

5976

5977

Diag. Cht. Nos. 288, 289 & 1201-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE

T-5976

Field No. Ph-51 (49) Office No. T-5977

LOCALITY

State MAINEGeneral locality KENNEBEC RIVERLocality FROM ABAGADASSET POINT TO TWO MILESNORTH OF RICHMOND1949

CHIEF OF PARTY

E.R. McCarthy, Chief of Field Party

H.A. Paton, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE

June 16 - 1953

B-1870-1 (1)

DATA RECORD

T - 5976

T - 5977

Project No. (II):

Ph 51(49)

Quadrangle Name (IV):

Field Office (II):

Washington, N.C.

Photogrammetric Office (III):

Baltimore, Md.

Instructions dated (II) (III):

7 July 1949 (Field)

6 Dec. 1949 (office)

Chief of Party:

E.R. McCarthy

Officer-in-Charge:

Hubert A. Paton

Copy filed in Division of
Photogrammetry (IV)

Office Files

Method of Compilation (III): Multiplex (Bausch and Lomb)

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 110,000

Scale Factor (III): 1.000

Date received in Washington Office (IV): 3-28-50

Date reported to Nautical Chart Branch (IV): 3-30-50

Applied to Chart No. 314(7-5976) Date: 7/11/51

Date registered (IV): 12-24-52

Publication Scale (IV): _____

Publication date (IV): _____

Geographic Datum (III): N.A. 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): HOUDLETTE, 1868

Lat.: 44° 05' 01.805"

Long.: 69° 46' 15.263"

Adjusted
Coordinates

Plane Coordinates (IV):

State: Maine

Zone: West

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.

Areas contoured by various personnel
 (Show name within area)
 (II) (III)

DATA RECORD

Field Inspection by (II): James A. Clear
Henry P. Eichert
Robert A. Horn
Harry Moore

Date: 7/11/49
8/26/49

Planetable contouring by (II): _____

Date: _____

Completion Surveys by (II): *None*

Date: _____

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

May 10, 1949 (date of photography)

Projection and Grids ruled by (IV): T.L.J.

Date: 12-2-49

Projection and Grids checked by (IV): T.L.J.

Date: 12-2-49

Control plotted by (III): D.M.Brant

Date: 1-50

Control checked by (III): A.K.Heywood T-5976
A.C.Rauck T-5977

Date: 1-50
1-50

~~Map Office~~ or Stereoscopic

Control extension by (III): A.K.Heywood T-5976
A.C.Rauck T-5977

Date: 1-50
1-50

Stereoscopic Instrument compilation (III): Planimetry A.K.Heywood T-5976
A.C.Rauck T-5977

Date: 1-50
1-50

~~365656~~

Date:

Manuscript delineated by (III): A.K.Heywood T-5976
A.C.Rauck T-5977

Date: 3-50

Photogrammetric Office Review by (III):

H.P.Eichert T-5976
A.K.Heywood T-5977

Date: 3-50

~~Elevation on Manuscript~~
~~checked by (III) (II) (I) (000) (000)~~

Date:

Camera (kind or source) (III):

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
49-0-726 to 733	5-10-49	1509-12	1:24,000	2.4' above MLW
49-0-734 to 739	5-10-49	1522-26	1:24,000	2.0' above MLW
49-0-756 to 762	5-10-49	1542-45	1:24,000	1.5' above MLW
49-0-721 to 723	5-10-49	1458-59	1:24,000	2.5' above MLW

Tide (III)

Reference Station: (from Predicted Tables)
Portland, Maine
Subordinate Station: Richmond, Me.
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	8.9	10.2
06	5.3	6.0

Washington Office Review by (IV): *K. N. Maki*

Date: *Jan 10, 1951*

Final Drafting by (IV): *J. Batteley, E. Hunter (5976)*
E. Hunter (5977)

Date: *June 8, 1951*

Drafting verified for reproduction by (IV): *C. Kupiec (5976)*
M. C. Webber (5977)

Date: *June 12, 1951*
6/11/52

Proof Edit by (IV):

Date:

~~Land Area (See Station Notes) (III):~~

Shoreline (More than 200 meters to opposite shore) (III): 36

Shoreline (Less than 200 meters to opposite shore) (III): 21

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 48

Recovered: 24

Identified: 20

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): 17

Number of Temporary Photo Hydro Stations established (III):

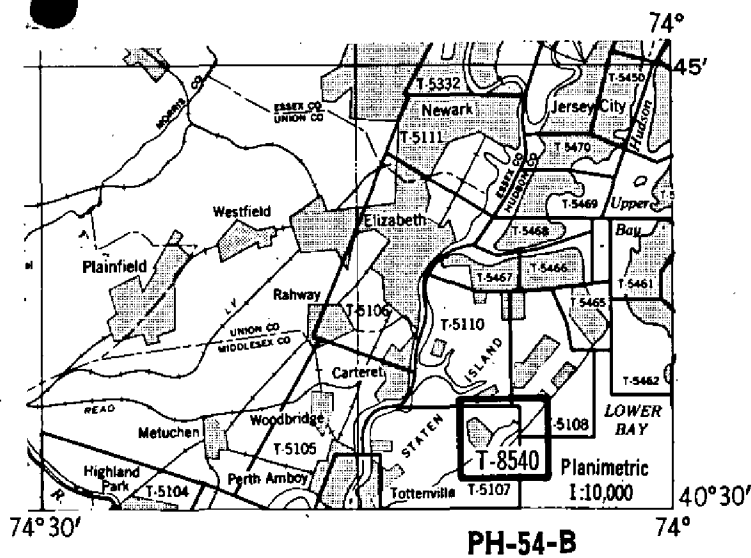
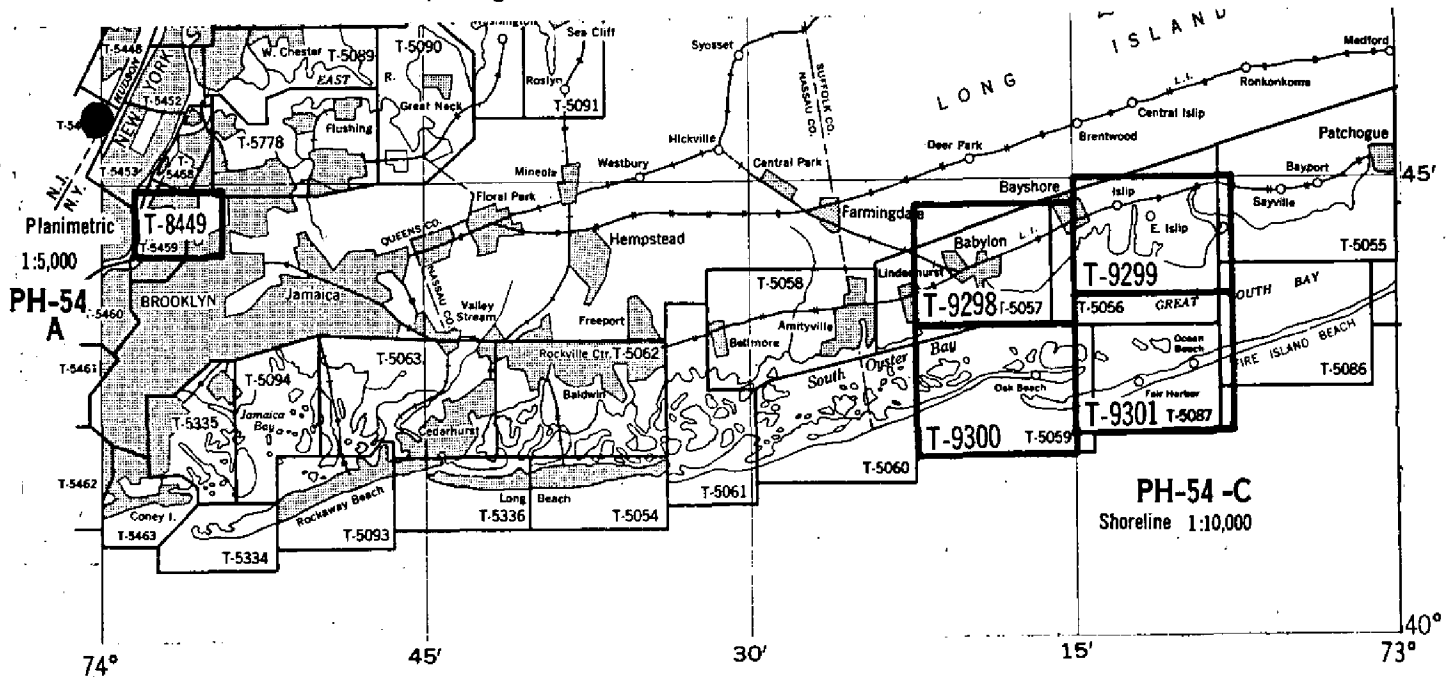
Remarks:

PLANIMETRIC AND SHORELINE MAPPING PROJECT

PH-54 (49)

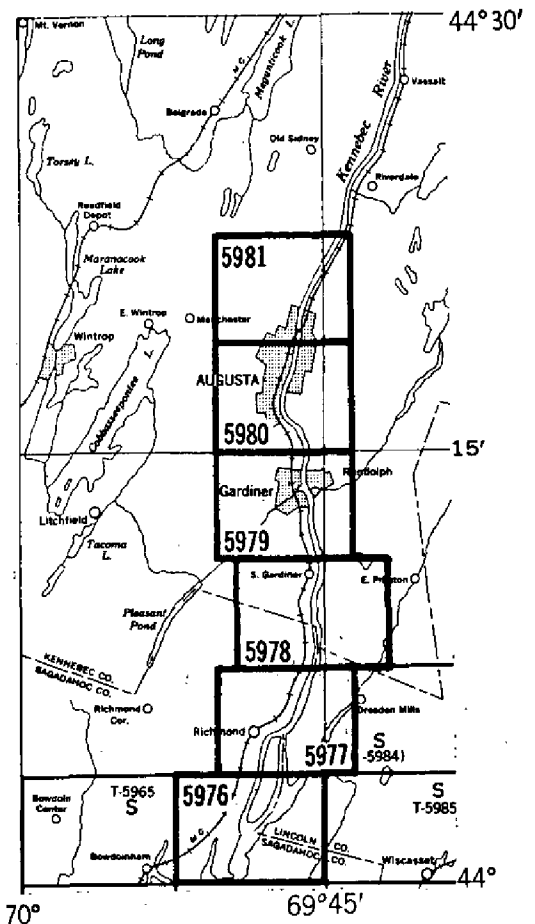
PH-51 (49)

NEW YORK, Long Island, and Staten Island



PH-51 (49) MAINE, Kennebec River

SHORELINE
1:10,000



Summary to Accompany T-5976 and T-5977

Shoreline maps T-5976 and T-5977 are two of six similar maps in project Ph-51(49) and are the two most southerly maps in the project. Project Ph-51(49) extends along the Kennebec River, Maine, from a junction with project CS-272 at latitude $44^{\circ} 00'$ upstream to a point approximately 2 miles north of Augusta at latitude $44^{\circ} 23'$. This is a multiplex project, in advance of hydrographic surveys to be made at a later date. The field operations preceding compilation included recovery and identification of horizontal control, shoreline inspection, inshore inspection, location of aids to navigation, selection and location of landmarks and geographic names investigation. The multiplex compilation was at a scale of 1:10,000 and the manuscripts were used as multiplex sheets.

Data pertaining to T-5976 and T-5977 will be filed as follows:

(a) Filed in the Division of Photogrammetry.

1. Two map manuscripts, T-5976 and T-5977,
scale 1:10,000.
2. Form 524 (17)

(b) Filed in the Coast and Geodetic Survey Archives

1. Combined Descriptive Report for T-5976 and
T-5977
2. A cloth-backed lithographic print of
T-5976 and T-5977

FIELD INSPECTION REPORT
SHORELINE SHEETS 5976 & 5977
PROJECT Ph-51(49)

E. R. McCarthy, Chief of Party

All phases of the field work were done in accordance with The Director's Instruction, Project Ph-51(49), Field dated 7 July 1949.

The field work on this sheet was performed by the following personnel on the dates indicated:

<u>Name & Title</u>	<u>Field work</u>	<u>Dates</u>
R. A. Horn	Recovery, Identification,	7/11/49
Cartographic Engr.	Shoreline & Inspection	8/26/49
James A. Clear Jr.	Recovery, Identification,	7/11/49
Cartographic	& Inspection	8/26/49
Survey Aid		

1. Description of the Area

The area surveyed includes the Kennebec River from "Abagadasset Point" to "The Bluff", which is approximately two miles north of the Richmond-Dresden Bridge; the Abagadasset River to it's headwaters; the Eastern River to a point about two miles north of the Dresden Mills highway bridge; and the land areas immediately adjacent to these three rivers.

Access to the area is available by highway, the Maine Central Railroad, or private yachts.

Swan Island is maintained by the state as a Game Preserve, and is one of the largest wildlife Sanctuaries in Maine. In addition, considerable experimental farming is conducted on Swan Island for the improvement of agricultural crops.

Richmond and Dresden are the principal settlements within the limits of the survey. The principal occupation of the inhabitants of the area is farming. There is, however, some light manufacturing conducted in the vicinity of Richmond.

2. Completeness of Field Inspection

It is felt that field inspection has been adequately covered on the photographs.

3. Interpretation of the Photographs

Some difficulties were encountered in selecting suitable substitute stations, particularly in wooded areas, due to the lack of definition of images. The photography is not considered inferior; but for sake of comparison this fact is mentioned. This group of photographs, taken by Camera "O", seemed to lack the qualities of well defined or sharp detail offered by the photographs taken with Camera "J", which were used on Project Ph-31(48).

4. Horizontal Control

The horizontal control within the limits of the sheets consisted of that established by the U. S. Coast & Geodetic Survey, U. S. Engineer Department and U. S. Geological Survey.

A thorough search was made for all U. S. Coast & Geodetic Survey stations and approximately 40 percent recovered. A total of six (6) U. S. C. & G. S., eight (8) U. S. E. D. and six (6) U. S. G. S. triangulation stations were recovered and identified on photographs for photogrammetric control purposes.

See Review Report

Sheet 5976

AMES LEDGE LIGHTHOUSE - 1913	Pricked Direct
T T 62 B T - 1940	Pricked Direct
TERM - 1937	Pricked Direct
BEEF - 1937	Pricked Direct
COSTELLOW - 1868	Sub. Station
HODGKINS - 1855, 1913	Sub. Station
MAXWELL - 1860, 1913	Sub. Station
T T 61 B T - 1940	Sub. Station
T T 63 B T - 1940	Sub. Station
CENTER - 1937	Sub. Station
FINIS - 1937	Sub. Station
ABAGA - 1937	Sub. Station
DRAM - 1937	Sub. Station

Horizontal Control (Cont'd)

RICHMOND CLOCK CHURCH SPIRE (METHODIST)	1868.....	Pricked Direct
T T 85 H O	1940	Pricked Direct
K 51-	1935	Pricked Direct
HOUDLETTE -	1868, 1913	Sub. Station
M 51-	1935	Sub. Station
A -	1937	Sub. Station
L -	1937	Sub. Station

To facilitate a "tie" between the U. S. Engineers scheme of triangulation and that of the U. S. Coast & Geodetic Survey in the area, observations for a point and azimuth connection were made. This information is submitted to the Division of Geodesy for any adjustments necessary.

5. Vertical Control

Not applicable

6. Contours and Drainage

Not applicable

7. Mean High water Line

The mean high water line, in virtually all cases, extends back to the woods line. There is, however, an abundance of grass in water, the outer limits of which have been indicated by a dashed line.

8. Low Water Line

Where practical, the approximate position of the mean low water line has been shown on the photographs.

9. Wharves and Shoreline Structures

All wharves and shoreline structures discernible on the photographs have been inspected and explained, where necessary. The ruins of many "Ice wharves" are apparent on the photos. These are generally log-faced, stone filled structures in a detached state that were used in the era in which ice was shipped out in considerable quantities. This practice has been abandoned many years.

10. Details Off-Shore from Mean High Water Line

At various points along the Kennebec River notations have been made indicating "Crib Piers". These are log-faced, stone filled structures that were used in the days when logs in considerable numbers were floated down river. A log boom was strung between the crib piers to control the movement of the logs. This practice has also been abandoned.

Since the "Ice wharves" and "Crib Piers" are essentially alike in construction, and appearance on the photos, an attempt was made to distinguish each by appropriate notes. Actually the only difference, at this date, is their relative positions. The crib piers are generally strung out and the ruins of the ice wharves generally grouped closely.

Four water-soaked log obstructions were observed in this portion of the river. In all cases they were close to shore, and the tips projected about 6" above the water level. They shift with the tides and a definite geographic position, therefore, could not be satisfactorily determined for charting. This fact should, however, be incorporated in the Coast Pilot Information.

11. Landmarks and Aids to Navigation

All landmarks and fixed aids to navigation within the limits of these sheets were investigated. It was found that there were no truly good landmarks available. Three new landmarks, which are the best to be had, were established. Form 567 will be submitted with the information determined upon completion of this project.

In some instances it was possible for the field party to identify several floating aids to navigation. Although this was not prescribed in the instructions, it was done without any additional effort and it is felt may serve as a check in some quarter. On the surface the ability to do this may appear to refute the testimony in paragraph 3 of this report. In reality it was simply a case of particularly good contrast and other external conditions.

12. Hydrographic Control

Not applicable

13. Landing Fields and Aeronautical Aids

There are no landing fields or aeronautical aids in this area.

14. Roads

The roads and trails were classified in accordance with Photogrammetry Instructions No. 10, dated 14 April 1947, and the Amendment to the above dated 24 October 1947.

15. Bridges

All bridge information for the area covered by this report as listed in the U. S. Engineers "List of Bridges over Navigable Waters in the U. S." , dated July 1, 1941 was verified in the field, all clearances were carefully measured with a steel tape, and the published descriptions and clearances were found to be correct except for the following discrepancies, which were reported to the Local District Engineer.

Kennebec River.

	No. Spans	Horiz. Clear.		Vert. Cl. (M H W)
		Left Center	Right	
Dresden (Mouth of Eastern River)				
Bridge Book-----	1-----	34-----	45----	5.7
Coast Survey-----	2-----	38.0-----	40.0--	4.0(Right) 5.0(Left)

*Richmond, Dresden

Bridge Book-----	69-----	---	61----	15.8
Coast Survey-----	63.4----	---	58.2--	15.6

Dresden (Eastern River & Dresden bridge)

Bridge Book-----	-----	230-----	-----	23.5
Coast Survey-----	-----	221.0-----	-----	20.0

*Horizontal clearance of this bridge is restricted more by the dolphins near the footings than by any part of the bridge structure. Measurements shown are in consideration of said dolphins.

The clearances of all secondary bridges, i.e., those not listed in the Bridge Book, were taken in reference to mean high water.

16. Buildings & Structures

Buildings and structures have been classified in accordance with Photogrammetry Instructions No. 29, dated 10/1/48, with one variation, Part (d) of paragraph 9 in these instructions has been executed in reverse. Since on shoreline sheets all structures are to be shown, the predominant number of buildings come under class 2. Therefore, for clarity, only class 1 buildings have been identified with all others to be considered class 2. This, of course, is an exception in the settlement of Richmond which is considered an Urban Area and in which public buildings have been identified.

An unusual condition exists in this region in that the barns, for the most part, are connected directly to the dwellings. To simplify the compilation of the buildings a short line has been drawn on the photographs showing the division of barn and dwelling, with the latter then being indicated as Class 1.

17. Boundary Monuments and Lines

There were no boundary monuments or lines within the limits of the sheets.

18. Geographic Names

In accordance with the Project Instructions, a systematic investigation of Geographic Names was not made, however names that were questionable have been investigated. Some new names were added on the Geographic Name Sheet and Photographs, and corrections made where necessary.

Submitted:

Date 8/26/49

Wm. 8/5/50

James A. Clear Jr.
James A. Clear Jr.
Cartographic Survey Aid

R. A. Horn
R. A. Horn
Cartographic Engr.

PHOTOGRAMMETRIC PLOT REPORT

21. AREA COVERED

T-5976 and T-5977.

22. METHOD

Horizontal control was extended on each sheet separately by multiplex. Long bridging of control was unnecessary. The first model in each strip was levelled using the water surface and well-defined points taken from the USGS 15 minute quadrangle.

Two strips were set for T-5976 as follows:

Six models were set (49-0-725 to 731) extending from SUB. PT. HODGKINS, 1885 to SUB. PT. K-51, 1935(USGS) and SUB. PT. HOUDLETTE, 1868. An intermediate control point in the strip was SUB. PT. COSTELOW, 1868. The projection had to be extended two minutes to the south in order to reach SUB. PT. HODGKINS. This station is off the project limits. The strip was scaled between SUB. PT. HODGKINS and SUB. PT. K-51. These points were well-defined. The images of SUB. PT. HOUDLETTE and SUB. PT. COSTELOW were very poor but it is believed they were held.

Five models were set to the west (49-0-735 to 740) from SUB. PT. TT61BT, 1940, (USGS) to SUB. PT. TT 63 BT, 1940 (USGS) and a pass point from a strip to the west (49-0-757 to 762.) The strip was scaled between these points. There were also two intermediate control points in the strip, TT 62 BT, 1940 (USGS) and SUB. PT. MAXWELL, 1860. TT62BT was well-defined and held. SUB. PT. MAXWELL appeared to be on although the image was so poor it could not be consistently identified in the models. Details from the adjoining strip to the east held well. All USE stations plotted 0.8 mm north.

Two strips and two individual models were set up for T-5977 as follows:

A five model strip (49-0-757 to 762)* was set and scaled between SUB. PT. MESERVE, 1868 at the north end and RICHMOND CLOCK CH.SP., 1868 at the south. Also held in this model were RICHMOND CONG. CH.SP., 1868 and RICHMOND BROWN CH. SP., 1868. While the latter two stations were not identified by the field inspection party, the churches had been identified and the spires were easily discernible in the multiplex model. Intermediate control points in this strip were TT 85 HO, 1940 (USGS), SUB. PT. A, 1937 (USE), SUB. PT. L-06, 1937 (USE) and NITE, 1937 (USE). Although no attempt was made to hold the latter three USE stations, their plotted positions held in the strip as did all the control.

As complete coverage in the vicinity of Richmond could not be obtained from model 49-0-761-762 pass points were left to the east to control model 49-0-734-735 which was needed for complete coverage. This model also tied well with the details from T-5976 to the south.

* It should be noted that model 49-0-761-762 had a small working area. The overlap between the two photographs was only about 42%. In addition, 49-0-762 had an unusual amount of tip and tilt. Despite these conditions the accuracy of the bridging is believed good.

22. METHOD

A three model strip was set to the east (49-O-730 to 733) to complete the work. In order to control this short bridge at the north end, it was necessary to bridge control with an intermediate model to the west (49-O-722-723). In this model pass points from the adjoining strip to west plus SUB. PT. L-06 and NITE were held. Pass points were left to the east which afforded control.

The field inspection party had inadvertently omitted the distance between M-51, 1935 (USGC) , and SUB. PT. M-51 on the form control station identification. This would have afforded a control point for the north end of the aforementioned strip. Nevertheless, from the description of M-51 which furnished ground measurements from identifiable features, the station proper was identified in the office and held. In model 49-O-730-731, at the south end of the strip, SUB. PT. K-51, 1935 (USGS) and SUB. PT. HOUDIETTE, 1868, were available as control. The adjacent planimetry to the south and west held very well.

As compilation of shoreline and planimetry was done directly on the manuscript after each strip was scaled, no transfer of points was necessary.

23. ADEQUACY OF CONTROL

Inasmuch as the USE stations at the south portion of the project were reported in error (see Instructions, Project Ph-51(49) dated 6 December 1949, item-6), and could not be used for horizontal control, only the minimum control requirements were met for T-5976 and T-5977. Nevertheless, the control is believed to be adequate as good ties were made between adjoining quadrangles and strips.

24. SUPPLEMENTAL DATA

Inapplicable.

25. PHOTOGRAPHY

Photographic coverage and overlap were satisfactory. The quality of the diapositives was fair to poor. Definition was for the most part fuzzy which often made it difficult to accurately identify horizontal control points. The fact that the strips were fogged at the outer edges hindered the clearing of parallax in the models. In spite of this the models appeared to be free of distortion as evidenced by the ease in making ties. It may be noted that the models as a whole would not have been suitable for contouring.

26. RECOMMENDATIONS

Although the ratio prints seemed to be lacking in definition,* they had considerably more contrast than the diapositives. It is felt that the diapositives could have been printed with more contrast. This is recommended for future work.

*Perhaps this is the result of an increase in flying height as compared with previous work flown at lower altitude - 12,000 feet as compared with 10,000 feet.


27. ACCURACY

It is believed that all well-defined points are within 0.5mm of their correct geographic position.

Approved and forwarded

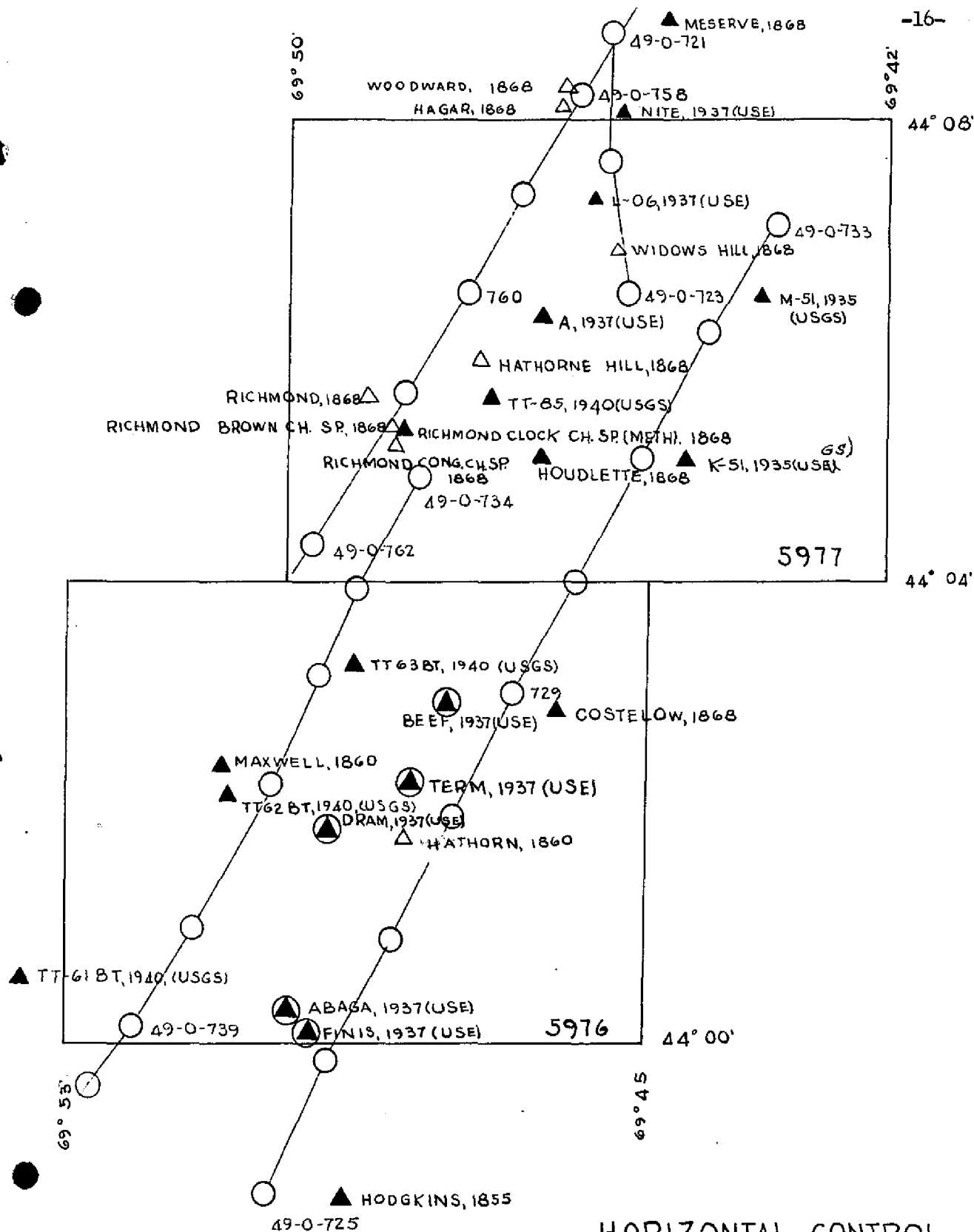
Respectfully submitted
15 March 1950

Hubert A. Paton
Comdr., USC&GS
Officer in Charge



Henry P. Eichert
Cartographer (Photo.)

Vsr. 3/5/50



HORIZONTAL CONTROL STATIONS

PROJECT PH-51(49)
KENNEBEC RIVER, MAINE

- △ Triangulation Station (Recovered, not identified)
- ▲ Triangulation Station (Identified and held)
- ⊙ Triangulation Station (Identified, not held)

MAP T. 5976

PROJECT NO. Ph-51(49)

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
HATHORN, 1860	G-6793 P. 277	N.A. 1927	44 01 48.528 69 47 55.612			1497.8 (354.1) 1238.4 (97.8)	
COSTELOW, 1868	"	"	44 02 52.266 69 46 06.828			1613.1 (238.8) 152.0 (1183.8)	
MAXWELL, 1860	"	"	44 02 12.336 69 50 35.457			380.7 (1471.2) 789.5 (546.5)	
*DRAM, 1937 (USE)	Plane Coord. P. 125	"	436,316.28 592,677.21	436,348.08' } Classified as Topo 592,679.10' } Sta. DRAM(USE), 1949		401.2 (1122.8) 816.0 (708.0)	
*TERM, 1937 (USE)	Plane Coord. P. 125	"	438,316.53 596,448.30	44° 02' 23.22m } Classified as Topo 69 47' 13.26m } Sta. TERM(USE), 1949		1010.9 (513.1) 441.4 (1082.6)	
*ABAGA, 1937 (USE)	" P. 129	"	427,417.40 590,252.19	427,448.13' } Classified as 590,262.14' } Topo, Sta.		736.8 (787.2) 76.9 (1447.1)	
*FINIS, 1937(USE)	" P. 129	"	426,129.63 591,530.67	426,152.22' } ABAGA (USE), 1949 591,571.50' } Classified as Topo Sta. FINIS(USE), 1949		344.3 (1179.7) 466.5 (1057.5)	
*BEEF, 1937(USE)	" P. 125	"	442,589.35 598,500.96	44° 02' 15.24m } Classified as Topo 69 47' 69.4m } Sta. BEEF(USE), 1949		789.2 (734.8) 1067.1 (456.9)	
TT61BT, 1940 USGS	USGS GARDINER P. 10	"	44 00 35.31 69 53 26.80			1089.8 (762.1) 597.0 (739.6)	
TT62BT, 1940 USGS	"	"	44 01 57.27 69 50 25.69			1767.6 (84.3) 572.1 (764.0)	
*Identified but not used as control. Position in error. New position shown in red.							

Page 17

M. 2388-12

1-50

DATE

CHECKED BY:

DATE 1-50

COMPUTED BY: Henry P. Eichert

1 FT. = 3048006 METERS

SCALE FACTOR.....1.000

MAP T-5976

PROJECT NO. Ph-51(49)

SCALE OF MAP 1:10,000

SCALE FACTOR.....1.000

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: Henry P. Eichert

DATE:

1-50

CHECKED BY:

D. M. Brant

DATE 1-50

M-2388-12

MAP T. 5977 PROJECT NO. PH-51(49) SCALE OF MAP 1:10,000 SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
HATHORNE HILL, 1868	G-6793 279	N.A. 1927	44 05	50.421				1556.2	(295.7)		
HOUDLETTE, 1868	" 278	"	69 47	10.707				238.2	(1096.5)		
			44 05	01.805				55.7	(1796.2)		
			69 46	15.263				339.6	(995.3)		
WIDOWS HILL, 1868	" "	"	44 07	00.867				26.8	(1825.1)		
			69 45	21.986				488.9	(845.3)		
RICHMOND, CLOCK, CH.SP. (METH), 1868	" 284	"	44 05	15.561				480.3	(1371.6)		
			69 48	13.229				296.5	(1038.3)		
RICHMOND CONG. CH.SP., 1868	" "	"	44 05	09.208				284.2	(1567.7)		
			69 48	16.315				363.0	(971.8)		
RICHMOND BROWN CH.SP., 1868	" 283	"	44 05	17.668				545.3	(1306.6)		
			69 48	20.941				465.9	(868.9)		
RICHMOND, 1868	" 278	"	44 05	23.614				728.8	(1123.1)		
			69 48	31.850				708.6	(626.2)		
M 51, 1935 (USGS)	USGS WISCASSET P.7	"	44 06	26.46				816.7	(1035.2)		
			69 43	28.70				638.3	(696.1)		
K 51, 1935 (USGS)	" p.7	"	44 05	00.69				21.3	(1830.6)		
			69 44	35.19				782.9	(552.0)		
TT85HO, 1940 (USGS)	USGS GARDINER P.6	"	44 05	29.83				920.7	(930.9)		
			69 47	06.71				149.3	(1185.5)		
*A, 1937(USE)	Plane Coord. P.122	"	462,988.48					910.9	(613.1)		
			603,067.29					934.9	(589.1)		
*L-06, 1937(USE)	Plane Coord. P.122	"	469,487.29					1367.7	(156.3)		
			606,025.90					312.7	(1211.3)		

M-2388-12

1 FT. = 3048006 METER
COMPUTED BY: Henry P. Eichert

DATE

1-50

CHECKED BY:

A.K. Heywood

DATE

1-50

FACTOR DISTANCE
FROM GRID OR PROJECTION LINE
IN METERS

FORWARD (BACK)

100

Pag

20

50 M-2388-12

COMPILATION REPORT

Ph-51(49)

T-5976 and T-5977

31. DELINEATION

Refer to Photogrammetric Plot Report.

32. CONTROL

Refer to Photogrammetric Plot Report

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Only drainage adjacent to the shoreline was shown.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate. The approximate low water in all instances was compiled from data furnished by the field party.

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

The landmark "Red Barn 1949" located on Abagadasset Point was not pricked on the field photograph. The description on Form 524 was inadequate for office pricking of this landmark. It was assumed by the photogrammetric office that the point intended was the east gable of the barn, this being nearest to the shoreline. The point shown on the manuscript is the east gable and a new form 524, ~~"GABLE~~, 1949" submitted.

GABLE

The position of Ames Ledge Daybeacon was believed by the field party to be in the same position as was Ames Ledge Lighthouse, 1913. The geographic position of the lighthouse was reported as the position of Ames Ledge Daybeacon on forms 524 and 567. See item 68

Forms 567 were submitted for manuscripts T-5976 and T-5977 and forwarded to the Washington Office March 28, 1950.

38. CONTROL FOR FUTURE SURVEYS

The multiplex positions of all USE triangulation stations were shown as topographic stations in accordance with Project Instructions dated 7 July 1949.

T-5976: Five USE triangulation stations were within the limits of this quadrangle. Not any of these five stations could be held during the multiplex bridging. Three stations, FINIS 1937, ABAGA 1937, and DRAM 1937, were located in the field by the substitute station method. The true positions of the triangulation stations were found by computing the differences in X and Y coordinate values between the computed substitute stations as identified by the field party, and the scaled multiplex positions of the substitute stations. These same differences in X and Y values were then used to adjust the USE triangulation stations to their true positions. These true positions were shown as topographic stations. *Geographic and/or coordinate position is shown in red on attached form M-5348-12.*

The positions of the two remaining USE triangulation stations, BEEF 1937, and TERM 1937, were plotted during multiplex bridging and also shown as topographic stations.

T-5977: Two USE triangulation stations that held in agreement with other control were shown in this manuscript as topographic stations.

There were twelve forms 524 submitted for manuscript T-5976 and five forms 524 submitted for manuscript T-5977. *Total of 17 form 524 cards filed in Div. of Photogrammetry general files*

These forms were transmitted March 28, 1950.

Since a list was not made of the recoverable topographic stations in paragraph 11, Field Inspection Report, a listing is made here by separate quadrangles.

The positions of all of the following recoverable topographic stations except Ames Ledge Daybeacon was determined by multiplex methods.

See Review Report

38. CONTROL FOR FUTURE SURVEYS (continued)

T-5976:

- *Abaga 1950
 - Abagadasset Point Range Front Daybeacon
 - Abagadasset Point Range Rear Daybeacon
 - Ames Ledge Daybeacon (~~Position same as Ames Ledge L.H.~~) *See Review Report*
 - Beef, 1950
 - Beef Rock Daybeacon
 - Chimney, 1949
 - Cupola (Barn Cupola 1949)
- * Dram, 1950
- * Finis, 1950
 - Gable, 1949
 - Term, 1950

T-5977:

- ** A 1937
- ** L-06 1937
 - Tower (Signal Tower 1949)
 - Tower (West Tower 1949)
 - Tower (East Tower 1949)

* The positions of the substitute points of these stations were determined by multiplex. See the second paragraph of Item 38.

** USE stations held with other control.

39. JUNCTIONS

To the north a junction was made between Survey No. T-5977 and T-5978. To the south a junction was made between Survey No. T-5976 and T-5975. A junction was also made between the two manuscripts covered in this report. There were no contemporary surveys to the east and west of these two quadrangles.

40. HORIZONTAL AND VERTICAL ACCURACY

Horizontal Control:

Refer to Item 38 and Photogrammetric Plot report, Item 23.

46. COMPARISON WITH EXISTING MAPS

Comparison was made between the manuscript and U.S. Geological Survey quadrangles Gardiner, scale 1:62,500, edition of 1943 reprinted in 1947, and Wiscasset, scale 1:62,500, edition of 1944 reprinted in 1948. In accordance with Instructions Project Ph-51(49) dated 7 July 1949, all roads within two miles of the river were visually compared with the Geological Survey quadrangles for new construction and new alignment. They were in good agreement.

47. COMPARISON WITH NAUTICAL CHARTS

Visual comparison was made between the manuscripts and Chart 288, scale 1:15,000, published May 1943 (3rd edition). In the vicinity of Green Point the chart shows considerable swamp area. The field party noted however, on Photograph O-729 (1:10,000) that this area is not swamp but "relatively low land". ✓

Items to be applied to nautical charts immediately:
See above paragraph.

Items to be carried forward:
None.

Approved and forwarded

Respectfully submitted
28 March 1950

Hubert A. Paton

Hubert A. Paton,
Comdr., USC&GS
Officer in Charge

A. K. Haywood

Albert K. Haywood
Surveying and Carto. Aid

5/6/50

PHOTOGRAMMETRIC OFFICE REVIEW

T. 5976

1. Projection and grids A.C.R. 2. Title Ph 3. Manuscript numbers Ph 4. Manuscript size Ph

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads Ph 28. Buildings Ph 29. Railroads Ph 30. Other cultural features Ph

BOUNDARIES

~~31. Boundary lines~~ ~~32. Public land lines~~

MISCELLANEOUS

33. Geographic names Ph 34. Junctions Ph 35. Legibility of the manuscript Ph 36. Discrepancy overlay Ph 37. Descriptive Report Ph 38. Field inspection photographs Ph 39. Forms Ph
 40. Henry J. Eickert Henry J. Eickert
 Reviewer 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:

PHOTOGRAMMETRIC OFFICE REVIEW

T-5977

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

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline AKH 13. Low-water line AKH 14. Rocks, shoals, etc. AKH 15. Bridges AKH 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 _____ 23. Stereoscopic instrument contours _____ 24. Contours in general _____ 25. Spot elevations _____ 26. Other physical features AKH

CULTURAL FEATURES

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

BOUNDARIES

31. Boundary lines _____ 32. Public land lines _____

MISCELLANEOUS

33. Geographic names AKH 34. Junctions AKH 35. Legibility of the manuscript AKH 36. Discrepancy overlay _____ 37. Descriptive Report AKH 38. Field inspection photographs AKH 39. Forms AKH
40. Robert K. H. Spwood _____ Henry P. Eichen _____
Reviewer 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:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~TO BE DELETED~~

STRIKE OUT ONE

NONFLOATING AIDS GRANTS MARKS FOR CHARITABLE AND NONPROFIT ORGANIZATIONS

Baltimore, Maryland

March 22 1950

I recommend that the following objects which have ~~been~~^{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 Henry P. Eichert

Hubert A. Paton

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.

TO BE CHARTED

STRIKE OUT ONE

~~TO BE DELETED~~

NONLOCALITY OR LANDMARKS FOR CHARTS

Baltimore, Md.

March 22

1950

I recommend that the following objects which have ~~(have been)~~ 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 **Henry P. Eichert**

Hubert A. Paton

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.

STRIKE OUT ONE

MONTHLY CHARTS AND EXTERNAL LANDMARKS FOR CHARTS

Baltimore, Maryland

March 22, 1950

I recommend that the following objects which have ~~(been inspected from seaward)~~ 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 Albert K. Heywood

Hubert A. Paton

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.

48(a) GEOGRAPHIC NAME LIST FOR T-5976

- ✓ Abagadasset Pt.
- ✓ Abagadasset River
- ✓ Ames Ledge
- ✓ Baker Brook
- ✓ Beef I
- ✓ Beef Rk
- ✓ ~~Beef Pt.~~
- ✓ Carney Pt.
- ✓ Cooksey Channel
- ✓ Cork Cove
- ✓ Dram Rk
- ✓ Eastern River
- ✓ Green Pt.
- ✓ Hatch Pt.
- ✓ Jefferson School
- ✓ Lillys Cove
- ✓ Maxwell I
- ✓ M.C.R.R.
- ✓ Me 24
- ✓ Me 127
- ✓ Me 128
- ✓ Middle Ground
- ✓ Pork Point
- ✓ River Road School
- ✓ Shipyard Pt.
- ✓ South Dresden
- ✓ Stiphinin Pt.
- ✓ Swan Island
- ✓ Swan Island Flats
- ✓ Swan Island Point
- ✓ Theobald Pt.
- ✓ Twing Pt.
- ✓ Wade ~~Cove~~
- ✓ Webbs Point.

Names approved

1-3-51

A.J.W.

48(b) GEOGRAPHIC NAME LIST FOR T-5977

- Campmeeting Point
- Cedar Grove
- Clay Cove
- Courthouse Pt.
- Dresden Mills
- Eastern River
- Forest Hill Cam.
- Goodwin Pt.
- Hathorn Hill
- Iceboro
- Little River
- Little Swan Island
- M.C.R.R.
- Me. 24
- Me 197
- Me 128
- Me. 127
- Reed Rock
- Richmond
- Richmond Camp Ground
- Richmond Dresden Bridge
- St. Johns Church
- Southard Point
- Stearns Pt.
- Swan Island
- Swan Island Game Preserve (Not shown on SL map)
K.H.M.
- The Bluff
- The Narrows → "Lovejoy Narrows" on ch 288
- West Dresden

Names approved

1-3-50

a.j.w.

49. NOTES FOR THE HYDROGRAPHER

The following is a list by quadrangles of recoverable topographic stations:

T-5976

Abaga 1950
Abagadasset Point Range Front Daybeacon
" " " Rear "
Ames Ledge Daybeacon

Beef, 1950
Beef Rock Daybeacon

Chimney, 1949
Cupola (Barn Cupola 1949)

Dram, 1950

Finis, 1950

Gable, 1949

Term, 1950

T-5977

A-1937

L-06 1937

Tower (Signal Tower 1949)
Tower (East Tower 1949)
Tower (West Tower 1949)

see
737

NOTES FOR THE REVIEWER

Photo point No. 1 and photo point No. 2, in the vicinity of Maxwell Island, shown in red on manuscript T-5976, are points furnished by the field party to use in plotting Abagadasset Point Range (See photograph O-738 1:10,000). It was assumed this point on range was to be used as a check in the positions of Abagadasset Point Range Front and Rear Daybeacons. These three points, however, do not fall in a straight line. Comparison was made between the positions of these daybeacons on Chart 288 and their positions in the manuscript and found to be in good agreement. See the Review Report for the explanation of this condition. *Srv*

REVIEW REPORT
Shoreline Maps T-5976 and T-5977
10 January 1951

62. Comparison with Registered Topographic Surveys

T-1115	1:10,000	1869-90
T-1158	1:10,000	1870-90

These maps supersede T-1115 and T-1158 for nautical charting purposes.

63. Comparison with Maps of other Agencies

Gardiner, Maine, U.S.G.S. quadrangle 1:62,500, 1941
Wiscasset, Maine, U.S.G.S. quadrangle 1:62,500, 1941

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

Chart 288, 1:15,000, ed. 1943, corr. 11/22/48
Chart 289, 1:15,000, ed. 1943, corr. 9/26/49

The northern portion of the Training Wall, shown as awash at MHW on T-5976 is shown as above the MHW datum on chart 289.

Several differences in geographic names occur between the map and the charts. Refer to the Geographic Names Report filed in the Geographic Names Section, Division of Charts, also the attached list of approved geographic names.

The towers supporting high tension lines over the Eastern River shown on T-5977 are ⁽²⁸⁸⁾~~(not)~~ shown on the chart. _{now}

A cable crossing just north of the Richmond-Dresden Bridge on T-5977 is not shown on chart 288. ^(Marked on Aid Proof)
6/19/53

The jetties south of Clay Cove shown as awash at MHW on T-5977 are shown as above the MHW datum on chart 288.

The shape of Little Swan Island differs on T-5977 from that shown on chart 288.

Refer to item 47 of the compilation report for differences between the map and chart 288 at Green Pt.

Small differences in shorelines and the number of near shore obstructions are apparent between the map and the charts but these differences are not critical to navigation.

66. Adequacy of Results and Future Surveys.

These maps are adequate as a base for hydrographic surveys and the construction of nautical charts.

2 -

They meet the National Standards of Map Accuracy.

7
68. Control

Eight triangulation stations were plotted on the manuscripts. These are stations that were searched for and not recovered but were not indicated as being lost or destroyed. They are as follows:

T-5976
Blair, 1868
Swan Island 1, 1868
T-5977
Sharp Top, 1870
Pine, 1870
Pray, 1870
McFadden, 1870
Swan Island 3, 1868
Wilson, 1868

8
68. Landmarks and Aids

Recoverable topographic station Ames Ledge Day-beacon has been determined to be in the same position formerly occupied by the Ames Ledge Lighthouse as based on local reports. See item 37 of the compilation report concerning geographic position submitted.

The Abagadasset Point on Range does not fall in line with the Abagadasset Point Range Front and Rear Day-beacons. The application of the data on Photo Pts. 1 and 2 and the angle and distance to the Point on Range as furnished on the Control Station Identification form positions the Point on Range about 0.3 m m inshore from the shoreline and east of the trees bordering the shoreline. The sketch on the field pricking card indicates the Point on Range as being in the open field west of the trees bordering the shoreline. It is evident that the plotted position and the sketch description do not agree for the Point on Range and some error probably in the measurement of the distance to the Point on Range from Photo Pt. 1 has been made in the field. The Point on Range has been deleted from the manuscript.

Reviewed by:

K. N. Maki
K. N. Maki

Approved:

S. V. Griffith
Chief, Review Section B
Div. of Photogrammetry

O. S. Reading
Chief, Div. of Photogrammetry

Red

W. E. Edmonson
Chief, Nautical Chart Branch
Division of Charts

Carl O. Heston
Chief, Div. of Coastal Surveys

skt

NAUTICAL CHARTS BRANCH

SURVEY NO. T-5976 2.7

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.