8551

Form 804
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey  Planimetric Air Photographic
Project CS272-E (shoreline)
Office No. T-8551

LOCALITY

State  Maine

General locality  Coast of Maine

Locality  East Penobscot Bay

Isle Au Haut Bay, Merchant Row

1946

CHIEF OF PARTY

William P. Deane

LIBRARY & ARCHIVES

DATE  May 29, 1948
DATA RECORD

T-8551

Quadrangle (II):

Project No. (II): CS-272 E

Field Office: Air Photograph Party No. 2
Chief of Party: Fred. L. Peacock

Compilation Office: Baltimore Photogrammetric Office
Chief of Party: William F. Deane

Instructions dated (II III):
April 1, 1942 (Additional) July 10, 1943 (Horizontal Control Requirements), March 18, 1944, April 11, July 17, 1944 (Supplemental) August 10, 1944 (Additional)
August 26, 1944 (Amendment to Additional Instructions).
Completed survey received in office: 11/14/46

Reported to Nautical Chart Section:
Reviewed: 3/5/47

Compiled: Printed from original drawing Sept. 1947

Registered: April 1947

Published: shoreline - could copy only

Compilation Scale: 1:10,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): BILLS, 1945

Reference Station (III): BILLS, 1945

Lat.: 44°06' 25.351" 782.5 M
Long.: 68°37' 42.428" 942.6 M

State Plane Coordinates (VI): East Zone

X =

Y =

Military Grid Zone (VI)
**PHOTOGRAPHS (III)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>44-C-1525 to</td>
<td>6-4-44</td>
<td>0945</td>
<td>1:10,000</td>
<td>8.5' above M.L.W.</td>
</tr>
<tr>
<td>44-C-1529 inc. 5-29-44</td>
<td>1245</td>
<td>1:10,000</td>
<td>7.5' above M.L.W.</td>
<td></td>
</tr>
<tr>
<td>44-C-1608 to</td>
<td>6-4-44</td>
<td>1030</td>
<td>1:10,000</td>
<td>6' above M.L.W.</td>
</tr>
<tr>
<td>44-C-1612</td>
<td>6-5-44</td>
<td>1200</td>
<td>1:10,000</td>
<td>5.5' above M.L.W.</td>
</tr>
<tr>
<td>44-C-1776</td>
<td>6-5-44</td>
<td>1215</td>
<td>1:10,000</td>
<td>5.1' above M.L.W.</td>
</tr>
<tr>
<td>44-C-2081</td>
<td>6-23-44</td>
<td>1000</td>
<td>1:10,000</td>
<td></td>
</tr>
</tbody>
</table>

**Tide from (III):** Predicted Tide Tables, Atlantic Ocean, 1944. Reference Station: Portland, Maine with correction to Kimball Island, Penobscot Bay, Maine

Mean Range: 9.6', Spring Range: 10.9'

**Camera:** (Kind or source) U.S. Coast and Geodetic Survey wide angle single lens camera. Type "CH", focal length 6". All negatives on file in the Washington Office.

**Field Inspection by:** Lt. H.O. Fortin  
**date:** 10-18-43

**Field Edit by:** Lt. Dale E. Sturmer  
**date:** August and September 1945

**Date of Mean High-Water Line Location (III):**  
As of photographs taken on May 29, June 4, 5, and 23rd, 1944 and supplemented by field data obtained during August and September 1945.

**Projection and Grids ruled by (III) S.R.**  
**date:** 4-9-46

**" = " checked by: S.R.**  
**date:** 4-9-46

**Control plotted by:** Florence M. Senasack  
**date:** 4-16-46

**Control checked by:** Raymond Glaser  
**date:** 4-16-46

**Radial Plot by:** Frank J. Tarcza  
**date:** April 1944

**Detailed by:** Ruth M. Whitson  
**date:** 7-17-46 to 7-19-46  
7-23-46 to 8-28-46  
9-30-46 to 10-23-46

**Reviewed in compilation office by:** Raymond Glaser  
**date:** 10-25 to 10-30-46

**Elevations on Field Edit Sheet checked by:**  
**date:** 3/5/47
STATISTICS (III)

Land Area (Sq. Statute Miles): 3

Shoreline (More than 200 meters to opposite shore): 24 statute miles

Shoreline (Less than 200 meters to opposite shore): 1½ statute miles

Number of Recoverable Topographic Stations established: 13
Two of which are theodolite stations

Number of Temporary Hydrographic Stations located by radial plot: 22

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:
FIELD REPORT
SURVEY NO. T-8551
COAST OF MAINE
EAST PENOBSOT BAY
ISLE AU HAUT BAY, MERCHANT ROW
PROJECT NO. GS-272

1. DESCRIPTION OF THE AREA:

According to Instructions, dated August 10, 1944, the survey for Map Manuscript, Survey No. T-8551, is a shoreline survey.

Map Manuscript, Survey No. T-8551 covers an area on the western and north western shores of Isle Au Haut, and includes Kimball Island, Merchant Island, several smaller islands, islets and ledge areas in East Penobscot Bay, Isle Au Haut Bay and Merchant Row.

The terrain immediately adjacent to the mean high-water line is, in general, rocky. The foreshore area is commonly ledge rock with some stretches of sand, gravel, and boulders.

The interior is hilly and mostly tree covered, with the elevation rising from sea level to a maximum of 160 feet on Kimball Island.

2. COMPLETENESS OF FIELD INSPECTION:

The identification of the horizontal control, mean high-water line, foreshore and offshore features are complete except for offlying shoal and sunken reef areas not discernible on the photographs. The approximate mean low-water line is not complete in several areas. (See Side Heading No. 8, Mean Low-Water Line). The charting data for mean low-water line should become available during the next hydrographic survey.

3. INTERPRETATION OF THE PHOTOGRAPHS:

Sufficient notes have been made on the field photographs to enable the compilation office to augment the field interpretation by analogy where necessary.

4. HORIZONTAL CONTROL:

Two previously established horizontal control stations were recovered in good condition and accurately identified on the field photographs. Form No. 526, Recovery Note, has been submitted for each station.
4. **HORIZONTAL CONTROL:** (Continued)

One new triangulation station was established within the area of this survey. Form No. 525 has been submitted for this station. It is identified by R. M. No. 2, which is also a substitute station.

Two new theodolite stations were established within the area of this survey. Form No. 524 has been submitted for these stations, and they are both identified by substitute stations.

5. **VERTICAL CONTROL:**

No vertical control was recovered or identified within the area of this survey.

6. **DRAINAGE:**

Drainage was not identified on the field photographs.

7. **MEAN HIGH-WATER LINE:**

All of the mean high-water line was inspected from a dinghy kept close to the shore or by traversing on foot. Where the mean high-water line could not be directly identified on the field photographs, reference measurements were taken or the distance estimated from some well-defined point.

Alongshore rocks, offshore rocks, and islets above the plane of mean high-water, revealed by photography, have been identified on the field photographs with the elevation above the plane of mean high-water noted.

Offshore rocks, ledge and reef areas revealed by photography, which are covered at mean high-water have been identified on the field photographs with the amount to which they uncover at mean low-water or at the time and date of inspection noted.

8. **MEAN LOW-WATER LINE:**

The mean low-water line was inspected at or near mean low-water whenever practicable.

The identification of the mean low-water line is not complete in several areas along the shoreline of this survey.

The approximate position of the mean low-water line is shown on the field photographs with a dotted green ink line and the true position is shown with a dot and dash green ink line.

9. **WHARVES AND SHORELINE STRUCTURES:**

All piers, and other shoreline structures, visible on the photographs, within the area of this survey, have been identified on the field photographs.
10. DETAILS OFFSHORE FROM THE MEAN HIGH-WATER LINE:

Details outside the foreshore area revealed by photography include several rocks and rock ledge areas that uncover at mean low-water or bare at mean high-water, small rocky islets, sand, gravel, boulders, ledge areas, and a fish-trap.

The character of the foreshore area has been indicated on the field photographs. The extent to which several prominent rocks uncover at mean low-water, bare at mean high-water, or uncover at the time of field inspection with time and date, has been noted on the field photographs. The height of each of the small islets above mean high-water has also been noted.

11. LANDMARKS AND AIDS TO NAVIGATION:

A previously charted landmark "ISLE AU HAUT CHURCH SPIRE" was located by triangulation in 1868, and has been recovered and identified by the field unit.

The positions of four previously charted non-floating aids to navigation "BARTER ISLAND LEDGES DAYBEACON", "BAY LEDGE BEACON", "BIRCH POINT BEACON", and "INNER LEDGE BEACON", have been verified and identified on the field photographs.

No new landmarks or non-floating aids to navigation are recommended.

12. HYDROGRAPHIC CONTROL:

11 Recoverable Photo (Topographic) Stations
22 Temporary Photo (Topographic) Stations
2 Theodolite Stations

Descriptions have been furnished for all stations

Form No. 524 has been submitted for each of the recoverable photo (topographic) stations and the theodolite stations.

14. ROAD CLASSIFICATION:

In accordance with the Army War College circular, dated January 12, 1942, "Classification of Roads".

18. GEOGRAPHIC NAMES:

No investigation.
COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO.T-8551

COAST OF MAINE
EAST PENOBSCOT BAY
ISLE AU HAUT BAY, MERCHANT ROW
Project No. GS-272

26. CONTROL:

The horizontal control in the area of the map manuscript for Survey No. T-8551 consists of five (5) stations. They are as follows:

Five (5) horizontal control stations falling within the limits of the map manuscript:

<table>
<thead>
<tr>
<th>Name of Station</th>
<th>Type of Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>* BILLS, 1945</td>
<td>Triangulation</td>
</tr>
<tr>
<td>** BIND, 1945</td>
<td>Theodolite</td>
</tr>
<tr>
<td>** EWEI, 1945</td>
<td>Theodolite</td>
</tr>
<tr>
<td>ISLE AU HAUT CHURCH SPIRE, 1868, 1934, r.1945</td>
<td>Triangulation</td>
</tr>
<tr>
<td>ISLE AU HAUT LIGHT HOUSE, 1934, 1945</td>
<td>Triangulation</td>
</tr>
</tbody>
</table>

* Station identified by a R.M., which is also a substitute station. R.M. is shown on the map manuscript with a 3 mm. black acid ink square.

** Station identified by a well-defined substitute station. The positions of these substitute stations have been shown on the map manuscript with very small black acid ink circles, accompanied by the note "Sub. Sta."

27. RADIAL PLOT

The radial plot for the area of this survey is part of a combined plot made with sotted steel templates, and covers the entire area of Surveys Nos. T-8551, T-8552, T-8553, T-8554, T-8555. Satisfactory results were obtained and the report for the radial plot was submitted to the Washington Office July 19, 1946. This report is filed as a separate report under radial line plot Project 272 E in General Files. DIV. OF PHOTOGRAMMETRY GENL. FILES.

28. DELINEATION:

The compilation is in accordance with the written instructions pertaining to Project No. GS-272.

The horizontal control stations and horizontal pass points available for the compilation of this survey were adequate.
28. **DELINEATION**: (Continued)

Field inspection for delineating the area of Outer Scrag Ledge, Sparrow Island Ledges, Sparrow Island, The Brown Cow, the southern portion of Scraggy Island and Farrell Island, was completed by the field unit October 18, 1943 on a nine lens field photograph taken on October 19, 1941. This field inspection was found to be inadequate for office use because of a light-struck area which obliterated important features on the photograph and because of a decided change in terrain and offshore features when compared with photographs taken in 1944. The mean high water line was transferred from the nine lens photograph to the single lens 1944 photographs after examination by the compilation office.

Kimball Island, Merchant Island, and all smaller islands and islets have been delineated in their entirety. Only the area in the vicinity of the shoreline, however, was delineated on Isle Au Haut.

30. **MEAN HIGH-WATER LINE**:

The mean high-water line bordering along firm ground has been delineated in accordance with the field data, and is shown with a continuous heavy weight black acid ink line.

31. **MEAN LOW-WATER LINE**:

The position of the approximate mean low-water line was delineated in accordance with the field data and is shown with a dotted black acid ink line. Where the position of the accurately determined mean low-water line was identified, it was shown with a light-weight dash and dot black acid ink line.

Only those portions of the mean low-water line identified by the field inspection party in the area of Round Island, Barter Island Ledges, Burnt Island, Flake Island, Bay Ledge, Marsh Cove Ledges, Isle Au Haut, Kimball Island, West Halibut Ledges, several small islets and ledge areas have been delineated on the map manuscript.

31-A **FORESHORE AREAS**:

The foreshore areas shown consist of rock ledge, boulders, detached rocks, gravel, sand, mud and shellfish. Such features have been delineated in accordance with the field data. The extent to which detached rocks and high spots of ledge within the foreshore area bare at mean high-water, or uncover at mean low-water, has been shown on the map manuscript with notes which are in accordance with the field data.

31-B. **SHOAL LINES**:

The approximate outline of shoal areas was delineated in accordance with the office interpretation of the photographs and is for the advance
31-B. **SHOAL LINES:**

Information of hydrographic parties only. Shown with a long dashed black acid ink line, accompanied with the note "Shoal".

31-C. **REEF LINES:**

The approximate outline of reef areas was delineated in accordance with the compilation office interpretation of the photographs and is for the advance information of the hydrographic parties only. Shown with a short dashed black acid ink line, accompanied by the note "Reef".

32. **DETAILS OFFSHORE FROM THE MEAN HIGH-WATER LINE:**

The offshore features include detached rocks, shoals, sunken reef areas, mud and shell areas, a fish trap, and small rocky islets, which have been shown in accordance with the field data and the office interpretation of the photographs.

The extent to which the offshore features are at mean high-water or cover-and uncover at mean low-water has been shown on the map manuscript with notes in accordance with the field data.

33. **WHARVES AND SHORELINE STRUCTURES:**

Several piers, and a fish-trap have been delineated in accordance with the field data and accompanied with descriptive notes.

34. **LANDMARKS AND AIDS TO NAVIGATION:**

A previously charted landmark "ISLE AU HAUT CHURCH SPIRE" falls within the area of the survey. The station was located by triangulation in 1868, and recovered in 1934 and 1945.

Four previously charted non-floating aids to navigation also fall within the area of the survey. Form No. 567 is being submitted for "BAY LEDGE BEACON", "BIRCH POINT BEACON"; and "INNER LEDGE BEACON"; and "BARTER ISLAND LEDGES DAYBEACON".

35. **HYDROGRAPHIC CONTROL:**

- 11 Recoverable Photo (Topographic) Stations
- 22 Temporary Photo (Topographic) Stations
- 2 Theodolite Stations

A descriptive list of all of the hydrographic control stations has been compiled and is attached to this report. Two additional copies have been furnished for the use of the hydrographic parties.
35. HYDROGRAPHIC CONTROL (Continued):

Form No. 524 is being submitted for each of the ten recoverable photo (topographic) stations, and the two theodolite stations.

38. GEOGRAPHIC NAMES: c

As instructed, no geographic names investigation was made by the field unit.

The geographic names appearing on the map manuscript have been taken from Nautical Chart No. 309 and the United States Geological Survey, Deer Isle, Maine, Quadrangle Map.

A list of the geographic names is attached to this report.

39. JUNCTIONS:

The junctions with Map Manuscripts, Survey No. T-8552 to the south, Survey No. T-8554 to the east, and Survey No. T-8051 to the north, have been made and are in agreement.

The junction with map manuscript for Survey No. T-8031 to the west is an all water area.

40. HORIZONTAL ACCURACY OF IMPORTANT PLANTMERTIC DETAILS:

The position of all detail of importance is believed to be within 0.5 mm.

41. RECOMMENDATIONS FOR FUTURE SURVEYS:

Map Manuscript, Survey No. T-8551 is complete with respect to all known details necessary for charting, except the charted features not definitely revealed by photography which should be investigated during the next hydrographic survey. These features have been noted in "Notes to Hydrographic Parties" attached to this report, and indicated on a section of Nautical Chart No. 309 also attached to this report.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:


Details common to the map manuscript and to the quadrangle are, in general, in good agreement.

Minor differences in land features are mentioned in the accompanying "Notes for Reviewer" and offshore features for which data were lacking, have been mentioned in the "Notes to the Hydrographic Party" attached to this report.
45. **COMPARISON WITH NAUTICAL CHARTS:**

Chart No. 309, scale 1:40,000, published at Washington, D. C., July 1943, corrected to April 27, 1946. (common area)

Details common to the map manuscript and to the chart are, in general, in good agreement.

Minor differences in land features are mentioned in the accompanying "Notes For Reviewer," and offshore features for which data were lacking, have been mentioned in the "Notes To The Hydrographic Party" attached to this report.
Respectfully submitted:
16 October 1946

[Signature]
Ruth M. Whitson
Engineering Draftsman

Map Manuscript and Descriptive Report Reviewed by

[Signature]
Raymond Glaser
Photogrammetric Aid

Compilation of Map Manuscript Supervised by:

[Signature]
Harry R. Rudolph
Photogrammetric Engineer

Approved and Forwarded:
13 November 1946

[Signature]
William F. Deane
Chief of Party, C&G Survey
Officer in Charge
Baltimore Photogrammetric Office
1945
IDENTIFICATION REPORT
HORIZONTAL CONTROL

MAP MANUSCRIPT, SURVEY NO. T-8551

Project No. CS-272-E

<table>
<thead>
<tr>
<th>Station</th>
<th>U.S.G.S. Quadrangle</th>
<th>Recovery Date</th>
<th>Pricking Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>** HILLS, 1945</td>
<td>Deer Isle</td>
<td>7-31-45 (new)</td>
<td>Positive</td>
</tr>
<tr>
<td>* BIND, 1945</td>
<td>&quot;</td>
<td>8-18-45</td>
<td>&quot;</td>
</tr>
<tr>
<td>* EWEI, 1945</td>
<td>&quot;</td>
<td>8-7-45</td>
<td>&quot;</td>
</tr>
<tr>
<td>ISLE AU HAUT CHURCH</td>
<td>&quot;</td>
<td>8-2-45</td>
<td>&quot;</td>
</tr>
<tr>
<td>SPIRE, 1868</td>
<td>&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISLE AU HAUT LIGHT</td>
<td>&quot;</td>
<td>8-2-45</td>
<td>&quot;</td>
</tr>
<tr>
<td>HOUSE, 1934</td>
<td>&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Station identified by a substitute point. The positions of these substitute points have been shown on the map manuscript with very small black acid ink circles, accompanied by the note "Sub. Sta."

** Station identified by R.M., which is also a substitute station. R.M. is shown on the map manuscript with a 3 mm black acid ink square.
GEOGRAPHIC NAMES
(Undisputed)

Taken from Nautical Chart No. 309 and the United States Geological Survey,
Deer Isle, Maine, Quadrangle.

- Barter Island Ledges
- Bay Ledge
- Bills Island
- Birch Point
- Burnt Island
- Channel Rock
- East Penobscot Bay
- Eno Island
- Farrel Island
- Flake Island
- Harbor Island
- Harbor Island Ledge
- Hardwood Island
- Inner Ledge
- Isle au Haut
- Isle au Haut (village) (All not written in upper case letters)
- Isle au Haut Bay
- Isle au Haut Thoreofars
- Kimball Head (See below)
- Kimball Island
- Kimball Rock
- Leach Rock
- Lookout
- Marsh Cove
- Marsh Cove Head
- Marsh Cove Ledges
- Merchant Harbor
- Merchant Island
- Merchant Row
- Nathan Island
- Outer Scrag Ledge
- Pell Island
- Point Lookout
- Ram Island
- Ram Island Ledge
- Robinson Point
- Round Island
- Sawyer Ledge
- Scraggy Island
- Scraggy Ledge
- Sparrow Island
- Sparrow Island Ledges
- The Brown Cow
- West Halibut Ledges
- Wreck Island

Add to sheet:
- Kimball Head

Names preceded by . are approved. All the one name listed, but not applied.

GEOGRAPHIC NAMES
L. Beck 9/11/97
COAST OF MAINE
PROJECT NO. CS-272

DESCRIPTIONS OF THE RECOVERABLE PHOTO (TOPOGRAPHIC) STATIONS, TEMPORARY PHOTO (TOPOGRAPHIC) STATIONS AND THEODOLITE STATIONS FOR THE AREA OF MAP MANUSCRIPT, SURVEY NO. T-8551.

NUMBER OF RECOVERABLE PHOTO (TOPOGRAPHIC) STATIONS ............ 11
NUMBER OF TEMPORARY PHOTO (TOPOGRAPHIC) STATIONS ............ 22
NUMBER OF THEODOLITE STATIONS ........................................ 2

TOTAL NUMBER OF STATIONS ........................................... 35

Listed by
Ruth M. Whitson
Engineering Draftsman

Checked by
Raymond Glaser
Photogrammetric Aid
All details have been shown with the usual symbols.

1. The small blue ink circles are the positions of well defined detail points determined photogrammetrically and are considered strong. The small green ink circles are the positions of well-defined detail points determined by only two wide angle radials or by three or more very slim angle radials and are considered weak.

3. The 2½ millimeter black acid ink circles accompanied with a name, date (1945), and a number, are the positions of the recoverable photo (topographic) stations. Such circles accompanied with a name and date (1945) are the positions of the theodolite stations. All other such circles accompanied with a number only are the positions of the temporary photo (topographic) station. A copy of the list of descriptions of all of the hydrographic control stations is attached to this report.

4. The very small black acid ink circles, accompanied with the note "Sub. Sta." are the positions of the substitute stations.

5. The photographs contain no appreciable tilt or differential distortion.

6. The scale of the photographs and the map manuscript was in good agreement.

7. The approximate limits of reef areas have been delineated according to office interpretation of the photographs and are shown with a short dashed black acid ink line accompanied with the note "Reef".

8. The approximate limits of shoal areas have been delineated according to office interpretation of the photographs and are shown with a long dashed black acid ink line accompanied with the note "Shoal".

Comparison with the United States Geological Survey, Deer Isle, Maine Quadrangle

Shown on the quadrangle but not on the map manuscript because no data were available:

Several swamp areas
Several buildings
Two minor roads
In disagreement with the quadrangle:

1. A road shown with double full lines on the quadrangle at Robinson Point, Isle Au Haut, leading south, has been delineated on the map manuscript as a Class 4 road.

Comparison with Nautical Chart No. 307

Charted but not shown on the map manuscript because no data were available:

1. A high water rock on ledge to the west of a small island about 3/4 mile west of Wreck Island.
2. * Harbor Island Ledge
3. * Leach Rock
4. Road from Lookout to Buck Point
5. Road on NW Kimball Island
6. Rock awash in Isle Au Haut Thorofare SE of Kimball Island
7. * Inner Ledge
8. * Sawyer Ledge
9. Road at Robinson Point
10. All floating aids to navigation

* Geographic name shown on map manuscript at approximate location.
In disagreement with the chart

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>CHARTED</th>
<th>MAP MANUSCRIPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>E of Scruggy Island</td>
<td>high water rock</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>3/4 mile W of Wreck Island</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>Scruggy Ledge</td>
<td>small island</td>
<td>4 islets and a rock awash</td>
</tr>
<tr>
<td>N of Scruggy Ledge</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>Ram Island Ledge</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>cove on SW Merchant Island</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>SW of Pell Island</td>
<td>6 high water rocks</td>
<td>reef and rock ledge</td>
</tr>
<tr>
<td>NW of Flake Island</td>
<td>rock awash</td>
<td>shoal area</td>
</tr>
<tr>
<td>NE of Flake Island</td>
<td>2 high water rocks</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>N of Kimball Island</td>
<td>4 high water rocks</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>S of NE point of Kimball Island</td>
<td>3 sunken rocks</td>
<td>mud and shell fish in shoal area</td>
</tr>
<tr>
<td>S of N point of Kimball Island</td>
<td>one sunken rock and a rock awash</td>
<td>shoal area</td>
</tr>
<tr>
<td>Kimball Rock</td>
<td>rock awash</td>
<td>high water rock on rock ledge</td>
</tr>
<tr>
<td>Marsh Cove Ledges</td>
<td>high water rock</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>N shore Marsh Cove</td>
<td>shoreline fairly regular</td>
<td>additional cove-like formation in this location</td>
</tr>
</tbody>
</table>

Approved and Forwarded:

13 November 1946

William F. Deane
Chief of Party, C&G Survey
Officer in Charge
Baltimore Photogrammetric Office

Respectfully submitted
21 October 1946
Ruth M. Whitson
Engineering Draftsman
NOTES FOR HYDROGRAPHIC PARTIES COAST OF MAINE MAP MANUSCRIPT, SURVEY NO. T-8551 PROJECT NO. CS-272

1. The 2½ millimeter black acid ink circles accompanied with a name, date, (1945), and a number, are the positions of the recoverable photo (topographic) stations. Such circles accompanied with a name and date (1945) are the positions of the theodolite stations. All other such circles accompanied with a number only are the positions of the temporary photo (topographic) stations. Two copies of the list of descriptions of all these stations have been furnished for your use.

2. The very small black acid ink circles, accompanied by the note "Sub. Sta." are the positions of substitute stations. A brief description of the substitute stations may be found on the pricking cards, Form No. M-982-1 submitted to the Washington Office.

3. The alternate dot and dash ink line is the position of the accurately determined mean low-water line. The dotted line is the position of the approximate mean low-water line.

4. The outline of reef and shoal areas are approximate and are for your advance information only. They are shown with short dashed and long dashed black acid ink lines accompanied with the notes "Reef", and "Shoal", respectively.

5. The following charted features were not definitely revealed by photog-raphy and should be investigated during the next hydrographic survey:

A high water rock on ledge to the west of a small island about 3/4 mile west of Wreck Island.

*Harbor Island Ledge
* Leach Rock
* Inner Ledge
* Sawyer Ledge

Rock swash in Isle Au Haut Thorofare SE of Kimball Island

All floating aids to navigation

Note: For location, see section of Nautical Chart No. 309 attached to this report. These features have been indicated with a red ink line around the area in which they fall.

* Geographic name shown on map manuscript at approximate location.
The following charted features are in disagreement with the map manuscript and should also be investigated.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>CHARTED</th>
<th>MAP MANUSCRIPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>N of Scraggy Island</td>
<td>high water rock</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>3/4 mile W of Wreck Island</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>Scraggy Ledge</td>
<td>small island</td>
<td>4 islets and a rock awash</td>
</tr>
<tr>
<td>N of Scraggy Ledge</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>Ram Island Ledge</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>cove on SW Merchant Island</td>
<td>rock awash</td>
<td>reef area</td>
</tr>
<tr>
<td>SW of Fall Island</td>
<td>6 high water rocks</td>
<td>reef and rock ledge</td>
</tr>
<tr>
<td>NW of Flake Island</td>
<td>rock awash</td>
<td>shoal area</td>
</tr>
<tr>
<td>NE of Flake Island</td>
<td>2 high water rocks</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>N of Kimball Island</td>
<td>4 high water rocks</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>5 of NE point of Kimball Island</td>
<td>3 sunken rocks</td>
<td>mud and shell fish</td>
</tr>
<tr>
<td>5 of W point of Kimball Island</td>
<td>one sunken rock and a</td>
<td>in shoal area</td>
</tr>
<tr>
<td></td>
<td>rock awash</td>
<td></td>
</tr>
<tr>
<td>Kimball Rock</td>
<td>rock awash</td>
<td>high water rock on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>reef ledge</td>
</tr>
<tr>
<td>Marsh Cove Ledges</td>
<td>high water rock</td>
<td>rock ledge area</td>
</tr>
<tr>
<td>N shore Marsh Cove</td>
<td>shoreline fairly regular</td>
<td>additional cove-like</td>
</tr>
<tr>
<td></td>
<td></td>
<td>formation in this</td>
</tr>
<tr>
<td></td>
<td></td>
<td>location</td>
</tr>
</tbody>
</table>

Note: For location see section of Nautical Chart No. 309 attached to this report. These features have been indicated with a green ink line around the area in which they fall.
Respectfully submitted:
17 October 1946

[Signature]
Ruth M. Whitson
Engineering Draftsman

Approved and Forwarded:
13 November 1946

[Signature]
William F. Deane
Chief of Party, C&G Survey
Officer in Charge
Baltimore Photogrammetric Office
"INNER LEDGE BEACON, 1945". The station is the black spindle beacon located at the southern entrance to Isle Au Haut Thorofare and about 1/3 mile northeast of Isle Au Haut Lighthouse. Aid to navigation. Elevation: 20 feet. Recoverable photo (topographic) station.

Northeast chimney on house.

Brick chimney near peak of roof of white weatherboard house trimmed in green.

Stone chimney at south gable of brown house.

South chimney on large 2 story unpainted house.

White chimney on white 1 1/2 story house.

West gable of large building, red on south side.

Conspicuous white top boulder on point.

"BOAT, 1945". The station is a standard topographic bronze disc stamped "BOAT, 1945" set in a drill hole in top of conspicuous white boulder. Located in ledge area southeast of Marsh Cove, 30 meters north of Marsh Cove Head. Elevation: 3 feet. Recoverable photo (topographic) station.

Conspicuous white top boulder.

Brick chimney on 2 1/2 story unpainted house.

"BIRCH POINT BEACON, 1945". The station is the spindle beacon which is located about 1/2 mile northwest of Birch Point on the Isle Au Haut, 1/2 mile west of Burnt Island and 1/2 mile northeast of Flame Island. Aid to navigation. Elevation: 15 feet. Recoverable photo (topographic) station.

"BARTER ISLAND LEDGES DAYBEACON, 1945". The station is a red day beacon. A spherical cage on an iron spindle. Located in Merchant Row, approximately 600 meters south of Wreck Island and 660 meters southwest of Round Island. Aid to navigation. Recoverable photo (topographic) station.

"BALK, 1945". The station is a standard topographic bronze disc stamped "BALK, 1945" set in a drill hole in top of large conspicuous white boulder 7 feet above grass line. Located 35 meters inshore on the southeastern shore of Farrel Island. Elevation: 12 feet. Recoverable photo (topographic) station.

"SOGAR, 1945". The station is a standard topographic bronze disc stamped "SOGAR, 1945" set in a drill hole in white top boulder in grass on highest point of land. On the larger of the West Halibut Ledges, located in East Penobscot Bay, south of Merchant Row. 16 m. in from M.H.W.L. Elevation: 15 feet. Recoverable photo (topographic) station.
2061. Center of conspicuous boulder
2062. Most northwesterly conspicuous white boulder.
2063. Westerly boulder
2064. East gable of unpainted house
2065. "CHIMNEY, 1945". The station is a large brick chimney on west wing of 'L' shaped house. Located in the middle of Merchant Island approximately 180 meters south of Merchant Harbor. Elevation: 50 feet. Recoverable photo (topographic) station.
2066. Large conspicuous boulder
2067. "CAKE, 1945". The station is a standard topographic bronze disc stamped "CAKE, 1945" set in a drill hole in a white granite boulder on northwest side of small islet, northeast of Flake Island and west of Birch Point, Isle Au Haut. Boulder is 3' above grass line and 20 m from M.H.W.L. Elevation: 15 feet. Recoverable photo (topographic) station.
2069. "HUNT, 1945". The station is a standard topographic bronze disc stamped "HUNT, 1945" cemented in a drill hole in ledge rock on highest point on small islet 1200 meters west of Wreck Island. Elevation: 12 feet. Recoverable photo (topographic) station.
2084. "IRON, 1945". The station is a standard topographic disc stamped "IRON, 1945" cemented in a drill hole in top center of very large conspicuous white boulder at grass line, on south side of Wreck Island, 250 meters east of southwest tip of Island. Boulder is 7 m. in from M.H.W.L. Elevation: 12 feet. Recoverable photo (topographic) station.
2093. "BAY LEDGE BEACON, 1945". The station is the black spingle beacon located on Bay Ledge, which is approximately 1 mile north of Kimball Island and 1 mile SSW of Merchant Island. Aid to navigation. Elevation: 15 feet. Recoverable photo (topographic) station.
4113. Top of large boulder at west tip of Farrel Island. Smaller boulder at south end of it.
4115. Top of long flat rock on ledge on east end of Farrel Island.
4116. Top of round brown colored boulder. Sitting on edge of ledge on south side of Farrel Island.
4117. Top of largest boulder on NE corner of Sparrow Island. Has white stripe across it.
4118. Highest part of offshore ledge off S side of Sparrow Island.
4119. Top of high dome shaped ledge on W end of Sparrow Island.
4120  Top of cage on top of wooden pole on top of large offshore ledge
SW of Scraggy Island.

4123  Highest part of The Brown Cow Ledge

"BIND, 1945". The station is a standard topographic bronze disc stamped
"BIND, 1945" set in a drill hole on SW side of Ram Island on bare ledge
5 meters W of westerly high peak of ledge.
Elevation: 10 feet. Theodolite station.  f'm 5 W

"EWEI, 1945". The station is located on eastern tip of Ewe Island, which
is located about 1/2 mile northwest of Merchant Island on the southern side
of Merchant Rew. The station is a standard topographic disc stamped
"EWEI, 1945" set in ledge rock about 5 meters outside tree line.
Elevation: 10 feet. Theodolite Station.  f'm 5 N
Division of Photogrammetry
Review Report of
Shoreline Survey Manuscript T-8551

Paragraph numbers used in this report refer to paragraph numbers in the Descriptive Report.

28.-32. Compilation.

The shoreline and planimetry shown on the map manuscript are complete and in accordance with project instructions and no significant changes were necessary during the review except for the following.

The map manuscript showed a dashed line outside the ledge and low-water lines, marked "reef" and "shoal". This line was placed on the map manuscript wholly from office interpretation of the photographs. Comparison with existing nautical charts indicates that this line showed no consistency with respect to soundings and as this line would be of no value to the hydrographer, and because the compiler obviously did not have a clear understanding of the terms "reef" and "shoal", this line has been removed from the map manuscript, except where specifically noted by the field inspector or evident from photo interpretation. The rock heights and symbols were changed to conform with Photogrammetry Instructions No. 3, dated Dec. 23, 1946.

44. Comparison with Existing Topographic Surveys.

This survey (T-8551) supersedes the following older U.S.C. & G.S. surveys in all common detail:

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1311</td>
<td>1:10,000</td>
<td>1872</td>
</tr>
<tr>
<td>T-1383a</td>
<td>1:20,000</td>
<td>1874</td>
</tr>
<tr>
<td>T-1383b</td>
<td>1:10,000</td>
<td>1874</td>
</tr>
</tbody>
</table>

Comparison has been made between map manuscript T-8551 and the following U.S.G.S. quadrangle and good agreement exists in all common detail except as noted under "Notes to the Reviewer" in the Descriptive Report and except that the name "George Head Ledge" which appears on the quadrangle was not on the map manuscript. This name has been added to the map drawing.

U.S.G.S. Deer Isle Quadrangle, Maine, 15 minute series, 1:62,500, edition of 1944
45. **Comparison with Nautical Charts.**

This manuscript has been compared with the following U.S.C.& G.S. nautical charts and good agreement exists between these maps except that the geographic name "Kimball Head" which appears on chart 309 had to be added to the map manuscript. All other discrepancies between these maps are adequately discussed under item 45 and "Notes to the Reviewer" in the Descriptive Report.

Chart 227, published February 1944, corrected to February 1944, scale of 1:20,000.

Chart 309, published July 1943, corrected to August 1946, scale of 1:40,000.

Map manuscript T-8551 has not been applied to nautical charts prior to this review. All corrections and additions have been shown on the map drawing in red acid ink.

Reviewed by:  

Howard W. Thune  
Photogrammetrist 3/5/47

Reviewed under direction of:

S. V. Griffith  
Chief, Review Section 3/7/47

APPROVED BY:

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C. K. Green  
Chief, Div. of Coastal Surveys

K. T. Adams  
Chief, Div. of Photogrammetry

S. G. G. S. Griffith  
Chief, Nautical Chart Branch
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