U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Topographic
Field No.: A  Office No.: 7-6910

LOCALITY
State: MAINE
General locality: Outside Coast
Locality: Cape Small to Kennebec River

1942
CHIEF OF PARTY
C. D. Keene

LIBRARY & ARCHIVES
DATE: January 17, 1944
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. A

REGISTER NO.

State MAINE

General Locality Outside Coast

Locality Cape Small to Kennebec River Entrance

Scale 1:10,000 Date of survey Summer 1942

Vessel LYDONIA

Chief of party O. D. Keanev

Surveyed by Dale E. Sturmer

Inked by D. E. Sturmer and L. A. Axelton

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated March 11, 1942

Remarks: Graphic control survey.
DESCRIPTIVE REPORT

to accompany

GRAPHIC CONTROL SHEET

Field Letter "A"

Cape Small to Kennebec River Entrance

MAINE

INSTRUCTIONS:
This survey was executed in accordance with The Directors
Supplemental Instructions to the commanding officer, ship LYDONIA,
dated March 11, 1942, Project GS265.

SCALE:
The scale of this survey is 1:10,000.

LIMITS:
This survey covers the area eastward of Cape Small to the
Kennebec River entrance and includes Seguin Island. This survey
joins Surveys Field Letters "B" and "E" on the North, Survey Field
Letter "F" on the east and Survey Letter "F" on the West.

CONTROL:
Horizontal control consisted of triangulation of second
and third order accuracy executed by C. M. Durgin in 1933, K. G.
Crosby in 1934 and F. L. Bernstein in 1941. There are a few
additional stations located by the U. S. Engineers Department
and which have connections to Coast and Geodetic Survey stations.

SURVEY METHODS:
Standard planetectsurvey methods were used throughout.
No traverses were run.

HIGH WATER LINE:
A short stretch of high water line was located near signals
APE and APE. In inking the high water line the point located has
not been inked.

ROCKS AND REEFS:
As many off lying rocks and reefs were located as time per-
mitted. Because of the nature of the rocks and reefs it was
necessary to locate them at or near low water to get the proper
outline. Where reefs extend around islets the edge of the reef
was located with the note that the islet is above mean high water.
It is assumed the islet will be located from the air photos.
Listed below are the recoverable topographic stations
located on this survey. Descriptions of these stations are on
form 526.
MAGNETIC MERIDIAN:
The magnetic meridian shown on this sheet was observed with the declinometer for alidade #190. The index error of this declinometer is not known. The variation scaled from the sheet is 17° 52' W.

INKING:
The rocks, reefs, high water line and the projections were inked by the Topographers. The notes on the rocks and reefs and the names of aids to navigation were lettered by personnel of the Norfolk Processing Office under the Topographers' supervision. The remainder of the sheet was inked by personnel at the Norfolk Processing Office.

LANDMARKS FOR CHARTS:
Landmarks for charts is the subject of a separate report covering the entire project area.

Respectfully submitted,

Dale E. Sturmer
Lieut. U.S.C.G.S.

Approved, Forwarded:

C. D. Meaney
Lt. Comdr. C.G.S.
Commanding Ship LYDONIA

This graphic control sheet has been compiled with contemporary hydrographic surveys. No further review by the Hydrographic Survey Section is necessary at the present time.

R.H. Caradonna 6/5/46
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. C

REG. NO.

State MAINE

General Locality Kennebec River

Locality Phippsburg to Fiddler Beach

Scale 1:10,000 Date of survey Summer, 1942

Vessel LYDONIA

Chief of party C. D. Meaney

Surveyed by D. E. Sturmer

Inked by D. E. Sturmer & M. A. Axelton

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated March 11, 1942

Remarks: Graphic control survey.
DESCRIPTIVE REPORT
to accompany
GRAPHIC CONTROL SURVEY
Field Letter "C"
KENNEBEC RIVER, MAINE

INSTRUCTIONS:
This survey was executed in accordance with The Director's Supplemental Instructions issued to the Commanding Officer, Ship LYDONIA for project C.S. 265. The date of these Supplemental Instructions is March 11, 1942.

SCALE:
The scale of this survey is 1:10,000.

LIMITS:
This survey covers the Kennebec River from Phippsburg to the western end of Fiddlers Reach. This survey joins Survey Field Letter "E" on the south and Survey Field Letter "F" on the north both of which were executed by LYDONIA personnel during the 1942 season.

CONTROL:
The horizontal control consisted mainly of triangulation executed by the U. S. Engineer Department in 1940 and which has been tied into Coast and Geodetic Survey stations. A few intersections stations used were located by C. M. Burgin in 1933 and K. G. Crosby in 1934.

SURVEY METHODS:
Standard planetable survey methods were used throughout. The only traverse run was from triangulation station BackUSE on sheet "E" to Station Back River, 1855, 1934. The closing error was 2 meters for which no adjustment was made.

HIGH WATER LINE:
Stretches of high water were located at intervals of about one mile along the river. As the control points are very closely spaced, it was thought unnecessary to locate the high water line adjacent to each control point. The above was considered adequate. In inking the high water line the point located was not inked. The fine line indicated as the grass line just south of station Cove is not the high water line. At mean high water the area is flooded over.
ROCKS AND LOW WATER LINE:

Most of the rocks awash at any stage of the tide were located and an occasional stretch of low water line was rodded in. Because of the nature of the rocks and reefs almost all were rodded in at or near low water.

A thorough search was made at low water for the rocks awash shown in Fisher Eddy (Lat. 43-51.2, Long. 69-47.8) on chart 31A but it could not be found.

In areas where reefs extend out from the shoreline (such as 50 meters southeast of Phippsburg, ME, only the outer end of the reef was located. It was assumed the inner part of the reef will be located on the air photos.

Northeast of signal DOT (Lat. 43-52.5, Long. 69-49.4) is an old rock dam that has been broken through in many places. Just to the northeast of this old dam are several groups of piling which are the remains of old docks.

RECOVERABLE TOPOGRAPHIC STATIONS:

Listed below are the recoverable topographic stations located on this survey. Descriptions for these are on Form 524:

- KAN----Coast Guard Bell Tower (aid to navigation)
- FRO----Front range light
- REAR----Rear range light
- RAM----Light on skeleton steel tower (aid to navigation)
- BAR----Beacon
- BEACON----Beacon
- ZULU----Cupola on barn
- BRICK----Chimney on house
- LEY----Gable of shack

MAGNETIC MERIDIAN:

The magnetic meridian shown on this survey was observed with the declination for alidade #190, for which the index error is not known.

The variation scaled from the sheet is 16° 7' W.

MISCELLANEOUS:

The azimuth of Doubling Point range was determined by setting up on the range line near the rear light and drawing the range line through the frontlight. The azimuth as scaled from the sheet is 359° 45'. The value given in the light list is 359°. This range was used for clearing of Fiddler Ledge and Lithgow/W Rock. Both of these obstructions were being removed during the summer of 1942. When this project is completed the range will no longer be needed.

LANDMARK FOR CHART:

Landmarks for charts is the subject of a separate report covering the entire project area.
INKING:
The topographer inked the high water line, the rocks and reefs, and the projection. Topographic signals, triangulation stations, the notes on the rocks and reefs and the names of aids to navigation were inked by personnel at the Norfolk Processing Office under the topographer's supervision. The remainder of this sheet was inked by the Norfolk Processing Office Personnel.

Respectfully submitted,
Dale E. Sturmer
Lieut. U.S.C.G.S.

Approved, Forwarded:
C. D. Meaney
Lt. Comdr. C.G.S.
Commanding Ship LYDONIA

This graphic control sheet has been compared with contemporary hydrographic surveys. No further revision by the Hydrographic Survey section is necessary at the present time.

B.O. Castner 6/15/46