

9031

Diag. Cht. No. 1116-2 & 1276-2/

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. PH 21 (17) E Office No. T-9031

LOCALITY

State LOUISIANA

General locality LOUISIANA DELTA

Locality ATCHAFALAYA BAY, LOWER ATCHAFALAYA
RIVER

1943

CHIEF OF PARTY

C. W. Clark, Chief of Field Party
R. A. Gilmore, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE Oct 17 - 1951

B-1870-1 (1)

9031

Areas contoured by various personnel
 (Show name within area)
 (II) (III)

7

Camera (kind or source) (III): U.S.C & G.S. Niise-lens, $8\frac{1}{4}$ inch focal length

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time			
21358	12-2-47	11:53		1:20,000	-0.8
21924	3-13-48	11:02		"	-0.1

Tide (III)

Reference Station: Galveston

Subordinate Station: Eugene I. Atchafalaya Bay

Subordinate Station:

Washington Office Review by (IV):

Final Drafting by (IV): Baltimore Office

Drafting verified for reproduction by (IV): C. Kupiec

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 7

Shoreline (More than 200 meters to opposite shore) (III): 12.7 miles

Shoreline (Less than 200 meters to opposite shore) (III): 8 miles

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 15

Number of BMs searched for (II):

Number of Recoverable Photo Stations established (III): 8

Number of Temporary Photo Hydro Stations established (III): 4

Remarks:

None

Ratio of Ranges	Mean Range	Spring Range
1.1	1.1	1.9

Date: Oct 25, 1950

Date: Feb 20, 1951

Date: June 6, 1951

Date: Aug 2, 1951

Recovered: 7

Recovered:

Identified: 7

Identified:

DATA RECORD

Field Inspection by (II):

W.M. Reynolds

Date:

March-April, 1948

Planetable contouring by (II):

Date:

Completion Surveys by (II):

None

Date:

Mean High Water Location (III) (State date and method of location):

Dec. 2, 1947 - March 13, 1948

Air Photo Compilation

Projection and Grids ruled by (IV):

W.O.

Date:

Projection and Grids checked by (IV):

W.O.

Date:

Control plotted by (III):

E. T. Ogilby

Date:

Dec. 23, 1948

Control checked by (III):

W. W. Dawsey

Date:

Dec. 23, 1948

Radial Plot or Stereoscopic

Control extension by (III):

M.M. Slavney

Planimetry

Date:

March 7, 1949

Stereoscopic Instrument compilation (III):

None

Contours

Date:

Date:

Manuscript delineated by (III):

Rexford E. Smith, Jr.

Date:

March-April, 1949

Photogrammetric Office Review by (III):

J.A. Giles

Date:

May, 1949

Elevations on Manuscript

checked by (II) (III):

Date:

DATA RECORD

T -9031

Project No. (II): Ph-21(47)B

Quadrangle Name (IV): Lower Atchafalaya River

Field Office (II): Morgan City, La.

Chief of Party: Charles W. Clark

Photogrammetric Office (III): Tampa, Fla.

Officer-in-Charge: Ross A. Gilmore

Instructions dated (II) (III): Feb. 12, 1948

Copy filed in Division of
Photogrammetry (IV)
Office files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1: 20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): 7-15-49 Date reported to Nautical Chart Branch (IV): 7-19-49

Applied to Chart No.

Date:

Date registered (IV): 9-17-51

Publication Scale (IV): 1: 40,000

Publication date (IV): July 1951

Geographic Datum (III): N.A. 1927

Vertical Datum (III): M.H.W.

~~Mean low water~~ except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): DYSON, 1933

Lat.: 29° 29' 46.082" (1418.8m) Long.: 91° 21' 09.832(264.8m)

Adjusted
(unpublished)

Plane Coordinates (IV):

State: Louisiana Zone: South

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

Summary T-9031

This planimetric survey is one of a series of 21 maps at 1:20,000 in the Gulf Coast area of Louisiana. Except for T-9032 and T-9033, each is $7\frac{1}{2}$ minutes in latitude and longitude.

The area covered by this project includes Houma, Louisiana, on the east, to Vermilion Bay on the west, and extends from the vicinity of the Intracoastal Waterway southward to Atchafalaya and Fourleague Bays.

Shoreline surveys for the Intracoastal Waterway of project Ph-14(46) at 1:10,000 scale, falling within the project, furnished some detailed information along both sides of the Waterway and for the planimetric maps of this project.

Adjoining this project to the west are ¹⁸~~17~~ contemporary topographic quadrangles at 1:20,000 scale in project Ph-33(48). Adjoining to the east and covering the Intracoastal Waterway to Florida are a series of revision sheets at 1:20,000 scale of Project Ph-1(45). Bordering the three southernmost quadrangles of this project is an early photo compilation project completed at about 1935.

5

FIELD INSPECTION REPORT

QUADRANGLES 9031, 9032, and 9033

PROJECT Ph-21(47)

APRIL 1948

1. DESCRIPTION OF THE AREA

This block of quadrangles lies in the southern portion of this project and embraces a land and water area that includes the eastern portion of Atchafalaya Bay; the ship channel through Point Au Fer Shell Reef; the mouth of the Atchafalaya River; and considerable marsh area to the east of Atchafalaya Bay.

The land is absolutely flat and consists of heavy, soft marsh that is cut by many bayous and ditches. This marsh land affords a large income to many trappers who, during the one hundred day annual trapping season, take out a harvest of furs valued at many thousands of dollars.

These trappers maintain cabins or houseboats throughout the area as a working base and rely entirely on the water as a mode of transportation.

In addition to the fur industry, oil wells have been brought in at many locations in the marshes and bays. Although no producing wells are located within the limits of these quadrangles, exploration and testing is a continuous process. South of these quadrangles on Point Au Fer Island several wells were being drilled at the time of field work.

The eastern portion of Atchafalaya Bay is generally shallow with a mud bottom; however a dredged channel running in a northeast-southwest direction connects the mouth of the Atchafalaya River and the pass through shell reefs to the Gulf of Mexico. This channel is not deep enough for steamers, but it does convey a heavy traffic of fishing boats from the fishing grounds to their bases in and around Morgan City, Louisiana. The channel is marked by fixed aids to navigation.

To the southwest and west of these quadrangles, separating Atchafalaya Bay and the Gulf of Mexico, is

Point Au Fer Shell Reef. The channel across the bay has been dredged through this reef and affords a passage to the Gulf. In addition to the regular channel, a lighthouse has been built on the west side of the channel to mark the entrance.

2. COMPLETENESS OF FIELD INSPECTION

Field inspection is felt to be complete and adequate. All field inspection notes are confined to the first of the two sets of field prints furnished to the field party. There is very little detail other than woods and marshes appearing in this area. The field party indicated cabins and small docks in the marsh area and it is recommended that the compiler show these structures on the map compilation since they are important to those persons working the marshes.

It is believed that sufficient samples of woods and marsh have been labeled to enable the compiler to delineate these features with no difficulty.

3. INTERPRETATION OF THE PHOTOGRAPHS

Photographic interpretation should cause no difficulty. Although several tones appear on the photographs, the area is all marsh and should be shown as such. The various types of marsh grass varying from high dry to low wet photograph differently. In some cases the field party has labeled the various types of marsh for the information of the compiler.

During the trapping season the trappers burn large areas of the marsh which shows black on the photographs. Some of these fires are visible on the photographs and afford a comparison of the area before and after burning.

4. HORIZONTAL CONTROL

All U.S.C. & G.S. stations within the limits of these quadrangles were searched for, and if recovered were identified on the photographs. In addition, several stations outside the quadrangles were recovered and identified for control of the radial plot.

The recovered control was identified on the first set of field prints furnished the field party and at a later date ~~was~~ transferred in the office to a new set of photographs.

The transfer was completed by the field party as a check to insure that the stations can be properly transferred to other prints at a later date. No great difficulty was encountered while transferring control, but it was noted that in a few instances some of the detail is not as clear and distinct on one set of photographs as it is on the other.

Two lights, Atchafalaya Channel Lights 41 and 42, were located by theodolite three-point fixes and may be used as horizontal control.

Positive identification was not secured on five control stations. Three of these doubtful identifications (VOSS, 1933; RICE, 1935; and WASHA, 1934) are due to indistinct photographic detail in the vicinity of the station.

Station FISH 1933 was not positively identified because the field party suspected a shifting of the sub-point between the dates of photography and field inspection.

The fifth station not identified positively is POINT AU FER STACK 1933. The stack has been destroyed and its original position could not be determined. The old steam boiler to which the stack was probably attached is still in place in the marsh, so the end of this boiler was located as probably being close to the position of the stack.

An explanation of all doubtful identification has been made on the control identification cards that accompany the field data.

5. VERTICAL CONTROL

(not applicable)

6. CONTOURS AND DRAINAGE

No contouring was performed in these quadrangles.

There is no definite drainage pattern within the area covered by this report.

7. MEAN HIGH WATER LINE

The shoreline, with one exception, is all apparent and sufficient notes have been made on the photographs to guide the compiler. The exception noted is a fast shoreline on Point Au Fer Island (outside the project limit) and it has been indicated on the photographs.

8. LOW WATER LINE

At the time of photography the tide was at an extreme low, well below the predicted low for the day. This low stage of the tide resulted in exposing a mud bank off the apparent shoreline that is normally awash at low water. The field party indicated the normal apparent waterline in the proper position and a low waterline can be extended around the exposed areas outside the apparent shoreline.

9. WHARVES AND SHORELINE STRUCTURES

The only wharves and shoreline structures in the area are those at Eugene Island and they have been clarified by field inspection notes.

10. DETAILS OFFSHORE FROM THE HIGH WATER LINE

The extreme low stage of the water exposed much of the Point Au Fer Shell Reef; however, the reef is awash at mean low water and local information states that no part of it is exposed. ~~Show this reef as submerged.~~ Not within limits of this quadrangle.

Local information stated that several wrecks are scattered throughout the reef, but only one of these could be located by the field party.

Point Au Fer Shell Reef will require further investigation by a hydrographic party.

The cable area shown on chart 1276 as running from the mouth of the Atchafalaya River to Point Au Fer Shell Reef, was not investigated by the field party and must be investigated by Field Edit.

11. LANDMARKS AND AIDS TO NAVIGATION

Southwest Reef Lighthouse (old tower) is listed in the 1947 Light List, page 802, as Southwest Reef Daybeacon. Not within limits of this project - Ph>1(47).

Previously unlocated aids to navigation were located by identification on photographs, by theodolite cuts, by sextant fixes, or by a combination of two or more methods. At Atchafalaya Channel Lights 7 and 25 sextant angles were observed to assist in identification on photographs and location of these lights. Atchafalaya Channel Lights 41 and 42 were located by three-point fixes observed with a theodolite on stations EUGENE ISLAND LIGHT, 1933; DYSON, 1933; and PLUMB 1933; with a check on BEACON 5, 1933. At each of these lights, directions were observed to other aids in the vicinity. Atchafalaya Channel Lights 25 and 38, Halter's Island Point Light, and Atchafalaya River Light 1 were located by identification on photographs supplemented by theodolite cuts from Lights 41 and 42.

A 1933 description by E. R. McC. of Atchafalaya River Light 1 (Beacon 1) is listed in Descriptions of Triangulation Stations No. 675, Louisiana Coast, Chenier Le Tigre to Oyster Bay Lighthouse, page 11. No geographic position could be found in the list of geographic positions of this area. The light is not shown as a triangulation station on the project index for Ph-21(47).

A line of privately maintained beacons marking the approach to Locust Bayou, Point Au Fer Island, were located by sextant fixes, supplemented by cuts from Lights 41 and 42.

All other daybeacons charted on Charts 1050 and 1276 and listed in the 1947 Light List in Atchafalaya Bay and approaches to the bay east of Longitude 91°30', were not in existence on 27 April 1948.

A temporary steel radio mast on Eugene Island was located by the field party. This radio tower is owned and operated by private interests and will be removed at the completion of the job for which it was constructed. It is not recommended that this tower be charted, but if the compilation office chooses to chart it, it must be shown as temporary.

12. HYDROGRAPHIC CONTROL

In accordance with project instructions, topographic stations were established along the shore of the most important water areas. Where natural objects were not selected, stations were marked by standard discs set in a concrete monument. A Form 524 has been submitted for each topographic station.

13. LANDING FIELDS AND AERONAUTICAL AIDS

There are neither landing fields nor aeronautical aids within the limits of these quadrangles.

14. ROAD CLASSIFICATION

No roads exist within the limits of these quadrangles.

15. BRIDGES

There are no bridges in these quadrangles.

16. BUILDINGS AND STRUCTURES

The only substantial building in these quadrangles is the U. S. Coast Guard Station on Eugene Island. The Eugene Island Lighthouse projects from the top of this building.

Because of the lack of buildings, the field party located trappers cabins as mentioned previously.

17. BOUNDARY MONUMENTS AND LINES

There are no boundary monuments in this area although the Terrebonne - St. Mary Parish line follows along the east end of Atchafalaya Bay from the east bank of the Atchafalaya River to the Gulf of Mexico around Point Au Fer. Boundaries will be the subject of a special report to be submitted at a later date.


18. GEOGRAPHIC NAMES

Geographic names are covered adequately by "Special Report on Geographic Names; Houma, Louisiana to Vermilion Bay, Louisiana; Project Ph-14(46)".

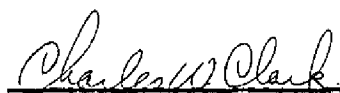
19. ADDITIONAL ITEMS

No additional items worthy of discussion were noted during the field work.

Submitted by


John S. Howell
Cartographer

Approved and Forwarded by


Charles W. Clark, Lieut., USCGS
Chief of Party

MAP T. 9031 PROJECT NO. Ph-21(47) SCALE OF MAP 1: 20,000 SCALE FACTOR 1,000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
FISH 1933	GL537 P.8	N.A. 1927	29 19 18.929 91 17 25.569				582.8 (1264.5)		
EUGENE ISLAND LIGHT, 1933	"	"	29 22 20.265 91 23 02.608				689.9 (929.0)		
DEER, 1933	"	"	29 28 51.959 91 15 51.771				623.9 (1223.4)		
PLUMB, 1933	"	"	29 26 37.569 91 15 32.602				70.3 (1547.8)		
POINT AU PER STACK 1933	"	"	29 19 53.940 91 20 55.709				1599.8 (247.5)		
ATCHAFALAYA BAY SHIP CHANNEL BEACON 5, 1933	P.11 P.12	"	29 24 24.596 91 21 11.269				1394.7 (221.7)		
DYSON, 1933	"	"	29 29 46.082 91 21 09.832				1156.7 (690.6)		
ATCHAFALAYA CHANNEL LT. 41, 1948	P.9 Field Comps.	"	29 26 32.166 91 19 21.350				878.7 (738.4)		
ATCHAFALAYA CHANNEL LT. 42, 1948	"	"	29 26 43.292 91 18 13.848				4660.7 (186.6)		
FISH SUB. STA. 1933	Comp.	"	29 23 23.12 91 13 643.49				1503.0 (115.8)		
ATCHAFALAYA CHAN- NEL BN. 1, 1933	Point Au Fer Quad.	"	29 24 906.92 1,966,915.74				757.3 (1090.0)		
ATCHAFALAYA CHAN- NEL BN. 3, 1933	"	"	29 25 627.43 1,975,315.43				303.8 (1313.8)		
							1418.8 (428.5)		
							264.8 (1351.4)		
							990.4 (857.0)		
							575.4 (1041.6)		
							1332.9 (514.4)		
							373.2 (1243.8)		
							2509.2 (538.9)		
							1110.5 (1937.5)		
							1495.6 (1552.4)		
							2107.9 (940.1)		
							1715.2 (1332.8)		
							1620.1 (1427.9)		

M-2388-12

1 FT. = 3048006 METER

COMPUTED BY J. Council. DATE November 5, 1948 CHECKED BY R. Rudolph DATE NOV. 15, 1948

COMPILATION REPORT
QUADRANGLE T-9031

26 & 27 CONTROL AND RADIAL PLOT:

Discussion of control will be found in the Special Report on Main Radial Plot submitted to the Washington Office May 5, 1949, by Milton M. Slavney, Photogrammetric Engineer, and is included in the Descriptive Report for T-9033.

28. DELINEATION:

The photographs were of poor scale, therefore causing some difficulty during the delineation of this manuscript.

All piroque trails have been delineated, ~~and shown with the abbreviation "P". A legend beneath the title block attests this fact.~~

29. SUPPLEMENTAL DATA:

None used.

30. MEAN HIGH-WATER LINE:

All shoreline within the limits of the manuscript is apparent.

31. LOW-WATER LINE:

Refer to paragraph No. 8 of Field Report.

32. DETAILS OFFSHORE FROM THE MEAN HIGH-WATER LINE:

There are a few shell reefs awash at MLW around Eugene Island, ~~and one at Deer Island.~~

33. WHARVES AND SHORELINE STRUCTURES:

There is ^{wharf and} one pier on Eugene Island.

34. LANDMARKS AND AIDS TO NAVIGATION:

No landmarks fall within the limits of this quadrangle.

ATCHAFALAYA RIVER LIGHT 1, 1948 and ATCHAFALAYA CHANNEL LIGHT 38 were cut in from the photographs. When located by theodolite cuts different positions were obtained. Because these positions were determined by only two flat cuts, the positions established by use of the photographs have been shown on the map manuscript.

POINT AU FER ISLAND CHANNEL LIGHTS were cut in with two-cut intersections furnished by the field inspector. These cuts are inked on the back of the manuscript for the convenience of the Washington Office while deciding if a check by the field editor is necessary

ATCHAFALAYA CHANNEL LIGHT 41, 1947, and ATCHAFALAYA CHANNEL LIGHT 42, 1948 were located by position computation.

35. HYDROGRAPHIC CONTROL:

None

36. LANDING FIELDS AND AERONAUTICAL AIDS:

None

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Comparison has been made with War Department, Corps of Engineers, Point Au Fer, Louisiana, quadrangle, scale 1: 62,500, edition of 1935 and found to be in good agreement except for a few minor changes in cultural details.

45. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Nautical Chart No. 1276, scale 1: 80,000, latest print date August 18, 1947, first edition. The map manuscript and chart were found to be in good agreement except for Plum Island Pass. This pass is no longer open.

The photographs show that Round Bayou above Deer Island Bayou is completely cut off, shows vegetation, and is impassable by water.

Respectfully submitted,

Rexford E. Smith, Jr.
Rexford E. Smith, Jr.
Cartographic Aid

Approved and Forwarded:

Ross A. Gilmore
Ross A. Gilmore, 7/11/49
Chief of Party.

~~TO BE DELETED~~

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

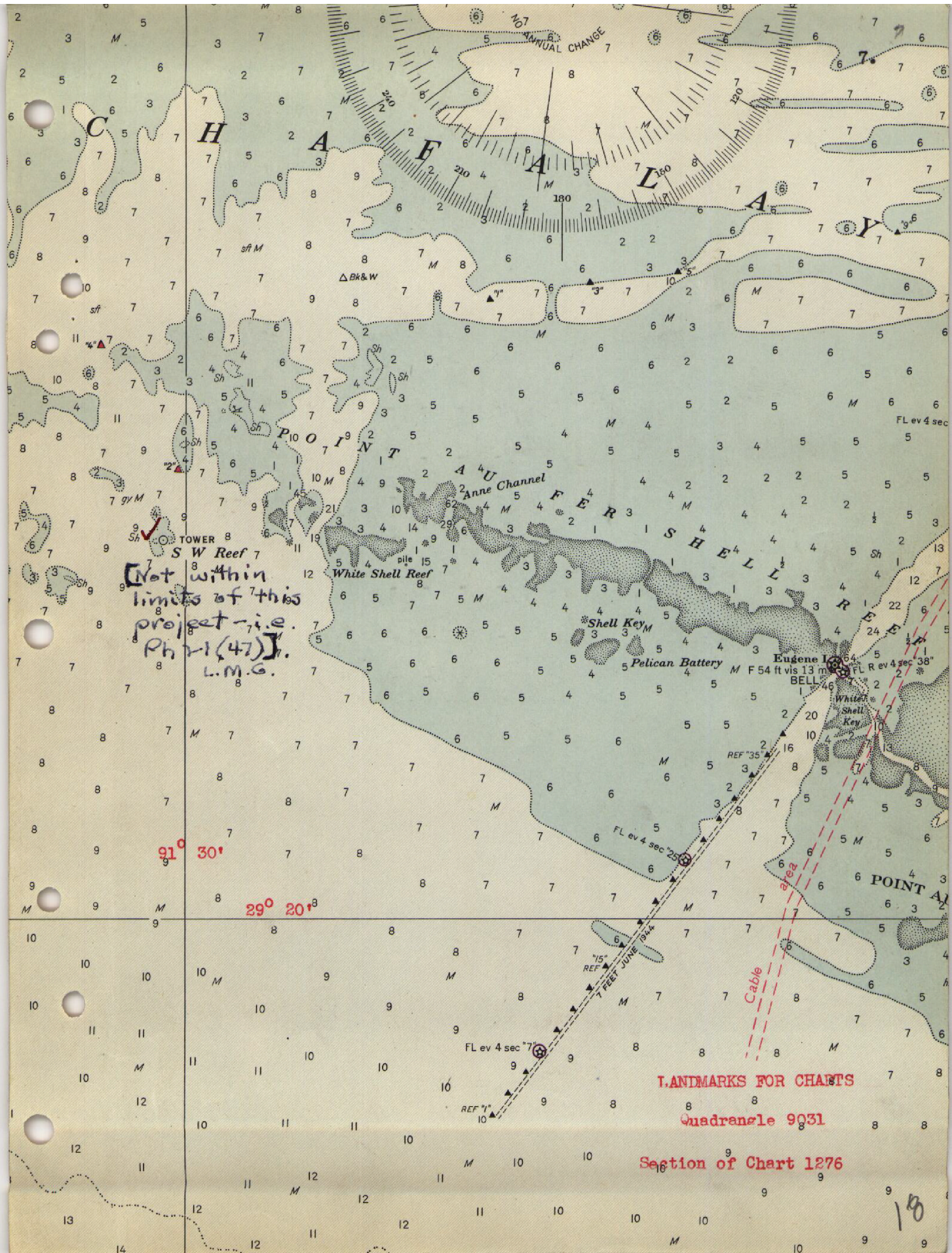
1961 8748

The positions given have been checked after listing by

Charles W. Clark
Chief of Party

* Located by Two-cut Theod. Intersection.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.



[Not within
limits of this
project - i.e.
Ph-1(47)].
L.M.G.

91° 30'

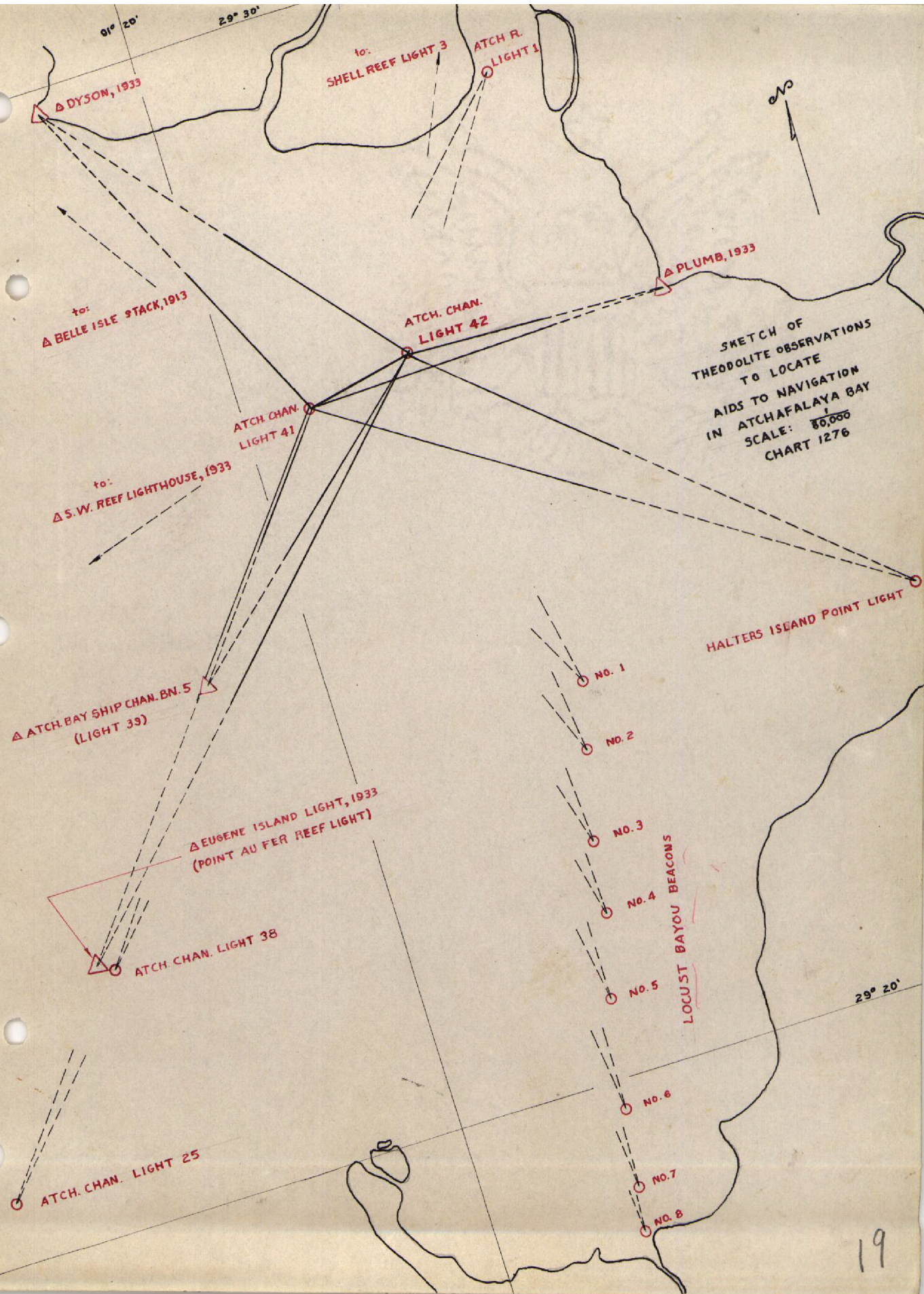
29° 20'

LANDMARKS FOR CHARTS

Quadrangle 9031

Section of Chart 1276

18



GEOGRAPHIC NAMES

Survey No. T-9031

GEOGRAPHIC NAMES										
Survey No. T-9031										
Name on Survey										
	A	B	C	D	E	F	G	H	K	
Little Hog Bayou ✓										1
Little Bay ✓										2
Shell Island Pass ✓										3
Shell Island ✓										4
Lower Atchafalaya ✓										5
River										6
Deer Island ✓										7
Deer Island Bayou ✓										8
Round Bayou ✓										9
Plumb Island ✓										10
Plumb Island Point ✓										11
Atchafalaya Bay ✓										12
Eugene Island ✓										13
Plumb Island Pass ✓										14
Terrebonne Parish ✓										15
St. Mary Parish ✓										16
Point au Fer Reef Light (if written in anything but capital letters)										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										28

Names underlined in red are approved.

7-16-51. L. H. H. ✓

Rechecked & approved

6-6-51

A. J. G.

REVIEW REPORT T-9031
Planimetric Map
October 24, 1950

62. Comparison with Registered Topographic Surveys

T- 442	1:200,000	1853
T- 636	1:9660	1855
T- 638	1:9660	1855
T- 639	1:9660	1855
T-1822	1:10,000	1888
T-2943	1:20,000	1909
T-6299b	1:20,000	1934
T-6323a,b	1:20,000	1935

This planimetric survey, T-9031, supersedes the above listed surveys for nautical charting purposes.

63. Comparison with Maps of Other Agencies

Lake Decade, La. 1:62,500 U.S.E. 1935

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

Chart 1050	1:175,000	May 1949 (revised)
1116	1:458,596	Sept. 1949 (revised)
1276	1:80,000	Sept. 1949 (revised)

Piles in the vicinity of ATCHAFALAYA CHANNEL LT. 41 and others west of one ATCHAFALAYA CHANNEL appearing on the above listed charts were not visible on the photographs nor were they recovered during field inspection.

66. Adequacy of Manuscript

This compilation complies with the National Standards of Map Accuracy and with project instructions for completeness.

67. Miscellaneous

(a) Triangulation station, PLUMB, 1933, is correctly delineated offshore from Plumb Island Point. The recovery note of 1947 indicates that this is the result of erosion.

(b) Considering the lack of development in this bayou country no field edit was required.

Reviewed by:

L. Martin Gazik
L. Martin Gazik

Approved by:

L. V. Griffith
Chief, Review Section *L.V.G.*
Division of Photogrammetry

H. B. Schenck
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Division of Photogrammetry
887

W. M. Scaife
Chief, Division of Coastal
Surveys *W.M.*