8786

Calais, Me

Diag. Cht. No. 801

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. PH-11 (46) *Office No.* T-8786

LOCALITY

State MAINE

General locality WASHINGTON COUNTY

Locality ST. CROIX RIVER

1949

CHIEF OF PARTY
R. A. Gilmore, Chief of Field Party
T. B. Reed, Photo. Office

LIBRARY & ARCHIVES

DATE August 23, 1951

8-1870-1 (1)

8786

DATA RECORD

T - 8786

Project No. (II): PH-11(46)

Quadrangle Name (IV): CALAIS

Field Office (II): Calais, Me.

Chief of Party: Ross A. Gilmore

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: Thos. B. Reed

Instructions dated (II) (III): 9 May, 18 Sept. 1946

Copy filed in Division of Photogrammetry (IV) Office Files

Method of Compilation (III): Air Photographic (Multiplex)

Manuscript Scale (III): 1:8500

Stereoscopic Plotting Instrument Scale (III): 1:8500

Scale Factor (III): 1.000

Date received in Washington Office (IV): 6-15-49

Date reported to Nautical Chart Branch (IV): 7-26-49

Applied to Chart No.

Date:

Date registered (IV): 2-6-51

Publication Scale (IV): 1:24,000

Publication date (IV):

Geographic Datum (III): N.A. 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): MAGUERREWOC, 1887

Lat.: 45° 09' 19.110"

Long.: 67° 16' 49.250"

Adjusted ~~Unadjusted~~

Plane Coordinates (IV):

State: Maine

Zone: East

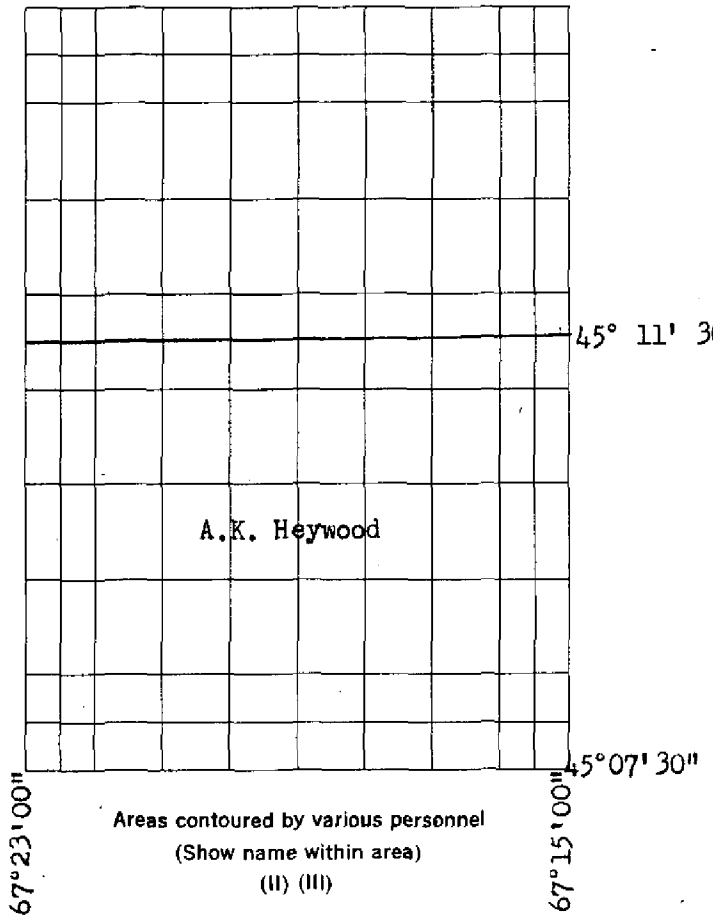
Y=

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.

M-2618-12(4)



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

DATA RECORD

Field Inspection by (II): John R. Smith, Herschel G. Murphy, Irving I. Saperstein — Date: Oct. 1946

Planetable contouring by (II): — Date:

Completion Surveys by (II): Henry P. Eichert, William H. Shearouse, John R. Smith, James A. Clear, John H. Gwaltney — Date: Oct. 1949

Mean High Water Location (III) (State date and method of location): October 1946

Projection and Grids ruled by (IV): H.R. — Date: Dec 1947

Projection and Grids checked by (IV): H. R. — Date: Dec 1947

Control plotted by (III): A. K. Heywood — Date: May 1948

Control checked by (III): A. C. Rauck, Jr. — Date: July 1948

[redacted] Stereoscopic Control extension by (III): A. K. Heywood — Date: Aug. 1948

Stereoscopic Instrument compilation (III): Planimetry A.K.Heywood — Date: May 1948

Contours A.K.Heywood — Date: August 1948

Manuscript delineated by (III): M.L.Rosenberg — Date: August 1948

Photogrammetric Office Review by (III): A.K.Heywood — Date: Dec. 1948

Elevations on Manuscript checked by (II) (III): C. Theurer — Date: July 1950

Camera (kind or source) (III): U.S.C.& G.S. Type "C" 6" Metrogon Lens

PHOTOGRAPHS (III)

Number	Date	Time EST	Scale	Stage of Tide
46-C-118-124 46-C-132-135	5-23-46	1030	1:20,000	2' MLW
46-C-127-130	5-23-46	1045	"	2' MLW
46-C-394-397	5-29-46	1405	"	1' MLW
46-C-113-117	5-23-46	1030	"	2' MLW
46-C-403-435	6-29-46	1455	1:36,000	5' MLW

Tide (III)

Ratio of Ranges	Mean Range	Spring Range
1.1	20.0	22.8

Reference Station: Eastport
Subordinate Station: Calais, St. Croix River
Subordinate Station:

Washington Office Review by (IV): C. Theurer Date: July 7, 1950

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 15
Shoreline (More than 200 meters to opposite shore) (III): 3
Shoreline (Less than 200 meters to opposite shore) (III): none
Control Leveling - Miles (II): 28
Number of Triangulation Stations searched for (II): 71 Recovered: Identified:
Number of BMs searched for (II): 24 Recovered: 22 Identified: 22
Number of Recoverable Photo Stations established (III): 9
Number of Temporary Photo Hydro Stations established (III): none

Remarks:

MAP T-8786 PROJECT NO. PH-11(46) SCALE OF MAP 1:8500 SCALE FACTOR 1.17647

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)
MAGUERREWOC 1887	G.P. List	N.A. 1927	45 09 19.110			589.9	1262.3	694.0	1485.1
			67 16 49.250			1075.8	234.8	1265.6	276.3
PINEO, 1909 (IBC)	Spec. Pub.No. 46	N.A.	45 09 23.280		-23.7	718.7	1133.5	845.5	1333.6
			67 17 51.039		- 2.9	1114.8	195.7	1311.5	230.3
PHINNEY, 1909 (IBC)	I.B.C.	N.A.	45 08 13.04		-23.7	402.5	1449.7	473.5	1705.6
			67 19 00.10		- 2.9	2.2	1308.8	2.6	1539.7
INTERNATIONAL BRIDGE, 1908 (IBC)	Spec. Pub. No.46	N.A.	45. 11 29.916		-23.7	923.5	928.7	1086.5	1092.6
			67 17 02.096		- 2.9	45.8	1264.0	53.9	1487.1
RUSSELL, 1909 (IBC)	"	N.A.	45 08 33.943	Near △ RM 212	-23.7	1047.8	804.4	1232.7	946.4
			67 18 39.765	Not Plotted	- 2.9	868.8	442.1	1022.1	520.1
REF. MON. 222 1922 (IBC)	I BC	N.A.	45 10 57.95		-23.7	1788.9	63.3	2104.6	74.5
			67 17 28.78		- 2.9	628.4	681.6	739.3	801.9
JUNCTION, 1909 (IBC)	Spec. Pub. No.46	N.A.	45 08 56.125		-23.7	1732.6	119.6	2038.4	140.7
			67 17 37.099		- 2.9	810.4	500.3	953.4	588.6
MILLTOWN COTTON MILL CHIM. 1887	"	"	45 10 29.15		-23.7	899.9	952.3	1058.7	1120.4
	"		67 17 36.25		- 2.9	791.6	518.5	931.3	610.0
BAILEY, 1909 (IBC)	"	"	45 08 20.324		-23.7	627.4	1224.8	738.1	1441.0
			67 22 05.967		-2.9	130.4	1180.6	153.4	1388.9
REF. MON. 219 1909 (IBC)	I BC	"	45 10 30.67		-23.7	946.8	905.4	1113.9	1065.2
			67 17 30.81		- 2.9	672.8	637.3	791.5	749.8
(IBC) SECRIP 1909	Spec. Pub.No. 46	"	45 08 24.862		-23.7	767.5	1084.7	902.9	1276.2
			67 22 10.267		- 2.9	224.3	1086.6	263.9	1278.3
CALAIS CONG. CH. SPIRE 1909 (IBC)	"	"	45 11 13.171		-23.7	406.6	1445.6	478.3	1700.8
			67 16 36.357		- 2.9	793.7	516.2	933.8	607.2

1 FT. = .3048006 METER

COMPUTED BY: H.P.Eichert DATE Winter 1947 CHECKED BY: E.L.Bauman DATE Winter 1947

M-2388-12

MAP T-8786 PROJECT NO. Ph-116(46) SCALE OF MAP 1:8500 SCALE FACTOR 1.17607

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)
DOTEN, 1909 (IBC)	I BC	N.A.	45 07 41.87		-23.7	1292.5	559.7	1520.6	658.5
			67 19 45.07		-2.9	985.0	326.2	1158.8	383.8
GAUGE, 1910 (IBC)	I BC	N.A.	45 09 09.61	West of	-23.7	296.7	1555.5	349.1	1830.0
			67 23 15.68	Limits	-2.9	342.5	968.1	402.9	1139.0
RIDEOUT 1909 (IBC)	Spec. Pub. No. 46	N.A.	45 08 28.190		-23.7	870.2	982.0	1023.8	1155.3
			67 18 09.869		-2.9	215.6	1095.3	253.6	1288.6
YOUNG 1909 (IBC)	"	"	45 10 58.137		-23.7	1794.7	57.5	2111.4	67.7
			67 15 37.468		-2.9	818.0	492.0	962.4	578.8
STONYFIELD 1909 (IBC)	"	"	45 08 32.087		-23.7	990.5	861.7	1165.3	1013.8
			67 17 31.155		-2.9	680.7	630.2	800.8	741.4
SLOUGH, 1909 (IBC)	"	"	45 10 54.854		-23.7	1693.3	158.9	1992.1	187.0
			67 17 24.876		-2.9	543.1	766.9	638.9	902.3
LOVERING 1910 (IBC)	I BC	"	45 09 04.84	West of Limits	-23.7	149.4	1702.8	175.8	2003.3
			67 23 00.42		-2.9	9.2	1301.5	10.8	1531.2
FROST FIELD 1910 (IBC)	I BC	"	45 07 40.06		-23.7	1236.7	615.5	1454.9	724.2
			67 20 12.27		-2.9	268.1	1043.1	315.4	1227.2
RINGBOLT 1910 (IBC)	I BC	"	45 07 47.93		-23.7	1479.6	372.6	1740.7	438.4
			67 21 22.00		-2.9	480.8	830.4	565.6	977.0
LAWLER, 1910 (IBC)	"	"	45 07 36.70		-23.7	1132.9	719.3	1332.8	846.3
			67 20 58.40		-2.9	1276.3	35.0	1501.5	41.2
PRATT, 1909 (IBC)	Spec. Pub. No. 46	"	45 07 48.416		-23.7	1494.6	357.6	1758.4	420.7
			67 19 24.766		-2.9	541.2	770.0	636.7	905.9
ROCK, 1909 (IBC)	"	"	45 07 26.226	South of Limits	-23.7	809.6	1042.6	952.5	1226.6
			67 19 32.944		-2.9	720.0	591.3	847.1	695.6

1 FT. = .3048006 METER

COMPUTED BY: H.P.Eichert DATE Winter 1947 CHECKED BY: E.L.Bauman DATE Winter 1947

M-2388-12

MAP T-8786 PROJECT NO. PH-11(46) SCALE OF MAP 1:8500 SCALE FACTOR 1.17647

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)
STUBBS, 1909 (IBC)	Spec. Pub. No. 46	N.A.	45 10 07.922		-23.7	244.6	1607.6	287.8	1891.3
			67 17 49.242		- 2.9	1075.3	235.0	1265.1	276.4
REF. MON. No. 215 1912 (IBC)	I B.C.	N.A.	45 10 11.47		-23.7	354.1	1498.1	416.6	1762.5
			67 17 46.59		- 2.9	1017.4	292.8	1196.9	344.5
MALLOY, 1910 (IBC)	"	"	45 07 41.24		-23.7	1273.1	579.1	1497.8	681.3
			67 21 08.77		- 2.9	191.6	1119.6	225.4	1317.2
MILLTOWN BAP.CH. FINIAL, 1909 (IBC)	"	"	45 10 15.93		-23.7	491.8	1360.4	578.6	1600.5
			67 17 24.51		- 2.9	535.2	775.0	629.6	911.8
MILLTOWN GRAMMAR SCHOOL CUPOLA, 1887	Spec. Pub. No. 46	"	45 10 08.885		-23.7	274.3	1577.9	322.7	1856.4
			67 17 13.833		- 2.9	302.1	1008.2	355.4	1186.1
INTERVAL 1910 (IBC)	I BC	"	45 07 27.13	South of Limits	-23.7	837.5	1014.7	985.3	1193.8
			67 20 32.24		- 2.9	704.6	606.7	828.9	713.8
FOWLER 1909 (IBC)	Spec. Pub. No. 46	"	45 10 41.603		-23.7	1284.3	567.9	1510.9	668.2
			67 17 31.338		- 2.9	684.3	625.8	805.1	736.2
HITCHINGS, 1909 (IBC)	"	"	45 09 31.390		-23.7	969.0	883.2	1140.0	1039.1
			67 16 43.250		- 2.9	944.7	365.8	1111.4	430.4
CANAL, 1909 (IBC)	I BC	"	45 08 31.79		-23.7	981.4	870.8	1154.6	1024.5
			67 19 05.27		- 2.9	115.1	1195.8	135.4	1406.8
CAMPBELL, 1909 (IBC)	Spec. Pub. No. 46	"	45 09 19.244		-23.7	594.1	1258.1	698.9	1480.2
			67 17 35.952		- 2.9	785.3	525.3	923.9	618.0
CHAIN ROCK, 1909 (IBC)	I BC	"	45 08 24.52		-23.7	756.9	1095.3	890.5	1288.6
			67 19 09.18		- 2.9	200.6	1110.4	236.0	1306.4
HAYWOOD, 1910	I BC	"	45 07 31.40	Not Plotted - Near A RM 204	-23.7	969.3	882.9	1140.4	1038.7
			67 20 23.62		- 2.9	516.2	795.1	607.3	935.4

1 FT. = .3048006 METER

COMPUTED BY: H.P.Eichert DATE Winter 1947 CHECKED BY: E.L.Bauman DATE Winter 1947

M-2388-12

MAP T-8786 PROJECT NO. PH-11(46) SCALE OF MAP 1:8500 SCALE FACTOR 1.17647

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)
REF. MON. 198, 1912	West of limits I BC	N.A.	45 08 50.77		-23.7	1567.3	284.9	1843.9	335.2
			67 22 48.64		-2.9	1062.6	248.2	1250.1	292.0
~~REF. MON. 200 1918~~	Listed twice ~~I BC~~	~~N.A.~~	~~45 08 20.31~~		~~-23.7~~	~~627.0~~	~~1225.2~~	~~737.6~~	~~1441.5~~
			~~67 22 05.98~~		~~- 2.9~~	~~130.7~~	~~1180.3~~	~~153.8~~	~~1388.6~~
REF. MON. 204 (IBC)	I BC	"	45 07 31.11		-23.7	960.4	891.8	1129.9	1049.2
			67 20 23.69		- 2.9	517.7	793.6	609.1	933.6
REF. MON. 206 1918 (IBC)	I BC	"	45 07 49.51		-23.7	1528.4	323.8	1798.1	381.0
			67 19 26.02		- 2.9	568.6	742.6	668.9	873.7
REF. MON. 224 1909 (IBC)	I BC	"	45 11 10.39		-23.7	320.7	1531.5	377.3	1801.8
			67 17 22.15		- 2.9	483.6	826.3	568.9	972.2
REF. MON. 225 1909 (IBC)	I BC	"	45 11 14.95		-23.7	461.5	1390.7	542.9	1636.2
			67 17 21.65		- 2.9	472.7	837.2	556.1	985.0
REF. MON. 227 1924 (IBC)	I BC	"	45 11 29.90 (29.912 - .107 1927 NA)	Near "International Bridge" - Not plotted	-23.7	923.0	929.2	1085.9	1093.2
			67 17 02.12		- 2.9	46.3	1263.5	54.5	1486.4
SS JUNCTION 1909		N.A. 1927	45 08			1760.8	91.4	2071.5	107.6
			67 17			804.3	506.4	946.2	595.8
SS INTERVAL 1910		"	45 07	Reidentified		869.6	982.6	1023.1	1156.0
			67 20	Position		754.5	556.8	887.6	655.1
SS REF. MON. 215 1912		"	45 10			324.0	1528.2	381.2	1797.9
			67 17			981.4	328.8	1154.6	386.8
SS BAILEY 1909		"	45 08	Reidentified		520.7	1331.5	612.6	1566.5
			67 22	Position		163.0	1148.0	191.8	1350.9
REF. MON. 212 (IBC) 1918	I BC	N.A.	45 08 33.94		-23.7	1047.7	804.5	1236.6	946.5
			67 18 39.77		- 2.9	868.9	442.0	1022.2	520.0

1 FT. = .3048006 METER

COMPUTED BY: H.P.Eichert DATE Winter 1947 CHECKED BY: E.L.Bauman DATE Winter 1947

M-2388-12

MAP T-8786 PROJECT NO. PH-11 SCALE OF MAP 1:8500 SCALE FACTOR 1.17647

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)
S.S. STUBBS, 1909		N.A. 1927	45 10				239.0	1613.2	281.2	1897.9
			67 17				1054.3	256.0	1240.3	301.2
S.S. SECRIP 1909		"	45 08				754.6	1097.6	887.8	1291.3
			67 22				184.4	1126.5	216.9	1325.3
SS REF.MON.219		"	45 10				942.0	910.2	1108.2	1070.9
			67 17				629.4	680.7	740.5	800.8
SS REF.MON. 222		"	45 10				1785.6	66.6	2100.7	78.4
			67 17				616.9	693.1	725.8	815.4
SS PINEO 1909		"	45 09				703.8	1184.4	828.0	1351.1
			67 17				1095.1	215.4	1288.4	253.4
SS MAGUERREWOC 1887		"	45 09				609.3	1242.9	716.8	1462.3
			67 16				1038.2	272.4	1221.4	320.5
SS BAILEY 1909		"	45 08				620.3	1231.9	729.8	1449.3
			67 22				115.1	1195.9	135.4	1406.9
SS INTERVAL 1910		"	45 07				826.9	1025.3	972.8	1206.3
			67 20				691.1	620.2	813.0	729.7
S.S.DOTEN 1909		"	45 07				1270.9	581.3	1495.2	683.9
			67 20				998.7	312.5	1174.9	367.6
Ref Mon 231, 1921 (IBC)		"	45 10 48.137							
			67 15 03.403							
Big Trees, 1909 (IBC)		"	45 10 48.172	Near ARM 231						
			67 15 03.400	Not Plotted.						
Big Trees Tablet, 1909 (IBC)		"	45 10 48.137	"						
			67 15 03.407							

1 FT. = .3048006 METER

COMPUTED BY: H.P.Eichert DATE Winter 1947 CHECKED BY: E.L.Bauman DATE Winter 1947

M-2388-12

Photogrammetry

MAP T-8786 PROJECT NO. Ph-11(46) SCALE OF MAP 1:8500 SCALE FACTOR

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)
REFERENCE MON. 199, 1917 (IBC)	I.B.C.	N.A.	45 08 22.32	689.0	1163.2	-23.7	665.3	1186.9		
			67 21 58.89	1286.7	24.3	- 2.9	1283.8	27.2		
* " " 200, 1918 (IBC)	Near "△ Bailey"		45 08 21.06 20.309 + 1927 NA 05.962	650.1	1202.1	-23.7	626.4	1225.8		
			67 22 06.10	133.3	1177.7	- 2.9	130.4	1180.6		
" " 201, 1918 (IBC)	"	"	45 07 47.99	1481.5	370.7	-23.7	1457.8	394.4		
			67 21 02.71	59.2	1252.0	- 2.9	56.3	1254.9		
" " 202, 1918 (IBC)	"	"	45 07 45.32	1399.0	453.2	-23.7	1375.3	476.9		
			67 21 03.24	70.8	1240.4	- 2.9	67.9	1243.3		
" " 203, 1918 (IBC)	"	"	45 07 33.66	1039.1	813.1	-23.7	1015.4	836.8		
			67 20 26.59	581.1	730.2	- 2.9	578.2	733.1		
" " 205, 1918 (IBC)	"	"	45 07 55.32	1707.7	144.5	-23.7	1684.0	168.2		
			67 19 28.82	629.8	681.3	- 2.9	626.9	684.2		
" " 207, 1910 (IBC)	"	"	45 08 15.42	476.0	1376.2	-23.7	452.3	1399.9		
			67 19 09.50	207.6	1103.3	- 2.9	204.7	1106.2		
" " 208 1918 (IBC)	"	"	45 08 12.65	390.5	1461.7	-23.7	366.8	1485.4		
			67 19 03.57	78.0	1233.0	- 2.9	75.1	1235.9		
" " 209 1918 (IBC)	"	"	45 08 26.40	815.0	1037.2	-23.7	791.3	1060.9		
			67 19 13.66	298.4	1012.5	- 2.9	295.5	1015.4		
" " 210 1918 (IBC)	"	"	45 08 25.32	781.6	1070.6	-23.7	757.9	1094.3		
			67 19 08.32	181.8	1129.1	- 2.9	178.9	1132.0		
" " 211 1918 (IBC)	"	"	45 08 44.07	1360.4	491.8	-23.7	1336.7	515.5		
			67 18 31.75	693.6	617.2	- 2.9	690.7	620.1		
" " 213 1918 (IBC)	"	"	45 09 39.20	1210.1	642.1	-23.7	1186.4	665.8		
			67 18 14.10	308.0	1002.5	- 2.9	305.1	1005.4		

1 FT. = .3048006 METER

COMPUTED BY: A.C.Rauck, Jr.

* not plotted

DATE December 1949

CHECKED BY: H.P.Eichert

DATE December 1949

M-2388-12

Photogrammetry

MAP T-8786 PROJECT NO. Ph-11(46) SCALE OF MAP 1:8500 SCALE FACTOR

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)
REFERENCE MON. 214 1918 (IBC)	I.B.C.	N.A.	45 09 38.75	1196.2	656.0	-23.7	1172.5	679.7		
			67 18 07.04	153.8	1156.7	- 2.9	150.9	1159.6		
" " 216 1909 (IBC)	"	"	45 10 15.73	485.6	1366.6	-23.7	461.9	1390.3		
			67 17 47.17	1030.0	280.2	- 2.9	1027.1	283.1		
" " 217 1909 (IBC)	"	"	45 10 16.39	506.0	1346.2	-23.7	482.3	1369.9		
			67 17 38.04	830.7	479.5	-2.9	827.8	482.4		
" " 218 1922 (IBC)	"	"	45 10 17.29	533.7	1318.5	-23.7	510.0	1342.2		
			67 17 33.90	740.3	569.9	- 2.9	737.4	572.8		
" " 220 1922 (IBC)	"	"	45 10 34.58	1067.5	784.7	-23.7	1043.8	808.4		
			67 17 39.99	873.2	436.9	- 2.9	870.3	439.8		
" " 221 1922 (IBC)	"	"	45 10 40.29	1243.8	608.4	-23.7	1220.1	632.1		
			67 17 41.96	916.2	393.9	- 2.9	913.3	396.8		
" " 223 1922 (IBC)	"	"	45 11 05.27	162.7	1689.5	-23.7	139.0	1713.2		
			67 17 34.47	752.6	557.4	- 2.9	749.7	560.3		
" " 226 1909 (IBC)	"	"	45 11 24.32	750.8	1101.4	-23.7	727.1	1125.1		
			67 17 15.28	333.6	976.2	-2.9	330.7	979.1		
" " 228 1921 (IBC)	"	"	45 11 25.87	798.6	1053.6	-23.7	774.9	1077.3		
			67 15 53.95	1177.7	132.1	- 2.9	1174.8	135.0		
" " 229 1921 (IBC)	" Lost	"	45 11 11.76	363.0	1489.2	-23.7	339.3	1512.9		
			67 16 01.99	43.4	1266.5	- 2.9	40.5	1269.4		
MURCHIE, 1908 (U.S.& C.B.S.)	Spec. Pub. No.46	P.L. 1946	45 09 10.099	311.8	1540.4	-23.7	288.1	1564.1	Outside detail limits in Canada Not plotted	
			67 22 09.155	200.0	1110.7	- 2.9	197.1	1113.6		
MOHANNAS, 1887	"	"	45 09 16.365	505.2	1347.0	-23.7	481.5	1370.7	~~Outside detail Limits in Canada Not Plotted~~	
			67 21 25.766	562.8	747.8	- 2.9	559.9	750.7		

1 FT. = .3048006 METER

COMPUTED BY: A.C.Rauck, Jr. DATE Dec. 1949 CHECKED BY: H.P.Eichert DATE Dec. 1949

M-2388-12

Photogrammetry

MAP T-8786 PROJECT NO. Ph-11(46) SCALE OF MAP 1:8500 SCALE FACTOR

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)
MOHANNAS RIDGE HOUSE CHIMNEY (IBC) 1909 (~~U.S.& C.B.S.~~)	SPEC. PUB. No.46	N.A.	45 08 53.39	1648.2	204.0	-23.7	1624.5	227.7	Beyond detail	
			67 21 51.87	1133.2	177.5	- 2.9	1130.3	180.4	limits - Not Plotted	
MIDRIP, 1909 (~~U.S. & C.B.S.~~) (IBC)	Lost	"	45 08 20.364	628.7	1223.5	-23.7	605.0	1247.2		
			67 22 01.004	21.9	1289.1	- 2.9	19.0	1292.0		
SMITH 1909 (~~U.S.&C.B.S.~~) (IBC)	Lost	"	45 08 14.606	450.9	1401.3	-23.7	427.2	1425.0		
			67 22 17.374	379.6	9314	- 2.9	376.7	934.3		
BARTON 2, 1922 (IBC)	IBC	"	45 10 36.44	1124.9	727.3	-23.7	1101.2	751.0		
			67 17 44.67	975.4	334.7	- 2.9	972.5	337.6		
ENGLISH, 1909 (~~U.S.& C.B.S.~~) (IBC)	SPEC. PUB. NO.46	Prob. Lost	45 08 04.210	130.0	1722.2	-23.7	106.3	1745.9		
			67 19 24.381	532.7	778.4	-2.9	529.8	781.3		
POPPLEMILL, 1909 (~~U.S. & C.B.S.~~) (IBC)	Lost	"	45 08 02.509	77.4	1774.8	-23.7	53.7	1798.4		
			67 19 06.849	149.7	1161.4	- 2.9	146.8	1164.3		
BARING SCHOOL CUPOLA, 1887	Last Deleted	"	45 08 04.479	138.3	1713.9	-23.7	114.6	1737.6		
			67 18 58.155	1270.8	40.3	- 2.9	1267.9	43.2		
SAWDUST ISLAND, 1909 (IBC)	I.B.C.	"	45 08 30.18	931.7	920.5	-23.7	908.0	944.2		
			67 19 11.13	243.2	1067.7	- 2.9	240.3	1070.6		
HAW POINT 1909 (~~U.S.& C.B.S.~~) (IBC)	SPEC. PUB. No.46	"	45 08 44.249	1366.0	486.2	-23.7	1342.3	509.9		
			67 18 55.679	1216.5	94.3	- 2.9	1213.6	97.2		
PINETREE ON LOWER END OF ISLAND. BELOW HANSON I., 1909 (~~U.S.& C.B.S.~~)	" (IBC)	West of Limits	45 08 48.31	1491.5	360.7	-23.7	1467.8	384.4		
		"	67 22 33.18	724.9	585.9	-2.9	722.0	588.8		
BIRCH HILL, 1909 (~~U.S.& C.B.S.~~) (IBC)	"	"	45 08 48.987	1512.2	340.0	-23.7	1488.5	363.7		
			67 18 01.497	32.7	1278.0	- 2.9	29.8	1280.9		
SQUIRREL POINT 1909 (~~U.S.& C.B.S.~~) (IBC)	"	"	45 08 43.006	1327.6	524.6	-23.7	1303.9	548.3		
			67 18 22.259	486.3	824.5	- 2.9	483.4	827.4		

1 FT. = .3048006 METER

COMPUTED BY: A.C. Rauck, Jr. DATE Dec. 1949 CHECKED BY: H.P. Eichert DATE Dec. 1949

M-2388-12

Photogrammetry

MAP T-8786 PROJECT NO. Ph-11(46) SCALE OF MAP 1:8500 SCALE FACTOR

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)
BALCOLM, 1909 ~~(U.S.& C.B.S.)~~ (IBC)	SPEC. PUB. No.46	N.A.	45 09 06.726	207.6	1644.6	-23.7	183.9	1668.3		
			67 18 01.327	29.0	1281.7	- 2.9	26.1	1284.6		
WHITE, 1909 ~~(U.S.& C.B.S.)~~ (IBC)	"	"	45 09 46.967	1450.0	402.3	-23.7	1426.3	426.0		
			67 18 14.514	317.0	993.4	- 2.9	314.1	996.3		
CROSS ON LEDGE ON NORTH SIDE WALL HOLDING	Near RM 217	"				-----				
	" Not plotted.	"				~~-2.9~~				
MAIN STREAM IN PRESENT CHANNEL 1909(U.S.& C.B.S.)	"	"	45 10 14.49	447.3	1404.9	-23.7	423.6	1428.6		
			67 17 42.54	929.0	381.3	- 2.9	926.1	384.2		
TODDS MOUNTAIN RESERVOIR CHIMNEY,1887	"	"	45 10 11.380	351.3	1500.9	-23.7	327.6	1524.6	Plots in Reservoir	
			67 18 44.913	980.8	329.5	- 2.9	977.9	332.4	Probably lost.	
HALEY, 1909 ~~(U.S.& C.B.S)~~ IBC	"	"	45 11 25.869	798.6	1053.7	-23.7	774.9	1077.4	Near RM 228	
			67 15 53.949	1177.7	132.1	-2.9	1174.8	135.0		
LAWN, 1909 (U.S.& C.B.S.)	Same as △ RM 226	"	45 11 24.325	751.0	1101.2	-23.7	727.3	1124.9		
			67 17 15.282	333.6	976.2	- 2.9	330.7	979.1		
INDIAN PT.1909 (U.S.& C.B.S.)	Same as △ RM 225	"	45 11 15.723	485.4	1366.8	-23.7	461.7	1390.5		
			67 17 21.781	475.6	834.3	- 2.9	472.7	837.2		
RANCH,1909 (U.S.& C.B.S.)	Same as △ RM 224	"	45 11 11.162	344.6	1507.6	-23.7	320.9	1531.3		
			67 17 22.276	486.4	823.5	- 2.9	483.5	826.4		
STABLE, 1909 ~~(U.S.& C.B.S)~~ (IBC)	Near △ RM 226 - Not plotted	"	45 11 25.735	794.5	1057.7	-23.7	770.8	1081.4		
			67 17 15.145	330.6	979.2	- 2.9	327.7	982.1		
YOUNGS HOUSE FINIAL ON CUPOLA 1909 (IBC) ~~(U.S.& C.B.S.)~~	"	"	45 11 27.25	841.2	1011.0	-23.7	817.5	1034.7		
			67 17 16.00	349.3	960.5	-2.9	346.4	963.4		
BARNARD,1909 ~~(U.S.& C.B.S.)~~	" Lost	"	45 11 25.749	794.9	1057.3	-23.7	771.2	1081.0		
			67 16 39.936	871.8	438.0	-2.9	868.9	440.9		

1 FT. = .3048006 METER

* not plotted

COMPUTED BY: A.C.Rauck,Jr. DATE Dec.1949 CHECKED BY: H.P.Eichert DATE Dec.1949

M-2388-12

Photogrammetry

MAP T- 8786 PROJECT NO. Ph-11(46) SCALE OF MAP 1:8500 SCALE FACTOR

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)
ST.STEPHENS METHODIST CHURCH SPIRE, 1909(~~U.S.& C.B.S.~~)(IBC)	SPEC. PUB. No.46	N.A.	45 11 41.428	1279.0	573.2	-23.7	1255.3	596.9		
			67 16 34.219	747.0	562.7	- 2.9	744.1	565.6		
ST.STEPHENS ENGLISH CHURCH 1866	"	"	45 11 38.324	1183.2	669.0	-23.7	1159.5	692.7		
			67 16 20.638	450.5	859.3	- 2.9	447.6	862.2		
BOX, 1909 (~~U.S.& C.B.S.~~)	" Lost	"	45 11 12.636	390.1	1462.1	-23.7	366.4	1485.8		
			67 16 05.074	110.8	1199.1	- 2.9	107.9	1202.0		
MILLTOWN WATERWORKS CHIMNEY 1887 *	" Lost	"	45 10 11.136	343.8	1508.4	-23.7	320.1	1532.1		
			67 17 47.574	1038.9	271.4	- 2.9	1036.0	274.3		
PUMPING STATION 1909(U.S.& C.B.S.) *	" Lost	"	45 10 11.275	348.1	1504.1	-23.7	324.4	1527.8		
			67 17 48.797	1065.6	244.7	- 2.9	1062.7	247.6		
HARRISON 1909 (~~U.S.& C.B.S.~~) (IBC)	" Lost	"	45 10 22.950	708.5	1143.7	-23.7	684.8	1167.4		
			67 17 22.887	499.8	810.4	- 2.9	496.9	813.3		
TODD MOUNTAIN 1908 (~~U.S.& C.B.S.~~)	" (IBC)	"	45 10 15.751	486.3	1365.9	-23.7	462.6	1389.6		
			67 18 48.796	1065.6	244.6	- 2.9	1062.7	247.5		
MILLTOWN CONGREGATIONAL CHURCH SPIRE 1909(~~U.S.& C.B.S.~~)	" (IBC)	"	45 10 23.849	736.3	1115.9	-23.7	712.6	1139.6		
			67 17 49.740	1086.2	224.0	- 2.9	1083.3	226.9		
POINT "A" ON WASTE WIER 1909 (U.S.& C.B.S.)	Near A RM 218 " " Not Plotted	"	45 10 20.68	638.5	1213.7	-23.7	614.8	1237.4		
			67 17 35.92	784.4	525.8	- 2.9	781.5	528.7		
VERTICAL IRON ROD, 1909(U.S.& C.B.S.)	Near RM 222 " " Not plotted		45 11 00.058	1.8	1850.4	-23.7	45° 10' 1830.3	21.9		
			67 17 33.007	720.7	589.3	- 2.9	717.8	592.2		
BRIDGESTONE, 1909 (~~U.S.& C.B.S.~~) (IBC)	Lost "	"	45 11 01.87	57.7	1794.5	-23.7	34.0	1818.2		
			67 17 26.33	574.9	735.1	- 2.9	572.0	738.0		
SLOPE,1909 (~~U.S.& C.B.S.~~) (IBC)	"	"	45 11 11.241	347.0	1505.2	-23.7	323.3	1528.9		
			67 17 34.149	745.6	564.3	- 2.9	742.7	567.2		

1 FT. = .3048006 METER

COMPUTED BY: A.C.Rauck,Jr.

* Not plotted

DATE Dec.1949

CHECKED BY: A.K.Heywood

DATE Dec. 1949

M-2388-12

Photogrammetry

MAP T- 8786 PROJECT NO. Ph-11(46) SCALE OF MAP 1:8500 SCALE FACTOR

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)
ST. STEPHENS CATH. CHURCH SPIRE, 1909 (~~U.S. & C.B.S.~~) (IBC)	SPEC. PUB. NO. 46	N.A.	45 11 41.571	1283.4	568.8	-23.7	1259.7	592.5		
			67 17 02.169	47.4	1262.3	- 2.9	44.5	1265.2		
KIRK SPIRE (SCOTCH PRESBYTERIAN CH. IN ST. STEPHENS) 1908 (~~U.S.&C.B.S.~~) (IBC)	"	"	45 11 35.82	1105.7	746.5	-23.7	1082.0	770.2		
			67 16 55.83	1218.8	91.0	- 2.9	1215.9	93.9		
HOSPITAL 1909 (~~U.S.&C.B.S.~~) IBC	"	"	45 11 31.174	962.4	889.8	-23.7	938.7	913.5		
			67 16 02.710	59.2	1250.6	- 2.9	56.3	1253.5		
RED HOUSE, 1909 (~~U.S.& C.B.S.~~)	" Lost	"	45 11 04.665	144.0	1708.2	-23.7	120.3	1731.9		
			67 15 05.891	128.6	1181.4	- 2.9	125.7	1184.3		
CROCKER, 1909 IBC (~~U.S.& C.B.S.~~)	"	"	45 11 15.497	478.4	1373.8	-23.7	454.7	1397.5		
			67 15 28.137	614.3	695.6	- 2.9	611.4	698.5		
John, 1946 (IBC)	GP List	NA 1927	45 08 51.779				Beyond detail limits			
			67 21 53.068				Not plotted.			
Rips, 1946 (IBC)	"	"	45 08 15.406							
			67 22 19.447							
Box 2, 1946 (IBC)	"	"	45 11 12.628							
			67 16 02.516							
Red House 2, 1946 (IBC)	"	"	45 11 04.288							
			67 15 05.955	NA 1927						
Clark, 1910 (IBC)	IBC Report	NA	45 08 01.11	00.34		.767				
			67 21 33.77	33.64		.130				
Ephraim, 1910 (IBC)	"	"	45 07 58.73	57.96						
			67 21 23.48	23.35						
Waters, 1910	"	"	45 07 32.84	32.07						
			67 20 29.97	29.84						

1 FT. = .3048006 METER

COMPUTED BY: A.C.Rauck, Jr. DATE Dec. 1949 CHECKED BY: A.K.Heywood DATE Dec. 1949

M-2388-12

MAP T-8786 PROJECT NO. SCALE OF MAP SCALE FACTOR

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) NA 1927	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)
(IBC) Cove, 1910	IBC Report	NA	45 07 44.38	43.61	-.767		
			67 20 11.20	11.07	-.130		
(IBC) Abbott, 1910	"	"	45 07 52.07	51.30			
			67 19 58.09	57.96			
(IBC) Towers, 1910	"	"	45 08 27.52	26.75	Near △ RM 209		
			67 19 14.55	14.42	Not plotted.		
(IBC) Church, 1909	"	"	45 10 13.30	12.53			
			67 17 54.60	54.47			
(IBC) Head, 1924	"	"	45 08 27.63	26.86			
			67 22 07.16	07.03			
Head Ecc	"	"	45 08 27.33	26.56	Near △ Head		
			67 22 07.10	06.97	Not plotted.		
(IBC) Lounder, 1924	"	"	45 08 13.52	12.75			
			67 21 46.13	46.00			
(IBC) Poorhouse, 1909	Spec Pub 46	"	45 10 31.441	30.674	Near △ RM 219		
			67 17 30.942	30.812	Not plotted		
(IBC) Hall, 1910	IBC Report	"	45 07 42.29	41.52			
			67 20 52.78	52.65			
(IBC) Stillman, 1910	"	"	45 07 38.42	37.65			
			67 20 46.74	46.61			
(IBC) Haywood, 1910	"	"	45 07 32.17	31.40	Near △ RM 204		
			67 20 23.75	23.62	Not plotted		
Will, 1910 (IBC)	"	"	45 07 33.53	32.76	Near △ RM 203		
			67 20 26.09	25.96	Not plotted		

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

MAP T-..... PROJECT NO..... SCALE OF MAP..... SCALE FACTOR .....

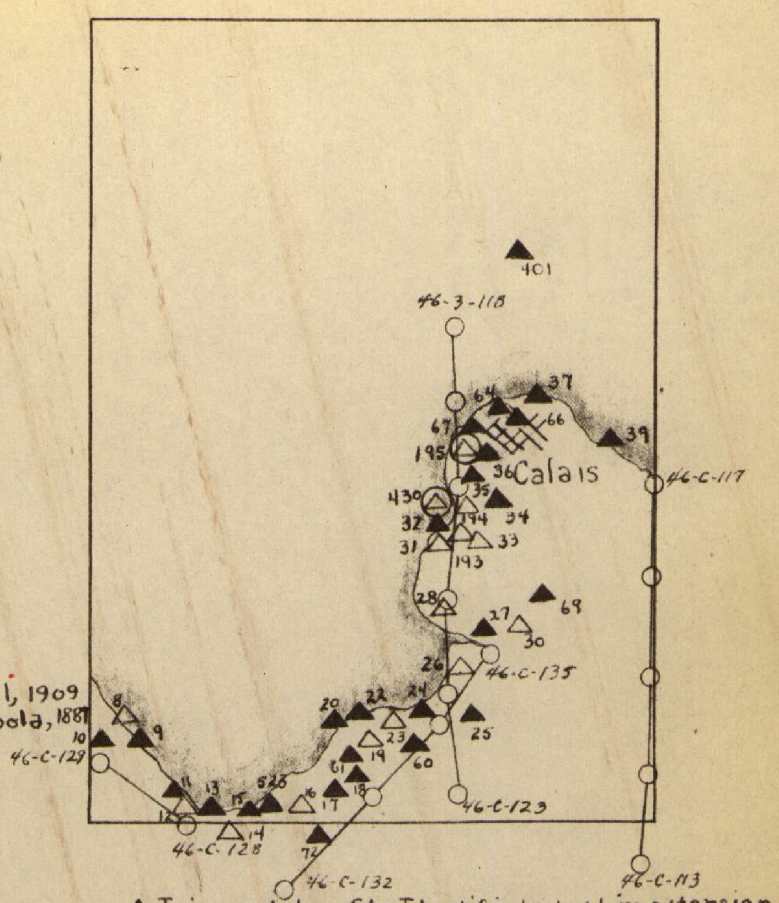
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK) NA 1927	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
(IBC) Heater, 1910	IBC Report	NA	45 07 55.08	54.31	-.767	Near Δ RM 205	
			67 19 27.99	27.86	-.130	Not plotted	
(IBC) Murphy, 1910	"	"	45 08 23.84	23.07			
			67 19 12.40	12.27			
(IBC) Bartlett, 1910	"	"	45 08 31.10	30.33			
			67 19 24.76	24.63			
(IBC) Butler, 1910	"	"	45 08 45.85	45.08			
			67 19 27.35	27.22			
(IBC) Harrison Ecc, 1909	"	"	45 10 23.07	22.30		Near Δ Harrison. Prob. destroyed	
			67 17 23.00	22.87		when Δ Harrison was lost.	
(IBC) Gristmill, 1909	"	"	45 10 23.30	22.53		Plots on building. No description	
			67 17 34.98	34.85		available. Not plotted.	
(IBC) Carl, 1909	"	"	45 09 42.45	41.68			
			67 18 08.58	08.45			
(IBC) Byre, 1909	"	"	45 10 50.19	49.42			
			67 17 35.23	35.10			
(IBC) Union, 1909	"	"	45 10 56.78	56.01			
			67 17 32.42	32.29			

1 FT. = .3048006 METER

COMPUTED BY:..... DATE..... CHECKED BY:..... DATE.....

M-2388-12

8 Bailey, 1909
8 Secrip, 1909
9 Midrip, 1909
10 Smith, 1909 lost
11 Ringbolt, 1910
12 Malloy, 1910 (difficult to see)
13 Lawler, 1910
14 Interval, 1910
15 Frost Field, 1910
16 Doten, 1909
17 Pratt, 1909
18 Poppelmill, 1909 lost
19 Phinney, 1909
20 Chain Rock, 1909
22 Canal, 1909
23 Russell, 1909
24 Rideout, 1909
25 Stoney Field, 1909
26 Junction, 1909
27 Campbell, 1909
28 Pineo, 1909
30 Maquerrewoc, 1887
31 Stubbs, 1909
33 Milltown Baptist Ch. finial, 1909
33 " Grammer Sch. Cupola, 1887
34 Harrison, 1909 lost
35 Fowler, 1909
36 Slough, 1909
37 Barnard, 1909
39 Young, 1909
60 Anderson, 1887 lost
61 Baring Sch. Cupola, 1887
64 International Bridge, 1908 IBC
66 Calais Congregational Ch. sp, 1909
67 Bridgestone, 1909 lost
69 Hitchings, 1909
193 Ref. Monument 215, 1912
194 " " 219, 1909
195 " " 222, 1922
430 Millton Cotton Mill Chimney, 1887
523 Haywood, 1910
401 Meridian Mark, 1886 lost
32 Pumping Sta, 1909 lost
72 Rock, 1909



Ph-11(46)
T-8786

SKETCH OF HORIZONTAL CONTROL

FIELD INSPECTION REPORT

TO ACCOMPANY

QUADRANGLE 8786

-PROJECT Ph-11(46)

OCTOBER 1946

1 - DESCRIPTION OF AREA:

This quadrangle lies in Washington County, Maine, and is bounded on the North by N. Lat. 45°-15'-00", on the South by N. Lat. 45°-07'-30", and on the East and West by W. Long. 67°-15'-00" and W. Long. 67°-22'-30" respectively. About 18 square miles of land area in the quadrangle lies in the United States and the remainder is in Canada.

The principal cultural features are U. S. Highway No. 1, which enters the quadrangle on the east and runs northwest to Calais, thence southeast through the quadrangle to the southeastern corner; the town of Calais in the east central part; Milltown, south of Calais; the small village of Baring, south of Milltown; the Maine Central Railroad, extending south through the quadrangle from Calais; and the St. Croix River, which is the boundary line between the United States and Canada.

The vegetation consists mostly of pine, spruce, fir, hackmatack, maple, alder and birch. There is a small amount of farm land in the area.

The shoreline, in general, is rocky, with mud flats along the Calais waterfront. The head of tidewater is midway between the international bridge at Calais and the dam at Milltown.

2 - COMPLETENESS OF FIELD INSPECTION:

All field inspection is complete. All important features such as buildings, road, railroads and vegetation were classified in accordance with instructions for the project.

The town of Calais was inspected on photograph 46 C 120 (1:8500) and the remainder of the quadrangle was inspected on the following 1:20,000 scale, single lens photographs: 46 C 117, 128, and 134.

3 - INTERPRETATION OF PHOTOGRAPHS:

Reference is hereby made to the Field Inspection Report for quadrangle 8795 for discussion of this subject. Filed in Div. of Phtgy - General Files

4 - HORIZONTAL CONTROL:

71 Triangulation recovery cards are submitted. Some of these stations have been classified as lost, while others were not recovered due to their inaccessibility at the time. At least one station in each required area has been recovered and identified on the photograph. The stations that were not searched for are SAWDUST ISLAND, 1909 and REFERENCE MONUMENT 202, 1918. These stations are located on islands in the St. Croix River and it was not practical to put a boat in the river in that vicinity. IRVING, 1910 was also not searched for, for above reason.

5 - VERTICAL CONTROL:

All vertical control stations of the Coast & Geodetic Survey and Geological Survey were searched for and those found were identified on the photographs.

About 28 linear miles of 4th order levels were run. 47 temporary elevation points were established by trigonometric leveling. There were several temporary elevations established in Canada and identified on the photographs.

The code letters CA prefix all spot elevations for this quadrangle.

The following 1:20,000 single lens photographs were used:
46 C 116, 117, 119, 121, 123, 127, 129, 133, 396, 397 and 390.

Level notes are shown on consecutively numbered pages of Trigonometric Leveling Form M-2339-12 (loose leaf).

6 - CONTOURS AND DRAINAGE:

Inapplicable.

7 - MEAN HIGH-WATER LINE:

The mean high-water line was delineated on the photographs within 0.5mm of true position.

In general, a boat was used and sailed as far inshore as possible to identify the mean high-water line.

Photographs on which shoreline and other field inspection appears are: 1:8500 ratio print 46 C 117.
Low altitude prints (1:8500 reduced from 1:6000) 46 C 425 - 433 inclusive.

8 - LOW-WATER LINE:

The low water line was delineated on the low water photographs within the prescribed accuracy.

9 - WHARVES AND SHORELINE STRUCTURES:

Wharves appear along the Calais waterfront and have been noted on the photographs. There is a dam across the St. Croix River at Milltown.

10 - DETAILS OFFSHORE FROM HIGH-WATER LINE:

Wherever rocks or ledges were awash at or below mean high water, a note was made on the photograph as to how much the rock or ledge bared, the time and date.

11 - LANDMARKS AND AIDS TO NAVIGATION:

No new landmarks are recommended for charting.

There are no permanent fixed aids to navigation within the limits of the quadrangle.

12 - HYDROGRAPHIC CONTROL:

Hydrographic signals were picked on the photograph for use of the hydrographer. These consist mainly of lone trees, or trees that stand out, such as on points of land. Also used for hydrographic signals were large boulders in the water, gables of houses and chimneys. Descriptions of hydrographic signals have been recorded in field sketchbook Vol. 9. An attempt was made to pick sufficient hydrographic signals, except in areas where it was impossible to pick signals with certainty.

Due to sufficient triangulation within the area, only 1 topographic station was established; this was the Black Stack of the Bar Mill at Calais, ~~which was recommended for a landmark.~~

Form 524 "Description of Recoverable Topographic Station" card was submitted.

13 - LANDING FIELDS AND AERONAUTICAL AIDS:

There is a small air strip at Baring which was outlined on photograph 46 C 134. The runway is dirt.

There are no aeronautical aids.

14 - ROAD CLASSIFICATION:

Roads were classified in accordance with "General Instructions - Classification and Compilation of Roads", dated 30 June 1945.

15 - BRIDGES:

The vertical and horizontal clearances of the international bridge at Calais were noted on photograph 46 C 428.

16 - BUILDINGS AND STRUCTURES:

Buildings and structures were identified by encircling them in red ink.

17 - BOUNDARY MONUMENTS AND LINES:

This is the subject of a special report submitted by Harold A. Duffy, Photogrammetrist. Filed in Div. of Phtgy - General Files

18 - GEOGRAPHIC NAMES:

Same as 17 above.

19 - SYMBOLS:

Symbols may be found on the back of photograph 46 C 430.

Note: Work was done on items 1, 2, 5, 13, 14, and 16 by John R. Smith, Eng. Aid.

Item 4 was done by Herschel G. Murphy, Eng. Aid.

Items 7, 8, 9, 10, 11, 12, and 15 were done by Irving I. Saperstein, Eng. Drafts.

Respectfully Submitted:

John R. Smith

John R. Smith, Eng. Aid

Herschel G. Murphy

Herschel G. Murphy, Eng. Aid

Irving I. Saperstein

Irving I. Saperstein, Eng. Drafts.

Approved and Forwarded: 12-27-46

Ross A. Gilmore

Ross A. Gilmore, Chief of Party

COMPILATION REPORT

TOPOGRAPHIC MANUSCRIPT SURVEY NO. T-8786

The methods used in the compilation of this quadrangle are more completely described in Project Report PH-11(46). Special methods employed in the delineation of this manuscript are discussed in detail under their applicable heading.

26. CONTROL

a) Horizontal

Two substitute stations, BAILEY, INTERVAL, were identified on low altitude flight 46-C-403-412 (1:6000), originally furnished by field inspection. These points could not be definitely identified during the orientation of the multiplex triangulation. It was requested by the office to choose new substitute stations to be identified on contact prints 46-C-127-129. These new positions were readily identified and used in the final scale of the flight.

For additional information on control refer to Project Report PH-11(46) and sketch of "Horizontal Control" inserted in the front of this report. Filed in Div. of Phtgy - General Files

b) Vertical

In the vicinity of Baring opposite the Customs House a Bench Mark marked V-6 was identified but no elevation given. It is believed this point is the same as one listed in "Report, International Boundary Commission" on page 167 under Baring, Wash. County, Me. B.M. No. 91, El. 90.85.
Station defaced. Not shown on map manuscript.

27. RADIAL PLOT

None

28. DETAILING

Some variation was noted in the shoreline of the St. Croix River due to the difference in dates of photography. These differences occur above the head of navigation. There are several flights over the same area.
Field edit recommended using the low altitude photographs. See Pp 30

29. SUPPLEMENTAL DATA

None.

30. MEAN HIGH WATER LINE

The major portion of the MHWL was furnished by the field inspection party on low altitude photographs 46-C-425-433 (scale 1:6000). An attempt was made to transfer this shoreline to the manuscript by use of the vertical projector. This was not possible due to the scarcity of common detail points. Consequently, using a stereoscope, the MHWL was transferred from the low altitude flight to ratio prints 46-C-117-119 (1:8500) and holding multiplex detail points, the shoreline was traced on the manuscript.

31. LOW WATER AND SHOAL LINES

The same method as employed in the compilation of the MHWL was used in the delineation of the approximate low water line.

32. DETAILS OFFSHORE FROM THE HIGH WATER LINE

Data completed

33. WHARVES AND SHORE LINE STRUCTURES

Data complete.

34. LANDMARKS AND AIDS TO NAVIGATION

One landmark "Black Stack" could not be plotted. It is requested that the field edit party locate the stack. Field editor does not recommend this stack as a landmark.

35. HYDROGRAPHIC CONTROL

The following photo-hydro stations were rejected:

8613	8607	8610
8606	8602	8611

T.S. Black Stack - see item 34. Located by Field Editor as topographic station.

36. LANDING FIELDS AND AERONAUTICAL AIDS

Data complete

37. GEOGRAPHIC NAMES

Refer to item 37 of Descriptive Report for T-8790 concerning Moose-Horn National Wild Life Refuge.

An alphabetical list of geographic names appearing on this map accompanies this report.

38. JUNCTIONS

North is Canada
East with T-8787
No attempt has been made to junction with the U. S. Geological Survey to the west and south.

39. BOUNDARIES

The completion of the limits of Moose-Horn National Wild Life Refuge in the vicinity of St. Croix Junction was made using land tracts 44 and 45a,b of "Special Report in Boundaries".

Beginning at Monument No. 9 (corner G) distances were scaled and plotted from the bearings and chained distances listed.

39. BOUNDARIES (Continued)

Upon reaching the Magurrewock Stream the boundary follows the centerline of the river. Beginning from Corner "N" and working SW along the boundary the "points on fences" were plotted from field inspection data on photograph 46-C-121 (1:20,000). The junction between Corner "N" and the point where the limits reach the centerline of Magurrewock Stream could not be plotted due to insufficient information and it is requested that field edit complete this boundary,

The boundary limit from Corner 76 extending NW was drawn along a fence line as shown on field inspection photograph 46-C-133 (1:20,000) to U. S. Hwy No. 1, then NE to Corner "B". See Review Report

The international boundary line between U.S. and Canada has been plotted using as a source "Report International Boundary Commission, Dept. of State, 1934", corrected to North American 1927 datum.

40. BRIDGES

The data for the International Bridge at Calais is as follows:

Field Data	Tidal Corrections	Clearance at MHW	U.S.E.D. Published Value
Fixed Bridge			Fixed Bridge
Hor. Cl. 119.6			115'
Vert.Cl. 5.7	.3	6' Vert Cl. 8 ft Checked by Field Editor	10' HW 30' MLW 4 spans

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Visual comparison was made with U.S.G.S. Calais topographic quadrangle dated 1932 and reprinted in 1944. They were in good agreement.

Numerous cultural and MHWL differences were noted upon comparison with the International Boundary Commission maps sheet No. 12 and 13. Since these maps were published in 1924 these changes are believed to be for the most part normal over this interval of time.

45. COMPARISON WITH NAUTICAL CHARTS

Upon visual comparison with U.S.Coast and Geodetic Survey Chart No. 801 dated February 1949, agreement was found to be good.

~~After completion of field edit and hydrographic survey, this compilation should supersede all previously charted information~~.

Respectfully submitted
8 June 1949

Albert K. Heywood
Cartographic Draftsman
Descriptive Report and Review

Approved and forwarded
June 1949

Thos. B. Reed
Officer in Charge
Baltimore Photogrammetric Office

NOTES FOR HYDROGRAPHIC PARTIES

EASTERN MAINE

TOPOGRAPHIC MANUSCRIPT

PROJECT PH-11(46)
Survey T-8786

The following are descriptions of photo-hydro stations to be used as hydrographic signal sites:

No.	Photo. No.	Description	Height above MHW(ft)
8601	443	Brick chimney on 2½ story white house, the most N. of group of houses.	75
8603	117	25' leaning spruce tree, at edge of 10' bank and is the most N cedar in group.	1
8604	430	E gable of galvanized iron shed, on piling; gable is over MHWL.	25
8605	430	N gable of yellow shed with ventilator on roof and four windows on W side.	30
8608	429	E gable of 3 story red brick R R Building with hipped roof.	50
8609	429	E corner of dock at sharp point.	2
8610	428	W gable of 2 story red brick customs house	45
8611	428	Finial of cupola in center of 6 sided pyramidal red roof building.	50
8612	426	Black metal stack on galvanized iron building with ventilator on roof about 75 m of Customs house.	75

Respectfully submitted

Approved and forwarded

Mary Louise Rosenberg
Mary Louise Rosenberg
Cartographic Aid

Thos. B. Reed
Officer in Charge
Baltimore Photogrammetric Office

ADDENDUM - Survey No. T-8786

This addendum is to show the methods used to delineate the Canadian shoreline and immediate inshore detail.

Only those items whichare applicable are included.

26. CONTROL:

Multiplex models 46C-118 to C-121, and C-116-117 were reset utilizing the same horizontal control heretofore used on the United States side of the International Boundary.

Additional control was not required.

27. RADIAL PLOT:

A small triangular shaped area north of photo center 46C-117 could not be included in the multiplex coverage. A small radial plot was made using low altitude photos in this area to establish shoreline and inshore detail points.

28. DETAILING:

Roads and streets in the vicinity of St. Stephen and the area across the St. Croix River from Milltown are the compilers interpretation. These are not classified.

Only those buildings immediately adjacent to the shoreline and a few located high in the town of St. Stephen are shown.

30. MEAN HIGH WATER LINE:

31. LOW WATER AND SHOAL LINES:

32. DETAILS OFFSHORE FROM THE HIGH WATER LINE:

33. WHARVES AND SHORELINE STRUCTURES:

34. LANDMARKS AND AIDS TO NAVIGATION:

Items 30, 31, 32, 33 and 34 are the compilers interpretation from stereoscopic examination of photographs.

No landmarks on aids to navigation were recommended, however, there is one elevated object shown at approximately latitude 45° 11' 30" and longitude 67° 16'. Although this is on the Canadian shore of the St. Croix River, it is below the head of tidewater, and believed to be of sufficient height to be of use to the hydrographic party or as a landmark.

Field editor does not recommend this as a landmark.

35. HYDROGRAPHIC CONTROL:

None established. However, there are many piers, wharves and other shoreline structures along this Canadian shoreline which may be used for hydrographic control.

37. GEOGRAPHIC NAMES:

The following charted names have been added:

Canada	Denny Stream
Crocker I.	St. Stephen

Added to Geog. Names List.

38. JUNCTIONS

A "Supplemental Sheet" has been ruled to join the north half of T-8786 at St. Stephen, Canada.

Respectfully submitted
20 July 1949

Albert C. Rauck, Jr.
Albert C. Rauck, Jr.,
Cartographic Draftsman

Approved and forwarded
July 1949

Thos. B. Reed,
Officer in Charge,
Baltimore Photogrammetric Office

ADDENDUM - SURVEY NO. T-8786

Additional compilation of the Canadian shoreline above tide water was completed during the time of application of field edit. This was done by multiplex, using models 46C394-C395, 46C395-C396, 46C127-C128, and 42C128-C129. As there was no shoreline inspection for this portion, that shown is from office interpretation of the photographs. The shoreline is now completed to the limits of the quadrangle.

Respectfully submitted
6 January 1950

Albert C. Rauck, Jr.
Albert C. Rauck, Jr.
Surveying and Cartographic Aid

Approved and forwarded
6 January 1950

Hubert A. Paton
Hubert A. Paton
Officer in Charge
Baltimore Photogrammetric Office

Field Edit Report, T-8786

51. Methods.--All roads were traversed by truck to check their classification, to investigate areas in question, to reclassify and check buildings, and to visually inspect contours and planimetry. Streets in the downtown congested area, the waterfront and adjacent streets, in Calais were traversed on foot as this method was necessary to clarify incorrect delineation.

The mean high-water line and the foreshore southeast of Calais and on the Canadian side were inspected from a skiff and outboard motor, at or near low-water.

Vertical clearance of the Calais-St.Stephen International Bridge was obtained by tape measurement. The time, date and clearance in feet was recorded on the Discrepancy Print in order that the accurate vertical clearance at mean High-water may be computed from the tidal data when available from the standard gauge at Eastport, Maine.

Standard planetable methods were employed to contour an area at the eastern edge of the City of Calais; to run a vertical accuracy test; and to obtain a peak elevation.

One natural object (stack) was located by theodolite at the request of the reviewer.

Field edit information is shown on the following: Discrepancy Prints; Field Edit Sheets Nos. 1 and 2; 1:8,500 scale ratio photographs 46 C 114, 115, 117, 119, 120, 121, ~~122~~, 129, 395, 396, 397; low altitude photographs 46 C 428, 429, 430, 431, 432; and 1:20,000 scale photographs 46 C 121 and 123.

Corrections and additions are shown in red ink; deletions in green. The letter "R" following a photograph number indicates a ratio photograph. Data shown on photographs has been cross-referenced on the Discrepancy Prints or Field Edit Sheets. No legend is shown.

52. Adequacy of compilation.--Delineation of

buildings throughout the compilation is not adequate. A section of a print of the map manuscript (1:8,500) was used in connection with the photographs to indicate the necessary corrections in the City of Calais. This sheet is labeled Field Edit Sheet No. 2. Extensive redrafting will be required before the map manuscript is adequate.

Shoreline delineation on the U. S. and Canadian side of the St. Croix River will be adequate after appilcation of field edit data.

53. Map accuracy.--One vertical accuracy test was run at approximate Lat. 45 07.5', Long 67 16.5'. This test was run in two parts. One part originated at bench mark J-6 vertically, was run westward and terminated at a trigonometric level point. The horizontal origin was at an acute road intersection and the termination was at the woods line where a trail enters a field. Horizontal error of closure was negligible. Vertical error of closure was 0.9 ft. high. No adjustment was made. It was run on 1:20,000 scale photograph 46 C 123.

The second part was run on 1:8,500 scale photograph 46 C 114. Origin and termination vertically were at bench mark J-6. Error of closure was 0.4 ft. low. Horizontal origin was at the intersection of a field trail and highway and termination was at a lone tree. Error of closure was negligible. No adjustments were made.

One peak elevation was obtained in the same area of the accuracy test. The work was done on 1:20,000 scale photograph 46 C 123. The elevation conforms with the contours.

Contours tested proved to be within required mapping accuracy.

An area of approximately ¼ sq. mile was contoured at approximate Lat. 45 11', Long. 67 16'. This work was done on 1:8,500 scale photograph 46 C 117. Vertical control was bench mark A 65 and horizontal origin and termination was street intersections. Vertical error of closure was within 1 ft. and horizontal error was negligible. No adjustments were made.

54. Recommendations--No recommendations are offered.

55. Examination of proof copy.--Mr. E. H. Lamb, Local Historian, Milltown Maine and MR. C. J. Miller, Calais, Maine, are intimately acquainted with the area and have agreed to review a proof copy of the map. It is believed that both these men are qualified to make an adequate examination.

No geographic names discrepancies were noted.

Respectfully submitted,
October 27, 1949

George E. Varnadoe

George E. Varnadoe,
Cartographic Engineer

T - 8786

LIST OF GEOGRAPHIC NAMES

- Baileyville
- Baring (village and district)
- Calais (town and district)
- Canada
- Conic Stream
- Calais Cemetery
- East Branch
- Magurrewock Mountain
- Magurrewock Stream
- Maine Central Railroad
- Milltown
- Moose Horn Wild Life Refuge · Moosehorn National Wildlife Refuge
- Stoney Brook
- St. Croix River
- St. Croix Junction

Names in Canada

- St. Stephen
- Crocker Island
- Denny Stream

- U.S. No. 1
- Maine No. 191

Names proceded by · are approved. 8-10-49 L. Heck

HISTORY OF HYDROGRAPHIC INFORMATION

T-8786

Calais, Maine Quadrangle

Hydrography was applied to the manuscript of this quadrangle in accordance with Division of Photogrammetry request of 26 September 1950, and with general specifications of 18 May 1949.

The depths are in feet at mean low water and originate with the following surveys:

USE Hydrographic Surveys

BP-46660 (1949) 1:2,000

BP-46661 (1949) 1:2,000

Bottom contours are shown at 0 (represented by a dotted line), and 6 feet.

The hydrography was compiled by R. E. Elkins and checked by G. F. Jordan.

R. E. Elkins

R. E. Elkins,
24 September 1950
Nautical Chart Branch

Review Report T-8786
Topographic Map
July 7, 1950

26. Control

Twenty-two triangulation stations were plotted on the map manuscript during review.

The only triangulation stations shown in Canada are along the edge of the detail limits. Several stations were not plotted since they are very close to stations already shown. Notes were added to the Form M-2388-12 indicating the status of each station that is not plotted.

Ten USC&GS bench marks were recovered in the field and are shown on the map manuscript.

28. Detailing

Detail inshore from the MHW line in Canada is incomplete and has been neither field inspected nor edited and is shown only for the information of the Hydrographic Party. This detail is not to be published.

The boundary of the Moosehorn National Wildlife Refuge was completed by the Field Editor. The boundary of a small area not included in the Refuge, near the Maine Central R.R., was added during review from a map of the Refuge Boundary submitted by the Field Editor.

31. Mean Low Water Line

Low altitude photographs covering all of the shoreline on this map were flown at low water. The approximate mean low water line was compiled from these photographs and reconciled with the Hydrographic Surveys. No changes were made in the original compilation.

44. Comparison with Existing Surveys

a)	USGS Calais Quadrangle	1:62,500	1932	Repr. 1944
b)	T-1150	1:10,000	1869	
	T-1940	"	1889	
	T-3246	"	1911	

This map supersedes these surveys in common area for nautical charting purposes.

45. Comparison with Nautical Charts

Chart No. 801 1:40,000 1949

Several minor changes have taken place in the wharf area at Calais and St. Stephen that are not shown on the chart.

47. Adequacy of the Compilation

This map, T-8786, is a complete topographic map and has been compared and reconciled with all hydrographic and topographic surveys of record in this Bureau and is, therefore, the most complete and accurate topographic map of record in the area covered. See Par. 28 relative to detail in Canada.

48. Accuracy Tests

The vertical accuracy test run on this quadrangle meets the project requirements. This map meets the National Standards of Map Accuracy.

49. Overlays

An overlay was prepared showing the border information, road classifications and route numbers, triangulation stations, bench marks and selected spot elevations that are to be shown by the draftsman.

Reviewed by:

Charles Theurer
C. Theurer

Approved by:

A. V. Griffith
Chief, Review Section
Division of Photogrammetry

H. C. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

W. M. Leaf
Chief, Div. of Coastal Surveys