

6790

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6790

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. 41-40 Office No. H. 6790

LOCALITY

State Southwest Alaska
General locality Bering Sea
Locality North ^{of} ~~Coast~~ Unimak Island

194 C-41

CHIEF OF PARTY

G. L. Bean and H. A. Cotton

LIBRARY & ARCHIVES

DATE _____

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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.

Field No. 41-40 (H 6790)

REGISTER NO.

State Southwestern Alaska
General locality Bering Sea
Locality North ^{of} Coast Unimak Island
Scale 1:40000 Date of survey 6/26/40 to 6/12 19 41
Vessel Ship GUIDE and Port Motorsailer
Chief of Party G. E. Bean and H. A. Cotton
Surveyed by G. L. Bean, H. A. Cotton, H. G. Conerly, E. H. Kirsch
Protracted by R. W. Lowe
Soundings penciled by R. W. Lowe and C. A. Kester
Soundings in fathoms feet Fathoms
Plane of reference MLLW
Subdivision of wire dragged areas by _____
Inked by A. R. STIRNI
Verified by A. R. STIRNI
Instructions dated March 8, 19 39
Remarks: _____

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET H 6790
Project H 231
Bering Sea
North Coast of Unimak Island
U.S.C. & G.S.S.GUIDE
1940-41

INSTRUCTIONS

Instructions for this work were dated March 8, 1939. ✓

SURVEY METHODS

The port motorsailer and the Ship GUIDE were used for sounding and the procedure was according to the standard practice for visual hydrography, both boats using three point fixes for control and fathometers for sounding. Lieut. E. H. Kirsch was in charge of the motorsailer in 1941 and H. G. Conerly, Aid, in 1940. Comdr. H. A. Cotton was in charge of the Ship GUIDE in 1941 and Lieut. Comdr. G. A. Bean in 1940. ✓

The general system of sounding lines is parallel with the shoreline on the eastern half of the sheet and perpendicular to the shoreline on the western half. The spacing of lines is in accordance with the instructions. ✓

DISCREPANCIES

There are no serious discrepancies on this sheet. In a few places the soundings on lines crossing one another disagree by one fathom but this is due to the plotting of soundings in fathoms, the difference in depth being in most cases but a foot or two. ✓

Irregularity in the twenty fathom curve is also due to the method of plotting in fathoms ✓

DANGERS

The area covered by the southwestern quarter of this sheet has a very irregular bottom with shoal areas occurring in several places. All of these shoal areas were sounded with a system of cross lines and in one spot two hours were spent in drift sounding.

Latitude 55° 02.7'. A minimum depth of 6 4/6 fathoms was obtained in this area. There is no record of drift soundings being taken. Longitude 163° 59.7'. 83

A shoal area with a least depth of 9 3/4 fathoms was located in Latitude 55° 02.3', Longitude 164° 04.9.

Latitude 55° 01.0', Longitude 164° 16.0'. A minimum depth of 8 3/4 fathoms was obtained in this area.

Two hours were spent in drift sounding on the shoal located in Latitude 54° 58.6', Longitude 164° 11.5'. A least depth of 10 3/4 fathoms was found.

CHANNELS

There are no channels in the area covered by this sheet.

ANCHORAGES

This is an offshore sheet and there are no anchorages.

COMPARISON WITH PREVIOUS AND CONTEMPORARY SURVEYS

There are no previous surveys of this area. Contemporary surveys are not available in this office for a comparison of junctions.

GEOGRAPHIC NAMES

Presumably this topic was covered in Topographic sheet reports covering this area.

STATISTICS

Statute miles of sounding lines	1740.4
Number of soundings	20,830
Number of positions	3987

LIST OF SIGNALS

TRIANGULATION

ARIES, 1939
BIG DUNE, 1939
CAIRN
CONE
CAVE POINT, 1939
LAST, 1939
MAM, 1939

OTTER POINT
PAP, 1939
PIP, 1940
CARIBOU, 1939
SHOL, 1939
TWIN PEAK, 1939

TOPOGRAPHIC

Block
Bluff
Broad
Cad
Dor
Dune
*End
Fir

*Fly
Gap
Grass
It
Job
Lap
Lum
Mur

Needle
New
Pon
Red
Sig
Tar
Top

* Plotted from boat sheet

TIDAL DATA

Cape Mordvinof tides were used in 1940 to July 15. Subsequent to July 15, 1940 the tides from the defective Dutch Harbor Gage were used for the reduction of soundings (see Directors letter 30 McC, dated April 23, 1941),

In 1941 the gage at Amak Island was used for the reduction of soundings except for June 11 and 12th when the tides were reduced to Amak Island from the Dutch Harbor gage. The gage at Amak had been discontinued on these two later days.

MLLW reads -0.3' on the Amak staff,

MLLW reads 1.0' on the Cape Mordvinof staff.

MLLW reads 4.0' on the Dutch Harbor staff.

The smooth plotting on this sheet was done by Mr. Robert W. Lowe, Sr. Engineering Draftsman, under the supervision of Captain E. H. Pagenhart, at the office of the Western District in San Francisco, California.

The soundings were penciled by Mr. R. W. Lowe and Mr. C. A. Kester.

The depth curves were drawn and the descriptive report was written by Mr. C. A. Kester. It should be noted that no notes for the descriptive report were turned over to the processing office when the sheet was transferred.

The completed smooth sheet has been inspected and is forwarded.



E. H. Pagenhart, Supervisor
Western District
114 Customhouse
San Francisco, California

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6790**

Records accompanying survey:

Boat sheets ²...; sounding vols. ..15; wire drag vols. .0...;
 bomb vols. ⁰.....; graphic recorder rolls ⁰.....;
 special reports, etc. 1. Vol. Cuts, 1. Vol. Hydrophone Records, 3. Tracings

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	..3987
Number of positions checked	..47..
Number of positions revised	..3..
Number of soundings recorded	20,830
Number of soundings revised (refers to depth only)	..71..
Number of soundings erroneously spaced	..52..
Number of signals erroneously plotted or transferred
Topographic details	Time
Junctions	Time ..16..
Verification of soundings from graphic record	Time

Verification by *A. R. STIRN!* Total time .155.. Date *Nov. 3, 1943*

Review by *R. H. Carstens* Time 13... Date *Nov. 5, 1943*

H6790

Remarks

Decisions

	Remarks	Decisions
1		
2		U.S.G.B.
3		"
4		
5		
6		
7		
8		
9	Location of tide staff	
10	"	
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. **H6790**

Name on Survey	Source										No.
	A	B	C	D	E	F	G	H	K		
<u>Southwest Alaska</u>											1
<u>Bering Sea</u>											2
<u>Unimak Island</u>											3
											4
											5
											6
											7
											8
<u>Cape Mordvinof</u>											9
<u>Amak Island</u>											10
											11
											12
											13
											14
											15
											16
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											24
											25
											26
											27

Names underlined in red approved
by L. Heck on 11/8/43

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H **H6790**
 PHOTOSTAT OF } No. T

{ received July 21, 1943
 registered July 21, 1943
 verified
 reviewed
 approved

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
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
✓ 83	Pg 2	ABB.	
88			
90			

RETURN TO

82	R.W.Knox
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VPWC

LGC
HRE

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 28, 1943

~~Division of Hydrography and Topography:~~

Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
17 volumes of sounding records for

HYDROGRAPHIC SHEET 6790

Locality North Coast Unimak Island, Bering Sea, Southwestern Alaska

Chief of Party: E. W. Eickelberg, G. L. Bean and H. A. Cotton in 1940-1941
Plane of reference is mean lower low water reading
1.0 ft. on tide staff at Cape Mordvinof
6.6 ft. below B. M. 1
-0.3 ft. on tide staff at Amak Island
15.6 ft. below B. M. 1

Height of mean high water above plane of reference is 5.9 ft. at
Cape Mordvinof; 6.4 ft. at Amak Island.

Condition of records satisfactory except as noted below:

H. Q. Warner
Acting Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6790

Field No. 41-40

Southwest Alaska, Bering Sea, North of Unimak Island
Surveyed June 1940 - June 1941; Scale 1:40,000
Instructions dated March 8, 1939, and March 20, 1941

Soundings:

Hughes Fathometer
Dorsey Fathometer

Control:

Three-point fix on shore signals

Chief of Party - G. L. Beam, H. A. Cotton
Surveyed by - Ship's Officers
Protracted by - R. W. Lowe
Soundings plotted by - R. W. Lowe and C. A. Kester
Verified and inked by - A. R. Stirni
Reviewed by - R. H. Carstens -
Inspected by - H. R. Edmonston, November 18, 1943

1. Shoreline and Signals

No shoreline is shown on this offshore survey. The signals originate with T-6777 (1939-40), T-6778 (1940), T-6779 (1940), T-6780 (1940) and T-6858 (1940-41). Hydrographic station FLY was transferred from the boat sheet.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory. Soundings were plotted to quarter fathoms at the 20- and 30-fm. curves in order to permit a more accurate delineation of these curves.

4. Junctions with Contemporary Surveys

Satisfactory junctions were made with H-6624 (1940-41) and H-6623 (1939-40) on the south, H-6465 (1939) on the west, and H-6464 (1939) on the northwest. No surveys to the north or east are registered at the present time.

5. Comparison with Prior Surveys

H-3194 (1910-1915) 1:999,000

The Head reckoning line of soundings within the limits of the present survey is in good agreement with present depths. The present survey is adequate to supersede this prior survey within the common area.

6. Comparison with Chart 8860 (Latest print date 5-15-43)

a. Hydrography

The charted soundings within the limits of the present survey originate largely with miscellaneous sources and are, in general, from 2-7 fathoms deeper than present depths. They should be superseded by the present survey. Charted soundings originating with the previously discussed surveys are disposed of in item 5.

b. Aids to Navigation

No charted aids to navigation fall within the limits of the present survey.

7. Condition of Survey

Satisfactory, except that the Descriptive Report was written by the processing office rather than by the hydrographer.

8. Compliance with Instructions for the Project

Satisfactory.


9. Additional Field Work Recommended


None.

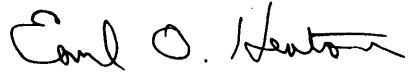
10. Superseded Surveys


H-3194 (1910-1915)

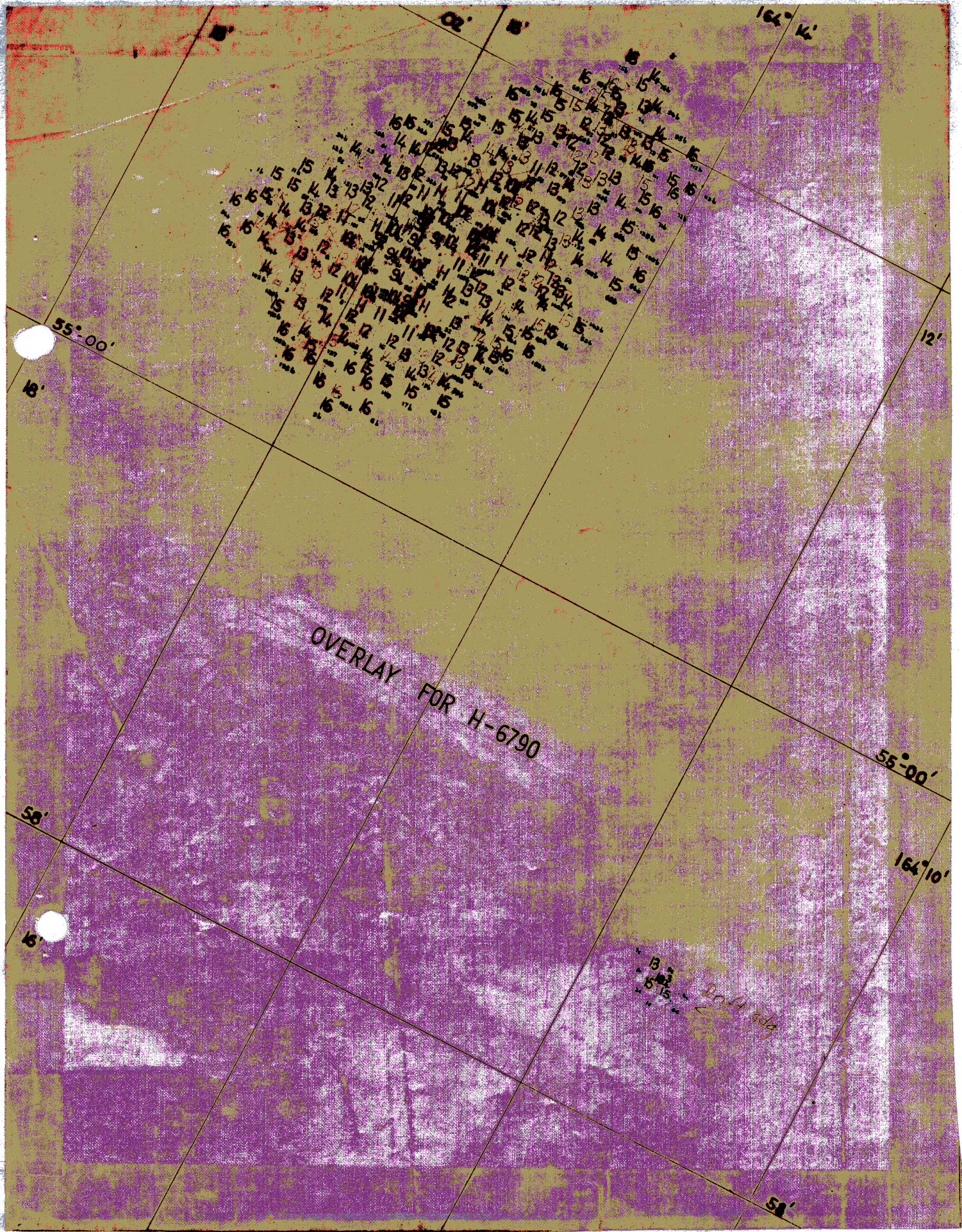
Examined and approved:

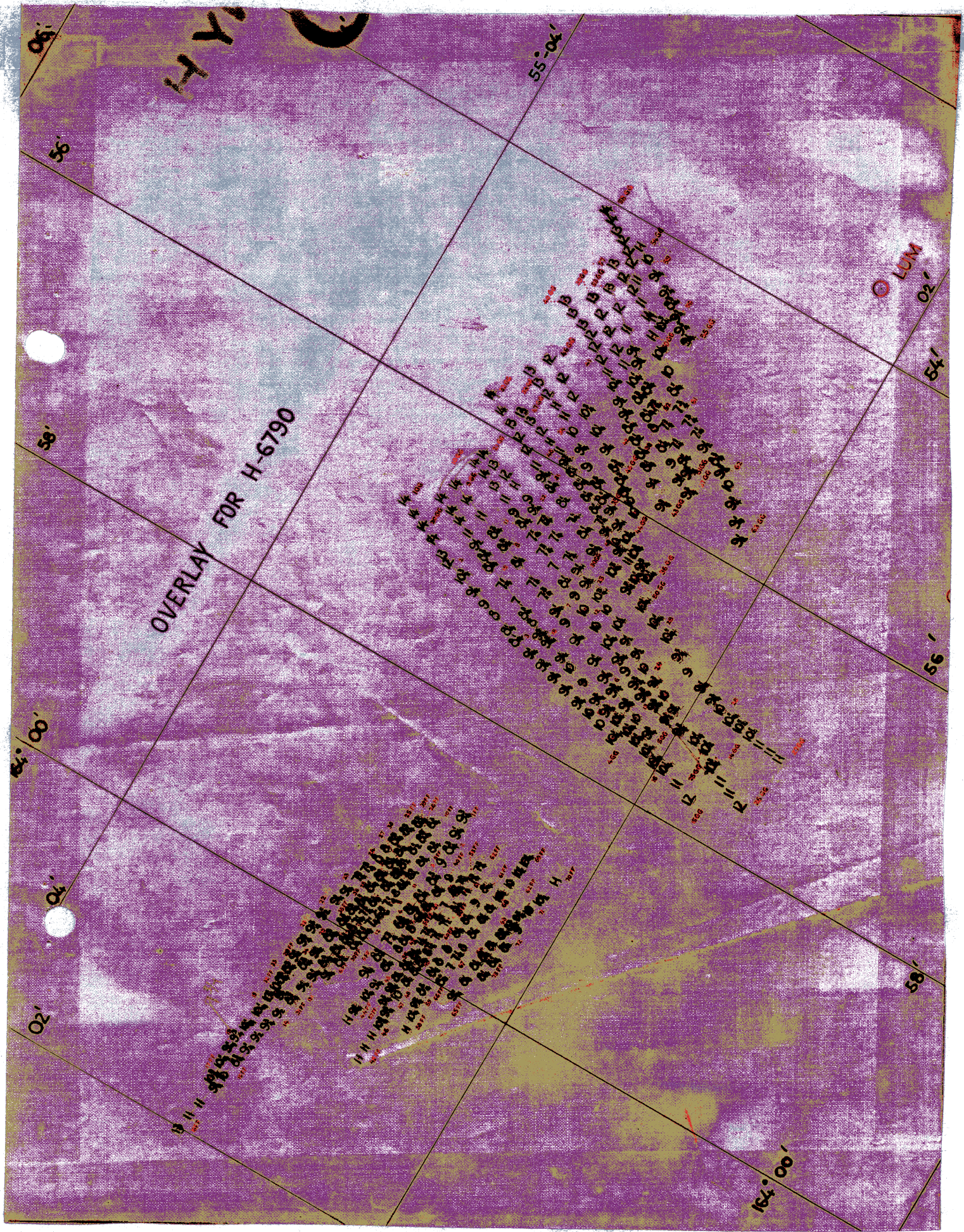

Chief, Surveys Branch


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of
Coastal Surveys





OVERLAY FOR H-6790

HYC

LUM

06'

56'

58'

02'

04'

02'

55° 04'

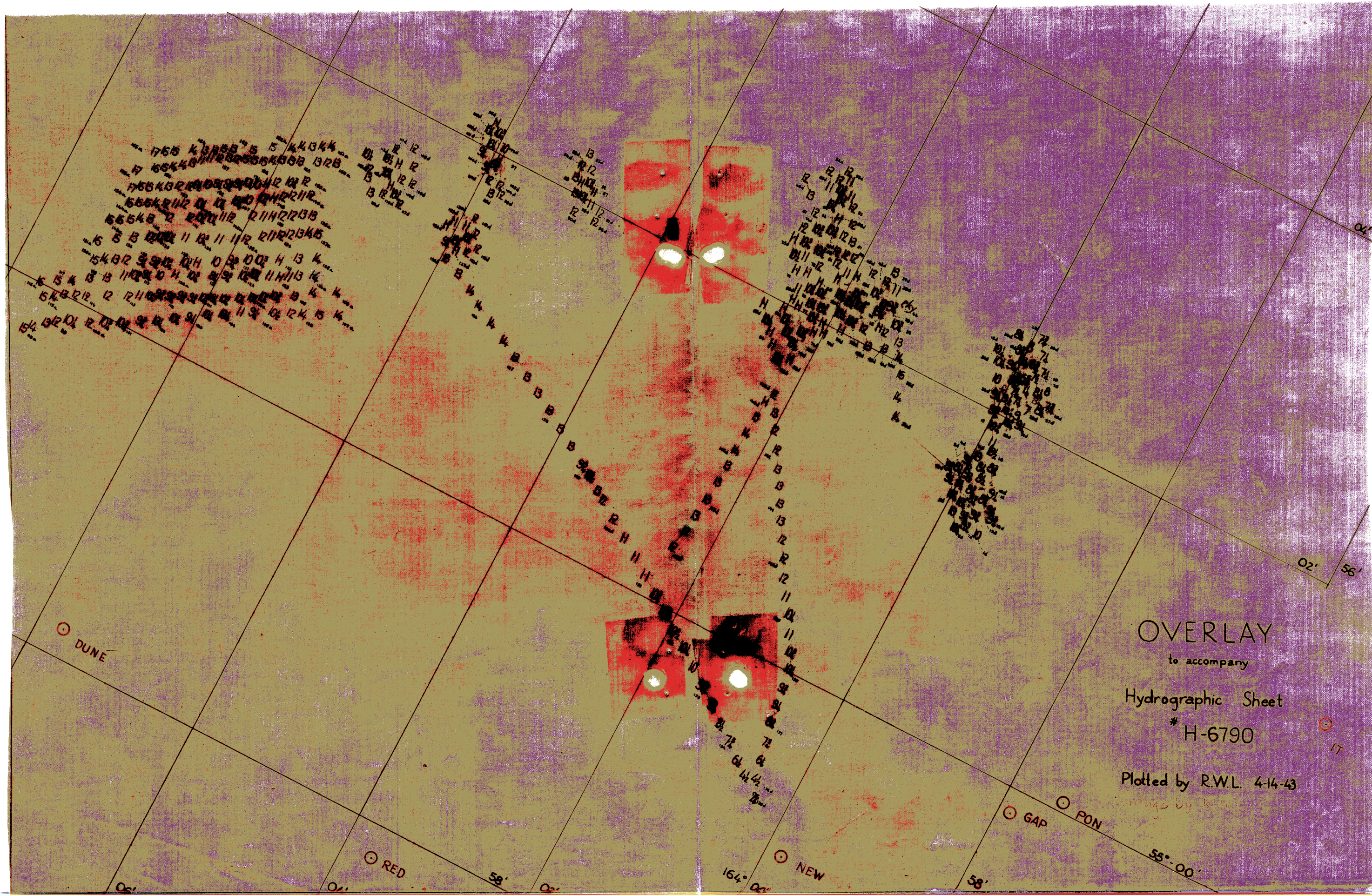
02'

54'

56'

58'

164° 00'



Partially applied (before being inked) to chart 8860 Oct. 15, 1943

	Applied to chart 8701	J.M.A.	March 16, 1944
completely	" " " 8860	J.H.S.	Mar. 28, 1944
	" " " 8802	J.H.S.	Mar. 28, 1944
	" " " 9302	J.H.S.	Mar. 28, 1944