately: None

Items to be carried forward: None

Approved and forwarded


E. H. Kirsch, Comdr. US&GS
Officer in Charge
Baltimore Photo. office

Respectfully submitted
16 July 1954


A. K. Heywood
Carto. (Photo.)

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11135 N

1. Projection and grids AKH 2. Title AKH 3. Manuscript numbers AKH 4. Manuscript size AKH

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy AKH 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) AKH 7. Photo hydro stations ---- 8. Bench marks AKH
9. Plotting of sextant fixes ---- 10. Photogrammetric plot report AKH 11. Detail points AKH

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline AKH 13. Low-water line AKH 14. Rocks, shoals, etc. AKH 15. Bridges ----- 16. Aids to navigation AKH 17. Landmarks AKH 18. Other alongshore physical features AKH 19. Other along-shore cultural features AKH

PHYSICAL FEATURES

20. Water features AKH 21. Natural ground cover AKH 22. Planetable contours AKH 23. Stereoscopic Instrument contours AKH 24. Contours in general AKH 25. Spot elevations AKH 26. Other physical features AKH

CULTURAL FEATURES

27. Roads AKH 28. Buildings AKH 29. Railroads ----- 30. Other cultural features AKH

BOUNDARIES

31. Boundary lines AKH 32. Public land lines -----

MISCELLANEOUS

33. Geographic names AKH 34. Junctions AKH 35. Legibility of the manuscript AKH 36. Discrepancy overlay AKH 37. Descriptive Report AKH 38. Field inspection photographs AKH 39. Forms AKH
40. AKH Joseph Steinberg
Reviewer Supervisor, Review Section of 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:

M-2623-12

48. GEOGRAPHIC NAMES

Allen Island ✓
 ✓* Allen Shoal
Atlantic Ocean ✓

Black Head ✓
Burnt Head ✓
Burnt Island ✓

Christmas Cove ✓

Deadman Cove ✓
 ** Dry Ledges ✓
Duck Rks ✓

Eastern Duck Rk. ✓

Georges Islands ✓
Green Pt. ✓
 ✓* Gull Rk. Ledge

Harpoon Ledge ✓

Inner Duck Rk. ✓

Knox Co. ✓

Lincoln Co. ✓
Little Burnt Island ✓
Little Egg Rk. ✓
 ✓* Little Egg Rk Shoals
Lobster Cove ✓
Lobster Pt ✓

Manana I ✓
 ✓* Midway Rocks ✓
Monhegan ✓
Monhegan Harbor ✓
Monhegan I ✓
Muscongus Bay ✓

Norton Ledge ✓

Old Hump Channel ✓
Old Man Ledge ✓
Old Woman Ledge ✓

Seal Ledges ✓
Shark I ✓
Smutty Nose I ✓
 ✓* Sunken Duck Rk.

Wash Ledge {change from
White Head {Andrew Rocks (ch 313)

✓* Names marked thus
 deleted from manuscript
 to be restored with
 hydrography

gmm
 Feb '56

* Name from Chart 313
 (Feature not shown on manuscript).

** From Chart 313.

Names approved,
 Subject to Field Edit
 9-3-54

A-241

49. NOTES FOR THE HYDROGRAPHER

The following is a list of recoverable topographic stations which may be used as control for hydrography.

These are all carried forward from previous planimetric surveys

BULL, 1943
N. GAB., C. G. HOUSE, 1943
RADIO TOWER, 1943
WOLF, 1943

A set of photographs (scale 1:10,000) at or about low water has been prepared for use in hydrographic surveys and submitted with this report.

These photographs contain detail points which are common to those on the manuscripts.

* Chart sections are attached on which are indicated details to be proven, disproven or located in position.

** All details proven disproven or located in position by 1943-45 hydrographic surveys. Chart sec. removed from this report*

NONFLOATING AIDS OR NONFLOATERESTORICHARTS

Baltimore, Maryland

7 July 1954

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(detached from)~~ the charts indicated.

The positions given have been checked after listing by

A. K. Heywood

173477 H 7 *Psychology*

E. H. Hirsch

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED
TO BE DELETED

STRIKE OUT ONE

NON-FLOATING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland

7 July, 1954

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by A. K. Heywood

Country of my Motherland

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

Field Edit Report
Quad. T-11135

51. Methods. The islands were visited by boat. All roads and trails on Monhegan and Burnt Islands were walked out to check their location and classification, to classify buildings, to investigate questioned areas and to visually check contour shapes and planimetry.

Standard plane-table methods were used for testing the vertical accuracy of contours on Burnt Island. Elevations of the water level was determined from a tide curve, which was constructed from predicted tides. This method was used only during calm weather, with a calm sea.

No test was made on Monhegan Island as the Coast Guard furnished transportation to the island and time would not permit a test.

Field edit information is to be found on the following; 2 Discrepancy Prints; 2 Field Edit Sheets; 2 Photographs (ratio prints) Nos. GS PE-1-183 and 187 and 2 Low-water Photographs Nos. 52-J-3102 and 3104.

All additions, corrections and deletions have been made on the Field Edit Sheets or cross referenced there to the Photographs. Violet ink was used for corrections and additions. Green ink was used for deletions. A legend appears on each Field Edit Sheet, as to the color of ink used.

52. Adequacy of the Compilation. The Compilation will be adequate and complete after the application of the Field Edit Data.

53. Map Accuracy. No horizontal tests were made. Sixteen points on contours were tested for vertical accuracy, on Burnt Island. None of the points tested were in error as much as one half contour interval.

54. Recommendations. No recommendations are offered.

55. Examination of the Proof Copy. No one was asked to examine a proof copy of the manuscript.

Geographic names were discussed with two fishermen of the area and with the Officer in Charge of the Burnt Island Coast Guard Station. No discrepancies were noted.

Respectfully submitted,
10 August 1955

George E. Varnadoe
George E. Varnadoe
Photo. Engr.

TOPOGRAPHIC MAPPING

Summary & Abstract of Vertical Accuracy Test

Project No. Ph-104 Quad. No. T-11135 Quad. Name Monhegan
Method of Testing Plane-table
Tested by GEV Date 8 Aug 1955 Evaluated by GEV
Contour interval 10 ft. 1:22 M.M. allowable shift at 1: 10,000
map or manuscript scale.

<u>16</u>	Total number of points tested
<u>100</u>	% of points within $\frac{1}{2}$ contour interval or better
<u>16</u>	Test points correct within $\frac{1}{2}$ contour interval
<u>0</u>	Test points in error between $\frac{1}{2}$ and full contour interval
<u>0</u>	Test points in error over full contour interval

[illegible]

Summary to Accompany
Descriptive Report
T-11135

Topographic Map T-11135 is one of 12 similar maps in Project 6104. This map includes Monhegan I, Burnt I and most of Allen I. The shoreline and planimetry were compiled from T-5620 (dated 1941-45) and corrected to 1955 by means of 1952-53 photographs, field inspected in 1953, partial shoreline inspection and a complete field edit. Other field work preceding compilation included plane-table contouring and establishment of some vertical control (by plane-table) for instrument contouring. The manuscript is in 2 sheets, each 3-3/4' x 7.5' and at 1:10,000 scale. The map is to be published by the Geological Survey at scale 1:24,000 as a standard 7.5 minute topographic quadrangle. Registered copies under T-11135 will include 2 half-quadrangle cloth mounted prints at 1:10,000 scale, one designated as T-11135-N and the other T-11135-S, and a cloth mounted color print of the 7.5' quadrangle.

John M. Neal
John M. Neal
February 1956

Review Report
Topographic Map
T-11135
February 1956

61. General Statement:

(See Summary)

62. Comparison with Registered Topographic Surveys:

T-960	1:20,000	1864
5620	1:10,000	1941-45

T-11135 supersedes both above surveys in common areas for use as source material for construction or maintenance of nautical charts. No major differences are noted except in cultural detail.

63. Comparison with Maps of Other Agencies:

Comparison was made with the SE/4 of USGS MONHEGAN, ME., 1/62,500 1906 (reprint 1950).

Considering differences in scale, dates of survey, contour interval and standards there are no significant differences except in interior detail. T-11135 supersedes the SE/4 of the above map.

64. Comparison with Contemporary Hydrographic Surveys::

H-6861	1:20,000 and 1:40,000	1943-44
6969	1:10,000	1944
6982	1:20,000	1944-45
6992	1:10,000	1944

All conflicts with above surveys have been resolved by the undersigned reviewer. The approximate low water line is nearly completely mapped by T-11135. Hydrography will be applied to this quadrangle prior to color separation drafting by the Geological Survey.

65. Comparison with Nautical Charts:

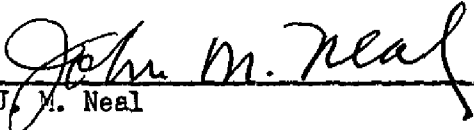
Chart 313	1:40,000	1949 (54-4/26)
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No differences except in minor details of no significance to the chart.

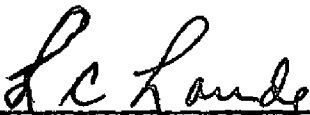
66. Adequacy of Results and Future Surveys:


This map complies with all instructions and is adequate for use as a base for future hydrographic surveys. It complies with the National Standards of Accuracy as evidenced by the Field Edit Report.


Reviewed by:


J. M. Neal

APPROVED:


Chief, Review and Drafting Section
Photogrammetry Division


Chief, Nautical Chart Branch
Charts Division


Chief, Photogrammetry Division


Chief, Coastal Surveys Division

