# 6802

U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 2-a Office No. H6802

### LOCALITY

State Natme

General locality Kennebec River

Bloff

Parker Bluff
Locality Gilbort Head to Parker Head

1942\_\_\_

CHIEF OF PARTY

C.D.Meaney

LIBRARY & ARCHIVES

DATE June 9, 1943



### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

## HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-6802

	A. The state of th	Fie	eld No	2 &	<b></b>		
State	ma ine	• 	<u>:</u>				·.
General lo	cality	KENNEBEC RIVER					
Locality	Parker <del>allowa</del>	HEAD TO PARKER	HEAD		# <del></del>		
Scale	1-5,000		Date	of survey .	May - Oc	tober, 194	2
Instructio	ns dated	March 11, 194					
Vessel	_	IA				· · ·	
Chief of 't	oarty	C.D. Meaney					· · · · · · · · · · · · · · · · · · ·
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#### DESCRIPTIVE REPORT

#### TO ACCOMPANY

#### HYDROGRAPHIC SHEET

NO. 6802

#### INSTRUCTIONS:

The authority for surveys of this area are contained in the following:

in the following:

Supplemental Instructions
Supplemental Instructions
Supplemental Instructions
Supplemental Instructions
Outline of areas to be dragged
Field Work

March 11, 1942 √
May 16, 1942(currents)
June 15, 1942
Jan.16,1942(currents)
July 10,1942(wire drag)
September 14, 1942

#### SURVEY METHODS:

Hydrography of the Kennebec River and the approaches to the river, executed in accordance with the Director's Instructions listed above was controlled by three point fixes on U. S. Engineers and U. S. Coast & Geodetic Survey triangulation stations and topographic stations located during 1942 by graphic control from these stations.

Submarine Signal Corporation 808 Depth Recorders mounted in Launches 79 and 82 were used for sounding. In general, bar-checks were very difficult to observe in the Kennebec River because currents are very strong and the current at different depths during certain stages of the tide seems to be setting in different directions. Current observations indicate that during slack water on the surface there is a current near the bottom. To furnish additional information a midchannel sounding line was run with the LYDONIA. A Dorsey No. 1 fathometer was used for sounding from the vicinity of Parker Flats to the vicinity of Bath, Additional comparisons between 808 Depth Recorder soundings and Dorsey Fathometer soundings were observed on Sheet 3 and near the junction of Sheet 3 and Sheet H-6730. (1941)

To furnish additional information for correcting soundings several serial temperatures were observed in the Kennebec River. The lowest specific gravity observed in the Kennebec River was 1.0032, the highest specific gravity observed was 1.0229. The average specific gravity observed in the Kennebec River is approximately 1.01.

#### CHANNELS:

During 1942 current observations were made at stations listed below:

Midchannel west of Bluff Head Anchorage on west side of the channel southwest of Crow Island

The records of these observations were submitted to the Director during the field season. Currents approaching 3.5 knots were observed during the summer. During spring thaws the currents are probably much stronger.

Entering, leaving or navigating the Kennebec River is dangerous during heavy fog. The channels are very narrow and the currents are strong. Whirlpools form in many parts of the river.

A ship, the size, speed and draft of the LYDONIA may be safely navigated in the entrance to the Kennebec River whenever visibility at the entrance to the river is one mile and in the Kennebec River to Bath Maine whenever the shoreline is visible along the river.

#### Back River:

A hydrographic survey of Back River for two miles north of its junction with the Kennebec River was executed. The controlling depth of the Back River surveyed is 7 feet.

#### ANCHORAGES:

The main anchorages on the Kennebec River are in 8 fathoms west of midchannel, 0.4 of a mile north of Carlton Bridge, on H-6800, and in 4 fathoms 0.3 of a mile southwest of Crow Island and east of the range of can buoy 1C and Phippsburg Church.

#### GEOGRAPHIC NAMES:

Geographic names is part of a report to be submitted by Lt. H. O. Fortin in connection with the air photo inspection of this area.

#### SCALE:

The scale of the boat sheets is 1:10,000. The scale of the smooth sheets of the Kennebec River is 1:5,000.

Respectfully submitted,

C. D. Meaney, Lieut. Comd'r. C&GS.

Copy of combined report which was signed by C. D. Meaney.

## STATISTICS

# HYDROGRAPHIC SHEET NO. 6802 & 6803

U. S. C. & G. S. LYDONIA - C. D. MEANEY, COMD'R.

Launch 79 - Lt. H. G. Conerly, In Charge

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Vol. No.	Date 1942	Day Letter	No. of Positions	Statute Miles	
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	Launch 79 -	Lt. Clare	nce A. George	e, In Charge	
XIII	10/12 10/13	u v	42 45	4.0	,
		Total	42 2497	224.4	
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I	10/13	a(red)	39	3.0	
	Launch 103 -	Lt. Dale	E. Sturmer,	In Charge	
I	10/13	a(green)	19	Bottom specim	ens

Vol.	Date 1942	Day Letter	No. of Positions	Statute Miles
	LYDONIA -	Lt. Comdr. C.	D. Meaney,	Comd'g.
I	6/12	A(red)	27	5.0

This is a sounding line run on sheets 1 and 2 on the Kennebec River to check 808 depth recorder soundings with Dorsey number one fathometer soundings.

25/8
Total Sheet 2 2582 232.4

# Surveys Section (Chart Division) HESC2 HYDROGRAPHIC SURVEY NO. .....

Records accompanying survey:	
Boat sheetsl.; sounding vols. 16; w	vire drag volsQ;
bomb vols ; graphic recorder rolls	20;
special reports, etcpone	
The following statistics will be submitted rapher's report on the sheet:	with the cartog-
Number of positions on sheet	1906
Number of positions checked	. 54
Number of positions revised	9
Number of soundings recorded	18,995
Number of soundings revised (refers to depth only)	!6
Number of soundings erroneously spaced	
Number of signals erroneously plotted or transferred	4
Topographic details Time	.1.4. brs.
Junctions Time	9 yū.
	••••
Verification by. Jessy Kry Total time	2.05 hrs. Date Od. 26.43
Review by J.A.McCormick Time	

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	Parker Head										4
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#### TIDE NOTE FOR HYDROGRAPHIC SHEET

September 24, 1943

Division\_of\_Hydrography\_and\_Topography:

Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in 16 volumes of sounding records for

HYDROGRAPHIC SHEET 6802

Locality Kennebec River, Gilbert Head to Parker Head, Maine

Chief of Party: C. D. Meaney in 1942
Plane of reference is mean low water reading
3.2 ft. on tide staff at Phippsburg
19.3 ft. below B. M. 1
2.9 ft. on tide staff at Fort Popham
14.8 ft. below B. M. 1

Height of mean high water above plane of reference is 8.0 feet at Phippsburg; 8.3 feet at Fort Popham.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

154327

# MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT No. H PHOTOSTAT OF No. T	H6802	received registered verified reviewed approved	Sept. 18, 1943 Sept 18, 1943 Oct. 26, 1943
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This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE	Initial	Attention called to
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RETURN TO

82 R. W. Knox

#### DIVISION OF CHARTS

#### REVIEW SECTION - SURVEYS BRANCH

#### REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6802

Field No. 2a

Maine; Kennebec River; Parker Head to Bluff Head Surveyed May - October 1942, Scale 1:5,000 Instructions dated March 11, 1942 (Project C.S. 265)

#### Soundings:

Control:

808 Recorder

Three-point fix on shore signals

Chief of Party - C. D. Meaney Surveyed by - LYDONIA'S OFFICERS Protracted by - A. Kaupa Soundings plotted by - A. Kaupa Verified and inked by - L. King Reviewed by - J. A. McCormick Inspected by - H. R. Edmonston, November 3, 1943

## 1. Shoreline and Signals

Shoreline and topographic signals are from topographic maps T-5972 and T-5973 and from graphic control surveys T-6910 and T-6911 of 1942.

#### 2. Sounding Line Crossings

Satisfactory.

#### 3. Depth Curves

Satisfactory.

## 4. Adjoining Surveys

Satisfactory junctions were effected with H-6801 (1942) on the north and H-6803 (1942) on the south.

### 5. Previous Surveys

## H-639 (1857), 1:10,000; H-776 (1862), 1:10,000

Major differences between old and new surveys are in the intensity of development and the control of sounding lines.

Cross channel lines on H-639 tended to exaggerate the shoaler areas. Times were not recorded for intermediate soundings and it is probable that they were taken as fast as the leadsman could haul his line. On the plotted sheet, soundings ranging from 1 to 51 feet were spaced at equal intervals. Typical examples on H-639 are the 2-foot depth (charted) in Lat. 43°50.0', Long. 69°47.95' and the 10-foot depth (charted) in Lat. 43°50.64', Long. 69°47.45'. A zero sounding (charted as a rock awash) in Lat. 43°51.18', Long. 69°47.48' on H-639 can also be disregarded but partly because of natural changes in its vicinity. Other areas which appear to have changed somewhat are Back River and Drummons Bay.

The old surveys can be considered completely superseded in this entire area.

## 6. Comparison with H-6799 (1942) W.D.

Groundings of the wire drag were consistent with the soundings of the present survey. Effective depths in the main channel ranged between 27 and 32 feet. The drag scraped constantly along the edges but conflicts between drag depths and soundings were few and unimportant.

## 7. Comparison with Chart 314 (Print of May 27, 1943)

Principal sources of hydrography charted in this area are superseded surveys covered in Par. 5 and U. S. Engineers' 1941 surveys filed as blueprints 37010 and 37011. None of the information on the Engineers' surveys need be retained.

Chart Letter 355 of 1942 is authority for depths of 6 feet in Lat. 43°50.88', Long. 69°47.83'; 6 feet in Lat. 43°50.52', Long. 69°47.52' and 4 feet in Lat. 43°47.26', Long. 69°47.36'. These are preliminary depths reported by the present field party and are superseded by final depths of 7 feet, 7 feet and 5 feet on the smooth sheet.

All survey positions of floating aids differ slightly from the positions charted. The nun buoy in Lat. 43°48.1', Long. 69°47.1' could be shifted slightly to better mark the entrance to Back River. Better locations also could be found for most of the others. Indian Point Beacon (Lat. 43°50.6', Long. 69°47.8') was removed from the chart by authority of H.O.N.to M. 22 of 1943.

- 8. Compliance with Project Instructions
  Satisfactory.
- 9. Additional Field Work Recommended
  None.

Examined and approved:

Chief, Surveys Branch

Chief, Section of Hydrography

Chief, Division of Charts

Chief, Division of Coastal Surveys

# NAUTICAL CHARTS BRANCH

SURVEY NO. H 6802

# Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
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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.

Partially applied to Cht. 1204 (before verification & review)
Oct. 1, 1943 X.X.

... ... Cht. 314 (before verification & review)
Oct. 28, 1943 X.R.

applied to Reconstr. ch. 230 5/5/45 STE