WIRE DRAG
6356

WIRE DRAG
6356

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic / *Hydrographic* } *Sheet No.* 1 W.D.

State S.E.Alaska

LOCALITY

Sitka Harbor

Southerly Approaches

1938

CHIEF OF PARTY

C. C. Jones

U.S. GOVERNMENT PRINTING OFFICE: 1934

Form 537
Ed. Sept., 1929

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. 1WD

REGISTER NO. 6356-WD H-6356 W.D.

State S.E. Alaska

General locality Sitka ~~Sound~~ Harbor

Locality ~~Southern part of Sitka Sound~~ Southerly Approaches

Scale 1:10,000 Date of survey May-June-July, 1938

Vessel U.S.C. & G.S.S. EXPLORER

Chief of Party G. C. Jones

Surveyed by G. C. Jones

Protracted by J. C. Ellerbe

Soundings penciled by J. C. Ellerbe

Soundings in fathoms ~~& feet~~ Subdivision of wire drag areas in feet H.F.S.

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by J. C. Ellerbe & H.F. Stegman

Inked by Harald F. Stegman

Verified by Harald F. Stegman

Instructions dated March 7, 1938

Remarks: Project HT-220

U. S. GOVERNMENT PRINTING OFFICE: 1930

DESCRIPTIVE REPORT

TO ACCOMPANY

WIRE DRAG SHEET ACC. NO. 6356-WD

SITKA SOUND AND VICINITY

PROJECT #220

U. S. C. & G. S. S. EXPLORER

G. C. Jones, Comdg.

1-9-3-8

DESCRIPTIVE REPORT

TO ACCOMPANY

WIRE DRAG SHEET ACC. NO. 6356-WD

SITKA SOUND AND VICINITY

PROJECT #220

U. S. C. & G. S. S. EXPLORER

G. C. Jones, Comdg.

1 9 3 8

AUTHORITY:

This survey was executed in accordance with Instructions by the Director for Project No. 220, dated March 7, 1938.

EXTENT:

This survey covers parts of Sitka Sound, East Channel, Middle Channel, and West Channel, as outlined by Instructions.

METHODS:

This survey was executed with standard wire drag equipment as specified by Special Publication No. 118, using the launches Delta and Tender No. 2, for drag launches and launch No. 69 for the drag masters' tender. A small portion of the survey was done with the skiff drag, a special arrangement of equipment worked out by this party to facilitate dragging in certain complicated and inaccessible, yet important, areas, where great flexibility of the drag was necessary. A special report on the construction and operation of this drag has been submitted.

CONTROL:

Trinagulation and topographic stations located by this party during the season 1938.

FIELD WORK:

Since this survey covers a rather complicated area, it

was necessary to drag certain spots again and again before the absolute least depth could be found and cleared. In accordance with instructions, dragging operations were executed before the other phases of the survey were accomplished, therefore it was necessary to use the soundings on the charts and photostats of the area concerned to govern the depth of the drag strips. It was found that the old surveys failed to find a numer of shoal spots, thus causing numerous groundings of the drag in apparently deep water, and consequent loss of time. This factor also complicated the sheet considerably, in that the number of lines necessary to cover the area was more than double the number which should have sufficed had a complete hydrographic survey been executed before dragging began.

Since triangulation had not been accomplished in this area when the drag survey was begun, it was necessary to use spotted positions of the stations for control on well over half of the work. Because of this fact, a very generous overlap was made on all lines to avoid possibility of splits. About midway in the field work, positions of triangulation stations were obtained andplotted, and thereafter, a normal overlap of lines was used.

A very serious attempt was made to clear all important shoal spots by from one to three feet.

On two occasions, excessive lift was encountered, once in Middle Channel and once in Whiting Harbor. In each case, the lines concerned were rejected and the area covered again.

It will be noted that the contours of Middle Channel were changed to such an extent that this waterway is no longer fit for passage of boats larger than small fishing craft.

A very comprehensive drag survey was made of Jamestown Bay, since the Navy plans to use this bay as a possible seaplane base. The skiff drag was used for the close inshore work here, and was very successful in determining the least depths near the high water line.

It will be noted that all of the deeper portions of the South and West Channels, were swept at 90 to 96 feet, but since the lift allowed on these lines was excessive as a

factor of safety, the actual effective depth was somewhat greater. An attempt was made to drag certain other areas to depths of 80 feet, but several of the aluminum toggles collapsed at this depth. Therefore, an effective depth of about 60 feet was never exceeded thereafter. N.B.

It will also be noted, in the records, that the work on "g" day was performed under very adverse weather conditions, and that the position of the ground at the end of the day was very indefinite, since no sextant fix was obtained. However, the position of a subsequent ground (#39 "s" day) checked the approximate position of the ground encountered on "g" day, thus proving that the first assumed position of this shoal was correct. The latter part of "g" day was therefore accepted and plotted, although parts of the area covered were dragged again later.

Rocky Patch, marked by Lighthouse Service Buoy N-2, was covered very thoroughly by lines from three directions. In each case, the ground wire was wrapped around the buoy, with a generous overlap into area covered by previous lines, and it is felt that the entire patch is adequately covered.

In Middle Channel, a sounding of 6-3/6 fathoms will be noted about 150 meters northwest of triangulation station "OLD". This shoal was not discovered on the original line run through the entrance from the southward, as the channel between Kayak Islands and Passage Islands narrows down to such an extent that it was necessary to pull the drag through sideways, thus pulling the deeper section (42 feet) around on the eastern side of the shoal. A momentary ground near buoy No. 3, was noted and the approximate position marked for investigation, but on the reverse, after a subsequent grounding, the drag struck this 6-3/6 fathom shoal between buoys 3 and 4, and the spot was immediately investigated.

It will be noted that the rock awash charted in Latitude 57°02.5' and Longitude 135°24.7' was proved non-existent, being covered by a 48 foot drag. Discussed in review of H-6355.

It will also be noted that a least depth of 4-5/6 fathoms was found in a charted depth of 30 fathoms about 300 meters N.N.E. of Zenobia Rock. Lat. 57°00.5' Long. 135°22.8'

PLOTTING: See par. 5b, review.

Due to the excessive number of lines on many areas of this sheet, it was found very impracticable to sub-divide each strip on the smooth sheet, as the Manual indicates. It was found difficult to differentiate between end-buoy paths in some areas, and it was felt that if sub-division were accomplished on the sheet, it would be impossible to segregate the various effective depths of the strips. Therefore, after due consideration and consultation as to procedure, it was decided to dispense with the actual sub-division and proceed directly from the smooth sheet plotting to the area and depth diagram. As each day's work was plotted, it was sub-divided on a working diagram (depth-area) and the diagram corrected accordingly as changes of depths in the areas affected occurred. The obsolete sections of the previous work and the unneeded parts of the new work were then erased. Thus, as the plotting proceeded, the area and depth diagram was kept fully corrected and up to date.

Upon completion of the plotting, the area-depth diagram was traced in proper colors, and is being submitted with the sheet.

In the sub-dividing, the celluloid buoy spacer was used and found satisfactory except in a few cases where sharp turns or complicated maneuvers were encountered. However, these cases were comparatively few, and the strips here were sub-divided according to the most probable paths of the intermediate buoys.

COMPARISONS WITH PREVIOUS AND PRESENT SURVEYS:

As the previous surveys of this area were entirely inadequate and in places erroneous, no comparison was attempted. See reviews of H-6350 to H-6355, inc.

A cursory inspection of the present hydrographic surveys was made for discrepancies, but none were noted. Due to different scale hydrographic sheets in parts of the area covered by this sheet, a very thorough comparison was almost impossible in the time available. Par. 3, review.

JUNCTIONS:

A satisfactory junction was made with wire drag Sheet No. 6357 covering areas to the northward. Par. 7, review.

CHANNELS, ANCHORAGES, ETC:

Information on channels, harbors, anchorages, etc., is contained in reports on contemporary hydrographic and topographic sheets.

STATISTICS:

Number of Positions	--	1001
Number of soundings	--	234
Statute miles of wire drag	--	84.3
Area covered in square statute miles	--	17.5

A table of statistics in detail and a tidal data sheet are attached to this report.

Respectfully submitted,

John C. Ellerbe

John C. Ellerbe,
Jr. H. & G. Engr.,
Coast & Geodetic Survey.

APPROVED AND FORWARDED:

G. C. Jones,
Chief of Party, C. & G. S.,
Comdg. U.S.C. & G.S.S. EXPLORER

STATISTICS WIRE DRAG SHEET ACC. NO. 6356-WD

DATE		LETTER	VOLUME	DRAG LENGTH	POSITIONS	STATUTE MILES	SOUNDINGS
May	23	a	1	5600	19	2.5	--
"	26	b	1	4000	50	7.3	--
"	27	c	1	4000	36	4.6	2
"	28	d	1	4000	17	3.0	1
"	31	e	1	2800	30	3.0	5
June	2	f	2	1800 2800	53	3.0	14
"	3	g	2	2400	19	2.5	--
"	13	h	3	4000	17	1.2	8
"	14	j	3	4000	49	4.4	15
"	15	k	3	4000	52	4.5	12
"	16	l	3	4000	39	2.5	10
"	20	m	4	3200	87	6.9	3
"	21	n	4	4000	61	6.8	8
"	22	p	4	4000	63	5.0	12
"	23	q	5	4000	56	4.7	18
"	24	r	5	3500 2800	68	5.4	12
"	27	s	6	1600 900 2400	64	5.4	31
July	1	t	6	1600 2400 1200	49	3.4	27
"	2	u	6	1200 800	34	2.1	12
"	7	v	7	4000 1500 2400	49	2.9	32
"	8	w	7	600	7	0.5	4
Aug.	22	x	7	600	62	1.7	8
	24	y	7	600	20	1.0	
TOTALS					1001	84.3	234

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6356 W. D.

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

Number of positions on sheet	1001 Wire Drag 234 Sdg Tender
Number of positions checked	66 Wire Drag 146 Sdg. Tender
Number of positions revised	3 Wire Drag 5 Sdg Tender
Number of soundings recorded	234
Number of soundings revised	None.
Number of soundings erroneously spaced	—
Number of signals erroneously plotted or transferred	None.

Date: July 28, 1939

Verification by H.F. Stegman Time: 12 3/4 hrs.

Review by J.A. Mc Cormick 8/31/39 Time: 26 hr.

2629

HYDROGRAPHIC SURVEY NO. H6356 W.D.

Smooth Sheet Yes

Boat Sheet Two

Records; Sounding 2 Vols., Wire Drag 12 Vols., Bomb ___ Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol.#1

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party None

Recoverable Station Cards (Form 524) ----

Special Chart for Lighthouse Service Yes
(Circular Nov.30, 1933)

Hydrography: Total Days 23 ; Last Date Aug. 24, 1938

Remarks

2776

	Remarks	Decisions
1	omit	570350 U. S. G. B
2		570353
3		"
4		"
5		"
6		570352
7		"
8		570353
9		"
10		"
11		
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26		
27		

GEOGRAPHIC NAMES

Survey No. H6356 W.D.

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Baranof Island										1
Sitka Harbor										2
Eastern Channel										3
Western Channel										4
Middle Channel										5
Jamestown Bay										6
Rocky Patch										7
Zenobia Rock										8
Kayakm Islands										9
Passage Islands										10
										11
										12
										13
										14
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										24
										25
										26
										27
										M 234

Names underlined in red approved by L Haen on 5/24/39

RAC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 1, 1939

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis

Plane of reference approved in
14 volumes of sounding/records for
and wire drag

HYDROGRAPHIC SHEET 6356

Locality Southerly Approaches to Sitka Harbor

Chief of Party: G. C. Jones in 1938
Plane of reference is mean lower low water reading
5.0 ft. on tide staff at Sitka, Standard Oil Dock
13.1 ft. below B. M. 1

Height of mean high water above plane of reference is 9.1.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154327

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTATIC~~ } No. H-6356 W.D.
~~No. T~~

received April 26, 1939
registered May 12, 1939
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			
88			
90			

RETURN TO

82	T. B. Reed

✓ JBR

VERIFICATION REPORT
ON H-6356 (1938) WD

1. CONDITION OF RECORDS

The records are neat and legible, and conform to the requirements of the Wire Drag Manual except that:

1. In most cases no check angles were taken on tender positions ✓ Noted in review.

2. Bottom characteristics were not shown on the smooth sheet. In ✓ a few cases the bottom was not recorded. (Tender Pos 5e) Noted in review.

3. On the skiff drag both position angles were taken by one observer. Since the scale of this sheet is 1:10,000, and the skiff speed was less than 1 knot, it is probable that the error caused by this practice is negligible. ✓

4. Wire drag positions are recorded and inked in lower case red, with Tender positions in lower case blue. The manual states ✓ that the former should be in upper case, and the latter in lower case of the same color. Noted in review.

5. Some confusion was caused by recording the End launch towline length in feet (For example see pos 1 - Q day) In copying the length into the Guide launch record this length was converted into meters approximately, (on Q day 400 ft (123.2 m) was copied as 135 meters) The maximum error caused by this

conversion was 1.2 mm. This error was not corrected as it was believed to be within the probable error of the F buoy positions, and its direction would be almost along the F buoy path, thus not changing the area covered by the strip. No comment in review.

6. Launch speed on A, B, and C days was 2 to 2½ knots, being in excess of the 1½ knot maximum recommended in the Wire Drag Manual. It is believed that this speed caused the 10 foot lift recorded on those days. Effective depths 90 to 96 ft. Acceptable.

The Descriptive Report (page 3, paragraph 4) discusses the 6½fm sdg (Tender pos 6T) ϕ-57°-01.6 λ-135°-21.5. When the verifier mentioned in the report subdivided the strip, it was noted that this shoal was covered by the inclined section (32 to 42 ft). This explains the momentary grounding recorded at pos 17 T Guide launch. ✓

2. SHORELINE AND SIGNALS

Shoreline and signals originate with the following Topographic Sheets: ✓

T-6631	(1938)	1:5,000
T-6632	(1938)	1:5,000
T-6633	(1938)	1:5,000
T-6635	(1938)	1:10,000
T-6636	(1938)	1:10,000

3. JUNCTIONS WITH CONTEMPORARY WIRE DRAG SURVEYS

This sheet joins H-6357 (1938) WD in the vicinity of ϕ - 57°02.8' λ - 135°-20.0' and ϕ - 57°-02.8' λ - 135°-24.0'. The junction is satisfactory. On the strip continuous from pos 43r H-6356 to pos 10F H-6357 there is a change from 32 ft effective depth to 31 ft effective depth at the junction (ϕ - 57°02.8' λ - 135°-24.0') This is caused by a change in recorded lift, from 1ft to 2 ft. ✓

4. JUNCTIONS WITH CONTEMPORARY HYDROGRAPHIC SURVEYS.

The following hydrographic sheets fall, entirely or in part, within the area of H-6356 WD:

H-6352 (1938) 1:5,000

H-6353 (1938) 1:5,000

H-6354 (1938) 1:10,000

H-6355 (1938) 1:10,000

H-6352 and H-6353 are not yet completely verified. Soundings, Groundings, and bottom characteristics were transferred from H-6356 WD to H-6354 and H-6355, by the verifier of H-6356 WD. All transfers completed.

5. FIELD PLOTTING See par. 5b, review.

The Descriptive Report, page 4, paragraph 1, outlines the method followed by the field party in plotting this sheet. Briefly, this consisted of showing only the extreme limits of each strip (in pencil) on the smooth sheet. All subdivisions, tide changes and ~~fix~~ depth changes were inked directly on the Area and Depth Tracing in those cases where it was affected.

The only advantage claimed for this method is that it does not necessitate the somewhat complicated smooth plotting. However, if each strip had been inked as it was plotted, and then added to the A and D sheet, the plotting could have been completed without confusing the field draftsman.

It is believed that the field party's method of plotting is unsatisfactory, for the following reasons:

1. There is no permanent record of the various drag strips as surveyed. In case a comparison of the A and D sheet with the hydrographic sheet reveals a discrepancy, it would be necessary to examine the records of each strip in the area, in order to find the one with the greatest depth, and to plot the subdivisions of that strip.

2. When working with Two or three different sheets (smooth sheet, strip subdivision Tracing, and A and D sheet) errors are more likely to occur. For example 2 strips run on E day, in ϕ - 57°-02' λ-135°-18' were plotted with the N buoy side and F buoy side reversed, causing errors as great as 30 ft in the diagram. At other Times depths were shown 10 ft in error, or small areas in the diagram were omitted entirely.

The verifier did the following drafting on this sheet:

1. Subdivided all strips, including tide and depth changes.
2. Inked all strips, including F buoy positions, which had not been inked in the field.
3. Inked Tender sdgs and bottom characteristics.
4. Prepared pencil A and D Tracing.
5. Added all shoreline and prominent rocks awash from contemporary Topo sheets. No shoreline was transferred by the field party.
6. Added 16 groundings to the sheet, from notes in the records.

Respectfully submitted

Harold F. Stegman

July 28, 1939

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6356(1938)W.D. FIELD NO. 1 W.D.

Southerly Approaches, Sitka Harbor, S. E. Alaska
Surveyed in May - July, 1938, Scale 1:10,000
Instructions dated March 7, 1938 (EXPLORER)

Wire Drag — Dual Control.

Chief of Party - G. C. Jones.
Surveyed by - G. C. Jones.
Protracted by - J. C. Ellerbe.
Subdivision of wire dragged areas by - J. C. Ellerbe.
H. F. Stegman.
Verified and inked by - H. F. Stegman.

1. Shoreline and Signals.

Shoreline and topographic signals are from T-6631, T-6632, T-6633, T-6635 and T-6636, all of 1938.

2. Junctions with Wire Drag Surveys.

The present survey overlaps H-6357 (1938) W.D. in the vicinity of lat. 57° 03', long. 135° 20' and again at lat. 57° 03', long. 135° 24'. An additional drag strip would have been desirable on either of the two surveys in the vicinity of lat. 57° 02.8', long. 135° 19.8' in order to clear the 3-1/2 fathom sounding and split on the present survey and the 3-1/2 fathom sounding on H-6357 (1938) W.D. Otherwise, the overlaps are satisfactory.

3. Comparison with Latest Hydrographic Surveys.

H-6352, H-6353, H-6354, H-6355, all of 1938.

a. Shoals.

Approximately 75 shoals were encountered by the drag in the examination of the area common to the present survey and the hydrographic surveys listed above. Individual investigations were, in most cases, satisfactory and do not require detailed discussion or itemizing of positions, depths and clearances. The few cases possibly unsatisfactory as to effective depth or otherwise are enumerated below.

(1) 8 fathom sounding in lat. 57° 02.7', long. 135° 24.3', falls in 8-1/6 fathoms on H-6355 (1938). Cleared with a 32 foot effective drag depth.

(2) 7-1/6 fathom sounding in lat. 57° 02.5', long. 135° 24.6', falls in 8-1/6 to 11-1/6 fathoms on H-6355 (1938). Cleared with a 22 foot effective depth.

(3) 4-1/6 fathom grounding in lat. 57° 02.6', long. 135° 19.9', falls in 10 to 11-5/6 fathoms on H-6353 (1938). Cleared with a 14 foot effective depth. The position is based entirely on noted grounding and bight of drag and appears dubious because of the existence of more reliably located shoals just to the westward. The shoal has been accepted as being on the safe side.

4 1/6-fm. grounding - plotting revised. See smooth sheet. Ad. w/k. H-6353 (1947)

(4) The 2-5/6 fathom sounding obtained from the guide launch in lat. 57° 02.4', long. 135° 19.3', falls in 11-4/6 fathoms on H-6353 (1938). Cleared with a 14 foot effective depth. It is extremely unlikely that the guide launch should locate such an outstanding shoal. Furthermore, the note in the record opposite the 2-5/6 fathom sounding states that it is 15 meters off the beach while the nearest beach is 170 meters away. The 2-5/6 has been rejected. No change has been made in the drag strips because of the plenteous overlap.

(5) The 5-2/6 fathom sounding in lat. 57° 02.6' long. 135° 17.2', falls in 7-1/2 to 8-5/6 fathoms on H-6353 (1938). It appears dubious because it is not the result of a grounding and because it falls well within the towline length of a drag strip with an effective depth of 36 feet. It has been accepted in the absence of absolute proof of error.

(b) Splits.

There are several splits within the area of the present survey. All are in the vicinity of navigational buoys and rocks and reefs of extremely shoal depth or close to the limits of the survey. Coverage would have been desirable only in the instance mentioned in par. 2.

(c) Effective Depths.

This is a difficult area in which to employ effective depths which would satisfy all of the requirements of S.P. 118. Wrapping about shoals with deeper effective depths would have been desirable in several places in order to reduce extensive areas of the shoaler clearing depths.

d. Conflicts.

An 8-1/6 fathom sounding in lat. 57° 02.15', long. 135° 24.78' on H-6355 (1938) was apparently covered with an effective drag depth of 50 feet on the present survey. The slight discrepancy is probably due to variable lift.

4. Comparison with Chart 8244 (New Print dated June 11, 1937).
Chart 8255 (New Print dated May 24, 1939).
Chart 8281 (New Print dated June 2, 1939).

In the area common to the present survey and to the hydrographic surveys discussed in the preceding paragraph no comment is required other than that made there and in the reviews of the respective surveys. In the small areas covered by the present survey beyond the limits of the new hydrography there are no conflicts between charted depths and effective drag depths.

5. Condition of Survey.

a. Drag Records.

(1) In very few cases were check angles taken at tender positions. Descriptions of shoals were meager and in some cases bottom characteristics were not recorded (page 33, S. P. 118).

(2) Drag position numbers and day letters were inked in lower case red and the tender positions in lower case blue. S. P. 118 specifies upper case letters for the drag and corresponding lower case letters of the same color for the tender.

b. Field Plotting.

The descriptive report, page 4, states that the complicated nature of the survey made it impracticable to complete the field plotting to the extent prescribed in S. P. 118. It was not so considered in the office and the following items of field plotting have been accomplished by the office verifier.

(1) Transfer and inking of shoreline.
(2) Subdivision of drag strips.
(3) Inking of drag strips.

The Area and Depth tracing (on paper) submitted by the field party was found to have so many errors

due to the unorthodox method of plotting that it was discarded.

c. Descriptive Report.

Satisfactory but could have been a little more comprehensive in its discussion of shoals.

6. Compliance with Instructions for the Project.

Satisfactory except as noted in par. 2, 3a and 3c.

7. Additional Field Work Recommended.

None recommended for immediate attention. See preceding and related paragraphs.

8. Reviewed by - J. A. McCormick, August 31, 1939.

9. Inspected by - H. R. Edmonston, Aug. 31, 1939.

Examined and approved:

T. B. Reed,
Chief, Section of Field Records.

K. T. Adams
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

Chief, Division of H. & T.

Applied to Reconstruction of Chart 8244 - 11/8/39 - JJW

Applied to Chart 8255 11/9/39 Chas R Bush Jr