

8189

00.4

Diag. Cht. No. 78-3.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. GO-1554 Office No. H-8189

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Dividing Creek and Vicinity

1945

CHIEF OF PARTY

J. C. Bull

LIBRARY & ARCHIVES

DATE May 8, 1957

B-1870-1 (1)

8189

p

Rev. B

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-8189

Field No. Co-1554

State VIRGINIA

General locality CHESAPEAKE BAY

Locality DIVIDING CREEK ^{and Vicinity} ~~TO GREAT WISCONAGO RIVER~~

Scale 1:10,000 Date of survey 9 Sept. to 27 Oct. 1954

Instructions dated 5 Feb. 1953 & 25 Feb. 1954

Vessel SHIP COWIE

Chief of party JOHN C. BULL

Surveyed by JOHN C. BULL, ALBERT J. RAMEY & J.M. OGILVIE

Soundings taken by ~~XXXXXX~~ graphic recorder, ~~XXXXXX~~ Pole ^{and Leadline}

Fathograms scaled by SHIP PERSONNEL

Fathograms checked by SHIP PERSONNEL

Protracted by R.G. HAJEC & A. KAUPA

Soundings penciled by A. KAUPA

Soundings in ~~XXXXX~~ fathoms feet at MLW ~~MLW~~ ^{and are true depths}

REMARKS: This survey was smooth plotted in the Hydrographic
Section of the Norfolk District Office

AKZ

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8189

FIELD NO. CO-1554

CHESAPEAKE BAY

DIVIDING CREEK TO
GREAT WICOMICO RIVER

SHIP COWIE

SCALE 1:10,000

COMDR. J.C. HULL
COMDG.A - PROJECT:

Project CS-287, Supplemental Instructions dated 5 Feb. ¹⁹⁵⁴ and Supplemental Instructions dated 25 Feb. 1954. ✓

B - SURVEY LIMITS AND DATES:

This survey is of Dividing Creek and Chesapeake Bay adjacent to it from lat. $37^{\circ}42.40'$, to lat. $37^{\circ}46.90'$, and eastward to long. $76^{\circ}16.50'$.
It makes junction with ^{H-8188(1954)} CO-1454 to the south, ^{H-8191(1954-55)} CO-2154 to the east and ^{H-8190(1954-55)} CO-1654 to the north. ✓

The survey began on 9 Sep. 1954 and concluded on 27 Oct. 1954. ✓

C - VESSELS AND EQUIPMENT:

Lch. No. 102, using 808 type fathometer no. 118-S was used in general depths of 5 ft. and upward, to a junction with ^{the ship's mark.} skiff no. 749, using 808 type fathometer no. 120-S and sounding pole was used in shoal areas along the shore, creeks and inlets. The launch and skiff operated from the Ship COWIE.

D - TIDE AND CURRENT STATIONS:

A portable automatic tide gage was installed and maintained at Ditchley, Dividing Creek throughout the period of this survey. Tide gage records and soundings are on Eastern Standard Time. No current stations were occupied within the limits of this survey. ✓

E - SMOOTH SHEET:

The smooth sheet ¹⁴⁹⁵ ~~will~~ be constructed and plotted by the Norfolk Processing Office.

F - CONTROL STATIONS; TRIANGULATION:

See N.P.O. Signal List

HUGH - Hugh 3, 1954 MARS - Marsh 1944

TOPOGRAPHIC: MANUSCRIPT NO. T-11053:

AGO	EEL	GOT	JAP	MOO	PIN	SAL	VAN
BUS	FEW	HIS	KEY	NIL	PUT	SKI	WOO
COW	FLY	HOE	KIM	OBI	RIO	TAR	YAK
DOG	GEM	IDA	LIZ	OUT	RUE	UKE	ZIG

MANUSCRIPT NO. T-11055:

AHA	BOX	DUG	GIN	JAR	NEO	SHE	VIA	ZOO
AMY	CAR	EMO	GUY	JAW	ORA	STY	VIX	
ANN	COD	EON	HAR	KED	PRO	TAX	WHY	
AZO	CUT	EVA	HER	LAY	QAK	TUB	WIG	
BED	DIM	FAC	HUG	LEO	QUO	UNI	YEO	
BOA	DIX	FRO	ION	LUX	RAT	USE	YES	
BOO	DUK	FUN	ITS	MOP	ROY	VET	ZAG	

G - SHORELINE AND TOPOGRAPHY:

The shoreline on the boat sheet was transferred from air-photo. manuscripts T-11053 and T-11055. *of 1952*

It was not practical to define the entire low water line by soundings due to the small range of tide in this area. The following areas have shoreline corrections as shown in red ink on the boat sheet.

- lat. 37°45.57', long. 76°19.16'. ✕
- lat. 37°44.25', long. 76°20.42'. ✕
- lat. 37°43.58', long. 76°20.10'. ✕

H - SOUNDINGS:

Soundings were taken with the 808 type fathometers, hand lead and sounding pole. Bar checks were used for obtaining fathometer corrections. Depths measured by fathometer, leadline and sounding pole agree satisfactorily and depth curves can be adequately drawn at the junctions.

SPECIAL NOTE:

$\phi 37^{\circ}43.75'$ $\lambda 76^{\circ}18.4'$
West

The area from signal JAR ~~east~~ ^{West}ward for 600 yards was reworked (on an overlay) because a crossline showed as much as 4 ft. discrepancies. It was found that the crossline was correct and the original work has been rejected. The rework was continued in all directions until it checked with the adjoining original work. The original was in error due to the fathometer shorting out at the arm pivot and thereby giving a false return.

I - CONTROL OF HYDROGRAPHY:

Sounding lines were controlled by three-point fixes using natural objects and signals on shore. Satisfactory results were obtained from using these signals.

J - ADEQUACY OF SURVEY:

This survey is considered ¹complete, adequate for charting purposes, and should supersede all prior surveys. Junctions with adjoining surveys are adequate, no holidays exist and depth curves can be adequately drawn at the junctions.

K - CROSSLINES:

Crosslines are in good agreement and comprise approximately eight percent of the principal system of lines.

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

L-M - COMPARISON WITH PRIOR SURVEYS AND CHARTS; SKIFF NO. 749:

- 1 - Item 6 (Preliminary Review) No trace of the 2 ft. sounding at lat. $37^{\circ}46.00'$, long. $76^{\circ}16.60'$ was found even though close development was done in the area. It is recommended that it be removed from the chart. ✓
- 2 - H252. The 12 ft. sounding at lat. $37^{\circ}44.95'$, long. $76^{\circ}17.70'$ was verified. This ¹⁰⁻¹² 12 ft. shoal extends 150 meters further to the east than shown on the chart.
- 3 - The creek entrance at lat. $37^{\circ}44.96'$, long. $76^{\circ}18.97'$ could not be entered and was closed off with 0.5 ft. soundings. ✓

LAUNCH 102 and SKIFF NO. 749:

A comparison with Chart 534 (print date 2/9/53) shows good agreement between the old and new surveys, maximum discrepancies being about 1 to 3 ft.

See
#64
Review

- 4 - The uncharted 2 ft. shoal in lat. $37^{\circ}46.02'$, long. $76^{\circ}16.60'$ was not verified, minimum depths obtained in this vicinity being 5 ft. This area was developed with closely spaced sounding lines and since there were no shoal indications, it is recommended that this sounding be removed from the chart. ✓

N - DANGERS AND SHOALS:

- 1 - In the vicinity of lat. $37^{\circ}42.96'$, long. $76^{\circ}19.15'$, and lat. $37^{\circ}43.00'$ long. $76^{\circ}19.21'$, powerlines cross these two creeks 35 ft. overhead, (see boat sheet) ✓
- 2 - In the vicinity of lat. $37^{\circ}43.36'$, long. $76^{\circ}19.50'$, power lines cross 35 ft. overhead, see boat sheet. ✓
- 3 - At lat. $37^{\circ}43.58'$, long. $76^{\circ}20.23'$ a powerline crosses 15 ft. overhead., see boat sheet. ✓

N - DANGERS AND SHOALS:

- 4 - At lat. 37°43.72', long. 76°19.62' is a steam engine in 3 ft. of water, bare 0.5 ft. (61-d, skiff 749).
- 5 - At lat. 37°43.85', long. 76°19.46' is a creosote pile in 10 ft. of water, bare 8 ft., pos. 42-d, skiff 749.
- 6 - At lat. 37°43.29', long. 76°18.86' is an old boiler in 2 ft. of water awash at low water. *pos. 50e (skiff)* **1 ft SHOCK area** **NP**
- 7 - At lat. 37°44.90', long. 76°20.65' is a wreck in 2 ft. of water, bare 1 ft., pos. 13-~~v~~, skiff 749.
- 8 - At lat. 37°44.43', long. 76°20.24' is a wreck in 3 ft. of water, mast bare 25 ft., skiff 749, position 44-j.
- 9 - At lat. 37°43.99', long. 76°19.30' is the offshore end of a rock jetty, pos. 162-m, skiff 749.
- 10 - At lat. 37°44.02', long. 76°19.33' is a pile in 13 ft. of water, bare 6 ft.
- 11 - At lat. 37°44.83', long. 76°20.40' is a power line 30 ft. overhead, see boat sheet.
- 12 - At lat. 37°45.05', long. 76°20.20', is a power line 33 ft. overhead, see boat sheet.
- 13 - At lat. 37°45.82', long. 76°19.20' is a telephone line 24 ft. overhead, see boat sheet.

Ø - COAST PILOT INFORMATION:

The Coast Pilot Report was forwarded to the Washington Office on

EXD:RER VDB:RER:
3 Nov. 1954.

EXD:RER VDB:RER:

EXD:RER VDB:RER:

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

P - AIDS TO NAVIGATION:

Form 567, Nonfloating Aids to Navigation is being prepared as a separate report.

Floating aids to navigation, within the limits of this survey are as follows: *SEE N.P.O. Floating Aids*

- 1 - Dividing Creek Entrance ^(Black Fl W) Lighted Buoy "1", lat. 37°42.67', long. 76°16.81' in 15 ft. of water. ✓
- 2 - Dividing Creek Spar Buoy "4", lat. 37°43.28', long. 76°18.24' in 12 ft. of water.
- 3 - Dividing Creek Spar Buoy "6", lat. 37°43.68', long. 76°18.77' in 13 ft. of water.

Q - LANDMARKS FOR CHARTS:

No landmarks are recommended for the area of this survey. ✓

R - GEOGRAPHIC NAMES:

Geographic names as shown on the charts of this area are adequate and no additional names are recommended.

U-Y - MISCELLANEOUS:

Fathometer corrections were obtained by averaging all bar checks for each survey vessel, the same fathometer being used throughout the season. An abstract of these corrections is included as part of this report. ✓

Z - TABULATION: of applicable data:

A list of signals is attached to Vol. I of the sounding records. A tabulation of the other data is included as part of this report. ✓

Respectfully submitted,

Albert J. Ramey
Albert J. Ramey,
Lieut. (j.g.),

J. Morgan Ogilvie
J. Morgan Ogilvie,
Ensign, USCGS.

Approved and forwarded: 3/25/55

Don Q. Jones

T I D E N O T E

A portable automatic tide gage at Ditchley, Dividing Creek, lat. $37^{\circ}44.01'$, long. $76^{\circ}19.35'$ was used for obtaining tide reducers for the entire survey. No time or height corrections were applied to the observed tides. The hourly heights were scaled from the mari-grams, and the tide curves were plotted by personnel of the Ship COWIE.

STATISTICS

LAUNCH NO. 102:

<u>DAY</u>	<u>DATE</u>	<u>VOL. NO.</u>	<u>STATUTE MILES</u>	<u>NO. OF POSITIONS</u>
a	9/17	I	15.8	94
b	9/24	I	15.6	100
c	9/28	I	7.2	46
d	10/5	II	29.9	186
e	10/6	II	15.9	87
e	10/6	III	6.1	35
f	10/12	III	18.4	140
g	10/13	III	16.4	102
g	10/13	IV	12.3	76
h	10/14	IV	8.0	63
j	10/25	IV	12.4	92
k	10/26	V	34.8	232
l	10/27	VI	27.1	185
TOTALS:			<u>219.9</u>	<u>1438</u>

SKIFF NO. 749:

a	9/9	VII	8.3	83
b	9/16	VII	18.4	174
c	9/17	VII	5.4	36
c	9/17	VIII	8.3	49
d	9/20	VIII	10.4	130
we	9/23	VIII	11.4	128
e	9/23	IX	8.5	64
f	9/24	IX	8.9	78
g	9/28	IX	6.8	73
h	9/29	IX	10.8	69
h	9/29	X	9.5	82
j	9/30	X	10.8	154
k	10/5	XI	23.7	214
l	10/6	XI	11.4	77
l	10/6	XII	2.6	29
m	10/12	XII	22.0	173
TOTAL:			<u>177.2</u>	<u>1613</u>
GRAND TOTAL:			397.1	3051

AREA: 11.2 Square statute miles.

PROCESSING OFFICE
LIST OF SIGNALS
H-8189

TRIANGULATION STATIONS

HUGH HUGH 3, 1954
MARS MARSH, 1944-52

TOPOGRAPHIC STATIONS

SOURCE T-11053

Ago	Bus	Cow	Doc	Eel	Few	Fly	Gem	Got	His
Hoe	Ida	Jap	Key	Liz	Moo	Nil	Out	Pin	Rio
Sal	Tar	Uke	Van	Woo	Yak	Zig			

SOURCE T-11055

Aha	Amy	Ann	Azo	Boa	Boo	Box	Car	Cod	Cut
Dim	Dix	Duk	Duo	Emo	Eon	Eva	Fac	Fro	Fun
Gin	Guy	Har	Her	Hug	Ion	Its	Jar	Jaw	Ked
Lay	Leo	Lux	Mop	Neo	Ora	Pro	Qak	Quo	Rat
Roy	She	Sty	Tax	Tub	Uni	Use	Vet	Via	Vix
Why	Wig	Yea	Yes	Zag	Zoo				

PROCESSING OFFICE

FLOATING AIDS TO NAVIGATION
H-8189

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
Dividing Creek Entr. Lighted Buoy 1	37-42.67	76-16.82	15'	1b	9/24/54
Dividing Creek Buoy 4	37-43.27	76-18.24	14'	62m	10/12/54
Dividing Creek Buoy 6	37-43.66	76-18.78	13'	147j	9/30/54

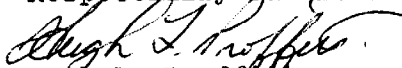
PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8189 (Field No. Co-1554)

GENERAL

This appears to be an excellent basic survey and no unusual conditions were encountered during the smooth plot.

Respectfully submitted,


Hugh L. Proffitt
Cartographer

Norfolk, Va.
1 May 1957

GEOGRAPHIC NAMES

Survey No. H-5139

Name on Survey	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On Chart No.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On previous survey No.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On U. S. quadrangle Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">From local information</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">On local Maps</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">P. O. Guide or Map</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Rand McNally Atlas</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">U. S. Light List</div> </div>									
	A	B	C	D	E	F	G	H	K	
<u>Virginia</u>			(for title)						BGN	1
<u>Chesapeake Bay</u>			"	"					"	2
<u>Great Wicomico River</u>			"	"					"	3
<u>Dividing Creek</u>									"	4
<u>Jarvis Point</u>										5
<u>Jarvis Creek</u>										6
<u>Prentice Creek</u>										7
<u>Ditchley</u>			(tide station)							8
<u>Lawrence Cove</u>										9
<u>Natty Point Cove</u>										10
<u>Hughlett Point</u>										11
<u>Ingram Cove</u>										12
<u>Ball Creek</u>										13
<u>Cloerdale Creek</u>										14
<u>Dameron Marsh</u>									BGN	15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved 5-24-57

L. Heck

see chart 534 for best placement of names.

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8189

FIELD NO. 00-1554

Virginia, Chesapeake Bay, Dividing Creek and Vicinity

Surveyed September-October, 1954

Scale 1:20,000

Project No. CS-287

• Soundings:

808 Depth Recorder
Sounding Pole
Hand lead

Control:

Sextant fixes on
shore signals

Chief of Party - J. C. Bull
Surveyed by - J. C. Bull, A. J. Ramey and J. M. Ogilvie
Protracted by - R. G. Hajec and A. Kaupa
Soundings plotted by - A. Kaupa
Preliminary verification - I. M. Zeskind
Reviewed by - I. M. Zeskind Date: 8/20/58
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with reviewed air-photographic surveys T-11053 and T-11055 of 1952, supplemented by several corrections to the shoreline made by the hydrographic party. These corrections are shown in red color.

The source of the control is described in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves supplemented by the 3-ft. curve were adequately delineated.

This is a survey of the west shore of Chesapeake Bay between Dameron Marsh and Jarvis Point and several tributary creeks, the largest of which is Dividing Creek. The bottom is fairly irregular with shoals, flats, deeps and spits contributing to the irregularity.

4. Junctions with Contemporary Surveys

The junctions with H-8190 (1954-55) on the north, with H-8191 (1954-55) on the east and with H-8188 (1954) on the south will be discussed in the reviews of those surveys.

5. Comparison with Prior Surveys

H-1005 (1869), 1:20,000
H-252 (1849-51), 1:40,000

These early reconnaissance surveys cover the area of the present survey. Only minor differences in depths of 1-2 ft. are generally noted between the prior and present surveys. However, in several areas differences in depths of as much as 4 ft. are noted, as for example, in lat. $37^{\circ}43.48'$, long. $76^{\circ}18.14'$, where a prior depth of 2 ft. falls in present depths of 5-6 ft. The shorelines of the creeks have generally eroded, with the greatest erosion occurring at the mouth of Dividing Creek, where Jarvis Point has eroded in a southwesterly direction about 100 meters and Hughlett Point has eroded in a northwesterly direction about 100 meters.

The 6-1/2 ft. sounding charted in lat. $37^{\circ}44.53'$, long. $76^{\circ}20.15'$, from H-1005 falls in the entrance to Lawrence Cove in present depths of 9-11 ft. The present survey shows a controlling depth of 8 ft. in Lawrence Cove as far as the vicinity of lat. $37^{\circ}44.35'$. The 6-1/2 ft. sounding should be deleted from the chart.

The present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 534 (Latest print date 4/7/58)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which need no further consideration and with partial application of the present survey prior to verification and review. Only minor differences of 1-4 ft. between the charted and present depths are noted. The following differences between the charted information and the present survey are specifically mentioned:

1. A pier located on air-photographic survey T-11055 (1952) in lat. $37^{\circ}44.17'$, long. $76^{\circ}19.02'$ has not been charted.

2. The several groins charted on the southwest shore of Hughlett Point originate with corrections on a Geological Survey Quad applied from 1951 - "J" camera photography. Re-examination of the photographs failed to reveal these groins. These groins are not found on the 1952 - 9 lens photographs from which T-11055 was compiled. They should be removed from the chart.
3. The 2 islets charted in lat. $37^{\circ}43.28'$, long. $76^{\circ}19.17'$ originate with planimetric survey T-8343 (1944-46) and fall in present depths of 1/2 ft. These islets appear to be grass in water which were neither located on the present survey nor shown on air-photographic survey T-11055 (1952). It is, however, recommended that these islets be retained on the chart to show the extent of the shoal area.

The present survey is adequate to supersede the charted hydrography.

B. Aids to Navigation

The present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended, except that lighted buoy "1" is located on the present survey 200 meters southeast of its charted position. This buoy would serve better if located about 180 meters north of its charted position where it would mark the end of a ridge with a least depth of 10 ft.

7. Condition of Survey

- a. This survey has only been given a preliminary verification. The Descriptive Report is complete and covers all matters of importance.
- b. The smooth plotting of the sounding lines inked was accurately done. Additional comment if necessary will be made when the verification is completed.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

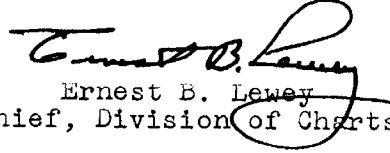
9. Additional Field Work Recommended

The survey is considered basic and no additional field work is recommended.

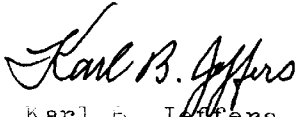
Examined and approved:



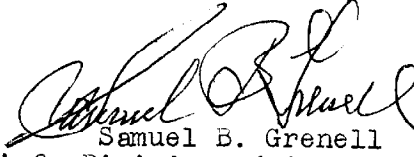
Max G. Ricketts
Chief, Nautical Chart Branch



Ernest B. Lewey
Chief, Division of Charts



Karl B. Jeffers
Chief, Hydrography Branch



Samuel B. Grenell
Chief, Division of Coastal Surveys

ADDENDUM TO REVIEW H-8189 (1954)

Verified and inked by ----- J. T. Gallahan; C. R. Lehman
Review Addendum by ----- I. M. Zeskind 7-13-61
Inspected by ----- R. H. Carstens

The verification of this survey has been completed. Soundings and depth curves have been completely inked and the junctional soundings added from verified surveys.

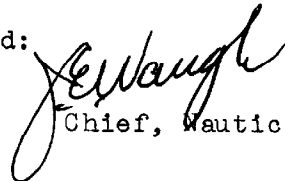
Comparison with Chart 534 (Latest print date 8-14-60)

The charted hydrography originates with the present survey after preliminary verification and prior to the complete inking of the smooth sheet. There are only minor 1-ft. differences between the charted and present survey depths.

Condition of Survey

- a. Completion of verification and inking reveals that the smooth plotting was well done.
- b. The Descriptive Report is complete and comprehensive.

Approved:

 9/1/61
Chief, Nautical Chart Div.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8189....

Records accompanying survey:

Boat sheets 1 (2pts) sounding vols. .12.; wire drag vols.;
 bomb vols.; graphic recorder rolls 9 - Envelopes
 special reports, etc. 1 - Smooth sheet. 1 - Descriptive report....
 ..and 1 - Boat sheet overlay.....

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

Number of positions on sheet		3051
Number of positions checked		.12... 6
Number of positions revised		..2... none
Number of soundings revised (refers to depth only)		..50 * 14
Number of soundings erroneously spaced		..0... 5
Number of signals erroneously plotted or transferred		..0....
Topographic details	Time	..3... 1 hr
Junctions	Time	..1.30
Verification of soundings from graphic record	Time	..8... 2 hrs
Prd verif by - <i>Juzekund</i>		29 8-15-58
Verification by <i>Starna P. Tehman</i>	Total time Date 11/1/58
<i>Juzekund</i>		20 8-20-58
Reviewed by.....	Time Date

* Largely corr. to account for days not recording.
 Lat. 37°45'53"
 Long. 76°15'07" Two Sndys (indication of possible wreck)

