

T-12502

Orig

T-12502

T-12502

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Chart Compilation
Field No.	Office No. T-12502 (Chart 524)
LOCALITY	
State	Texas
General locality	Nueces Bay-Corpus Christi Bay
Locality	Corpus Christi
1960 - 196 65	
CHIEF OF PARTY	
J. E. Waugh Div. of Photogrammetry, Wash. D. C.	
LIBRARY & ARCHIVES	
DATE	FEB 4 - 1966

DESCRIPTIVE REPORT - DATA RECORD
T - 12502

PROJECT NO. (II): 21416		
FIELD OFFICE (III):		CHIEF OF PARTY J. K. Wilson
PHOTOGRAMMETRIC OFFICE (III): Washington, D. C.		OFFICER-IN-CHARGE J. E. Waugh
INSTRUCTIONS DATED (II) (III): Field - Dec. 9, 1963 Aerotriangulation - Mar. 31, 1964 Compilation - Apr. 29, 1964 Field Edit - Feb. 15, 1965 NOTE: COPIES OF THE ABOVE INSTRUCTIONS ARE INCLUDED IN THIS DESCRIPTIVE REPORT, PAGES 29 THROUGH 41		
METHOD OF COMPILATION (III): B-8 Stereoplotter		
MANUSCRIPT SCALE (III): 1:10,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:30,000 and 1:10,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV): May 1965	
APPLIED TO CHART NO. 524	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III): N. A. 1927		VERTICAL DATUM (III): MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>
REFERENCE STATION (III):		
LAT.:	LONG.:	<input type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): = X =		STATE ZONE
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.		

DESCRIPTIVE REPORT - DATA RECORD

T-12502

FIELD INSPECTION BY (III):		DATE:
J. C. Lajoie		Feb. 1964
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
FIELD INSPECTION, FEB, 1964 REFER TO FIELD INSPECTION REPORT, PAGE 7		
PROJECTION AND GRIDS RULED BY (IV):		DATE
G. Meyers - R. House		5-8-64
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
J. E. Gearhart		5-8-64
CONTROL PLOTTED BY (III):		DATE
M. Webber		5-24-64
CONTROL CHECKED BY (III):		DATE
R. A. Carter		5-24-64
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
J. T. Gerlach		
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE 5-24-64 thru 10-24-64
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
R. A. Carter		4-65
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
J. Battley		5-7-65
REMARKS:		
Field Edited: Feb. 1965 by: W. H. Shearouse (J. K. Wilson, Chief)		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Single-lens

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
63 W 898-904	29 Sept 63	9:38-9:42	1:30,000	
63 W 911-913	29 Sept 63	9:48-9:50	1:30,000	
63 W(C) 941 thru 961	29 Sept 63	10:40-10:41	1:10,000	
GS-VACX 2-40 and GS-VACX 2-41	17 Dec 60		1:24,000	

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:			
COORDINATE STATION:			
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): J. Battley

DATE:
5-7-65

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:
12

IDENTIFIED:
12

NUMBER OF BM(S) SEARCHED FOR (II):

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

④

97°28'00"

7°50'41"

63 W 913

63 W 911

see inset

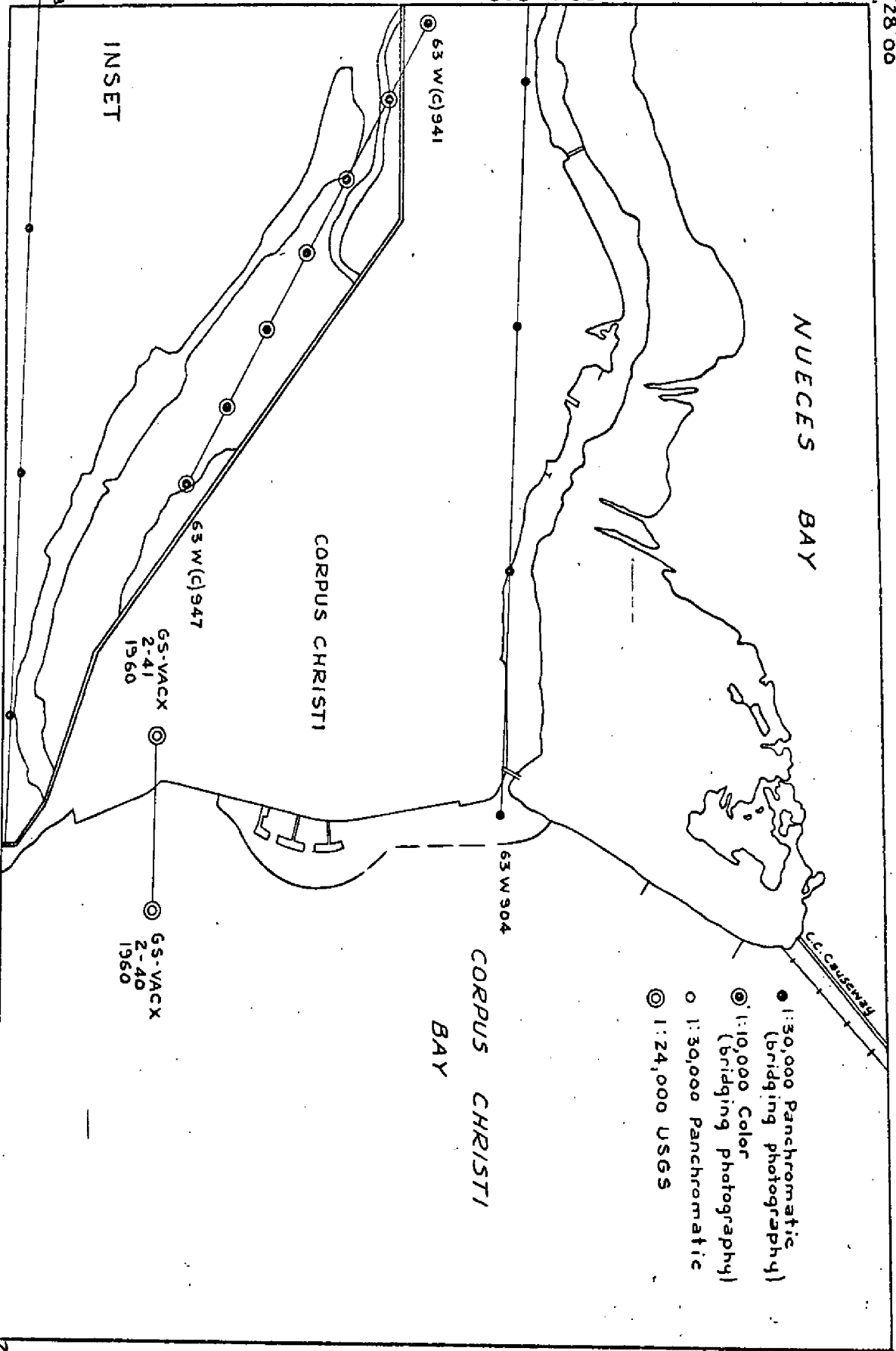


CHART 524 (T-12502)
 Project 21416
 Scale 1:10,000

97°20'35"
 27°46'05"

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT T-12502
SEPTEMBER 1964
APRIL 1965

T-12502 is a Chart Compilation Manuscript, compiled for and comprising new Nautical Chart 524 in its entirety.

The purpose of this project is to provide contemporary topographic information for the new Chart 524 at a scale of 1:10,000. The chart covers the Corpus Christi Harbor area and the Turning Basin, with a 1:10,000 scale inset extending to the Viola Turning Basin.

The compilation was achieved on the B-8 stereoplotter utilizing 1:30,000 scale panchromatic photography and 1:10,000 scale color photography. These two strips of photography were used to bridge, on the stereoplanigraph, the majority of the project area. The photography was flown September 29, 1963. The southern area mentioned under Item 5 of the Field Edit Instructions was resolved by obtaining 1960 photographic glass plates from the Geological Survey. This 1:24,000 scale photography, along with a detailed field edit, resulted in an accurate interpretation and compilation of the area. The field editor in this area obtained three-point fixes on the breakwater and seawall that was built after the date of photography.

Compilation involved extensive shoreline facilities and all features pertinent to a nautical chart. All features were compiled using the Provisional Photogrammetry Instructions for compiling nautical chart topography.

The Chart Compilation Manuscript was submitted to the Nautical Chart Division. A copy of this manuscript will be registered in the Bureau Archives under T-12502.

Submitted by:

Jeter P. Battley, Jr.
J. P. Battley, Jr.
Cartographer

FIELD INSPECTION REPORT

2/ AREAL FIELD INSPECTION

The project area, as defined by the project diagram, includes the north portion of the city of Corpus Christi and the area west through the industrial development area adjacent to the dredged Tule Lake Channel.

3/ HORIZONTAL CONTROL

a. Supplemental control of a temporary nature was established at SHALT(temp) by resection in the vicinity of SHASTER 1933 which was not recovered. INDIAN POINT OFFSET (temp) was established by traverse from INDIAN POINT 1933. BASIN (temp) was established by resection. Corpus Christi Channel Light 86 was located by triangles from INDIAN POINT OFFSET (temp); RLX 2 (USE) 1949; and BASIN (temp).

Location of photogrammetric control points in the area indicated on Photograph 63 W 943 was by base line from VIOLA 1933.

b. No datum adjustments were made in the field.

c. All control used was either established by or tied to Coast and Geodetic Survey control

d. Triangulation stations SHASTER 1933 and ACES 1933 were required for identification by the project diagram but neither was recovered. SHALT (temp) was established by resection to provide control in the SHASTER area. Base line methods were used to provide control in the area required on Photo 63 W 943

e. All Coast and Geodetic Survey stations shown on the project diagram of the area were searched for and reported on Form 526.

f. All stations required were positively identified.

4/ VERTICAL CONTROL

No vertical control was established or recovered.

5/ CONTOURS AND DRAINAGE

Not applicable

6/ WOODLAND COVER

Not applicable

7/ SHORELINE AND ALONG SHORE FEATURES

a. The mean highwater line is shown on the field photographs. The shoreline south of the harbor entrance is stabilized by seawalls to the south limit of the project. North of the entrance channel, the sandy shore area is protected by groins.

The shoreline of Tule Lake Channel, a dredged channel for large ships, is largely sand and mud and flats extend from the shore line to the edge of the dredged channel. The Nueces Bay shoreline is low and mud flats extend from the high waterline. As the range of tide is very small, these flats and oyster bars are exposed at lower water.

b. The low water line is not shown

c. In the dredged channel area, the drop from the mud flats to the deep water is abrupt. Sand bars exist in Corpus Christi Bay and there is a spoil dump area adjacent to the Corpus Christi Channel.

d. There are no large bluffs or cliffs within the project area.

e. All docks, wharves, piers and dolphins are shown on the field photographs.

f. All submarine cables shown on existing charts were verified.

g. There are no other shoreline structures.

8/ OFFSHORE FEATURES

The principal offshore feature is the breakwater at the entrance to Corpus Christi Harbor. This is a riprap reenforced sea wall which protects the harbor channel and the small boat harbor.

9/ LANDMARKS AND AIDS

a. In accordance with the instructions for the project, all landmarks were inspected and verified. One landmark is recommended for deletion as the object was found to be destroyed. One new landmark was recommended for charting after Photogrammetric location.

b. No interior landmarks were inspected.

c. No aeronautical aids were inspected.

d. All fixed aids to navigation were located. All lights along Corpus Christi Channel are on pile structures and are shown on the field photographs for photogrammetric location.

Corpus Christi Channel Light 86, a steel and concrete structure was located by triangles from BASIN (temp), INDIAN POINT 1933 OFFSET (temp), and RLX 2 (USE) 1949.

9/ (cont'd)

All range structures along Tule Lake Channel were located by photogrammetric methods. Points on the various ranges were also located photogrammetrically. All identification of lights and ranges was made on color photography except Tule Lake Channel Range F Rear Lt. which falls south of the color photos.

Corpus Christi Channel Lt. 85, Corpus Christi Lt, and Corpus Christi Breakwater Lt. were previously located by triangulation.

10/ BOUNDARIES MONUMENTS AND LINES

Not applicable.

11/ OTHER CONTROL

No topographic or hydrographic control was established.

12/ OTHER INTERIOR FEATURES

Railroads where they approach the water have been shown. One line parallels the south side of Tule Lake Channel while another crosses the channel on the lift bridge and runs east along the north side of the channel to the Harbor Bridge and west about a mile onto the fill area west of the lift bridge.

Roads adjacent to the water have been classified as dfl regardless of surfacing.

The causeway north from Corpus Christi to Portland has been rebuilt and the bascule type span on the highway has been replaced by a fixed span with a 48 ft. horizontal and a 21.4 ft. vertical clearance. The present channel makes a sharp turn north after passing through the railroad bascule type draw and passes under the causeway bridge north of the span previously listed through a fixed span with a 75 ft horizontal and a 53.2 ft. vertical clearance. This information was secured from the U.S. Engineer Office at Corpus Christi and is shown on the photographs.

13/ GEOGRAPHIC NAMES

A separate Geographic Names Report and Base Map Sheet is included with the data for this project.

14/ SPECIAL REPORTS AND SUPPLEMENTAL DATA

- 1. U.S. Engineers Layouts of Tule Lake Channel and Viola Channel extension - 3 sheets.(also Geo. Names Ref Map D.)
- 2. Industrial District of Port of Corpus Christi - 1 (also Geo. Names Ref. Map C)
- 3. Clarksons City Map of Corpus Christi

14/(cont'd)

- 4. Enco Corpus Christi Street and Vicinity Map.
- 5. Geographic Names Report and Base Map.

Respectfully submitted
John C. LaJoye
John C. LaJoye
Super. Surveying Tech.

AEROTRIANGULATION REPORT

PH-21416

Corpus Christi, Texas

21. Area Covered

This report covers the Nueces Bay Area. (North and West of Corpus Christi, Texas).

22. Method

Two strips were bridged on the Zeiss C-5 Stereoplanigraph to provide control for graphic compilation of shoreline. Strip #1 consisted of photographs 63-W-898 through 904. (1:30,000 scale) Strip #2 consisted of photographs 63-W (C)-941 through 947 (1:10,000 scale)

23. Adequacy of Control

Control positions were adequate for bridge adjustment. All points held within accuracy requirements except Clarkwood Municipal Water Tank, 1949 which was dropped from the bridge. Field and office identified, check control indicates that the tank has been moved. All common pass points between the two strips were averaged.

24. Supplemental Data

Three additional stations were office identified to aid in adjusting the two strips.

25. Photography

Photography was adequate as to coverage, overlap and definition.

Submitted by:



John T. Gerlach

Approved by:



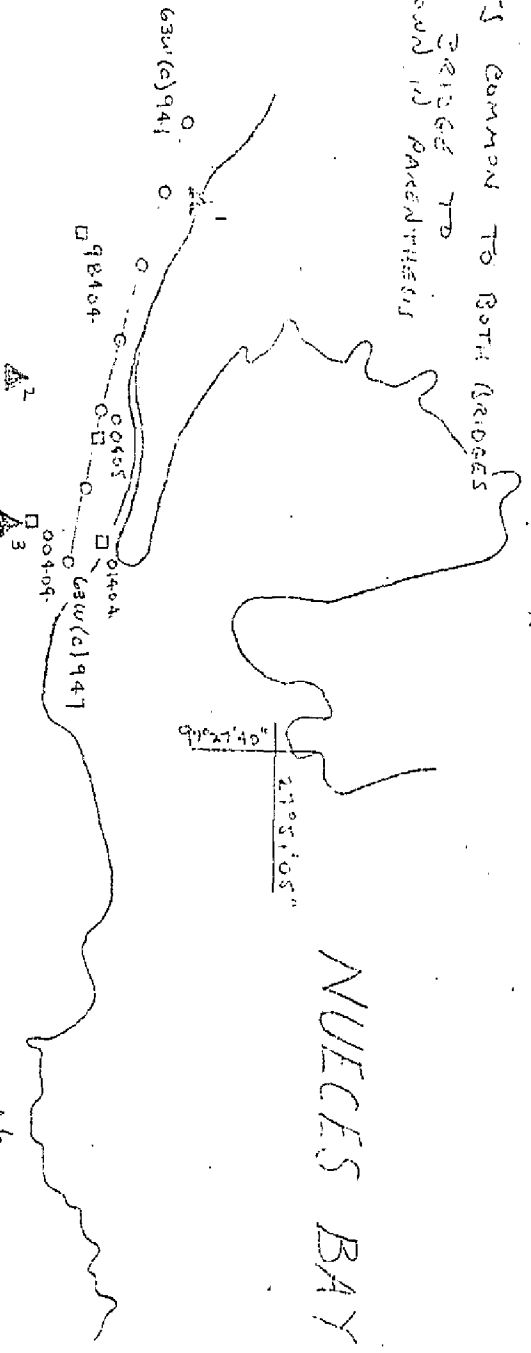
John D. Perrow, Jr.

- LEGEND
- COLOR PHOTO - SURFACE
 - ⊗ PANCHROMATIC PHOTO - SURFACE

AERONAUTIC NEGOTIATION SERVICE
 CHANGE No. 21416
 ROBERT CHRISTI, TEXAS
 APRIL, 1964

- ⊕ CONTROL USED IN ADJUSTMENT
- △ CONTROL USED AS CHECK
- ▲ OFFICE IDENTIFIED CONTROL USED AS CHECK

DTIC POINTS COMMON TO BOTH RIDGES
 COULD BE USED TO
 CORRELATE STATION IN PARENTHESIS

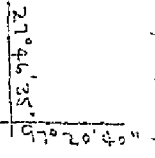


63W896

63W904

CONTROL IDENTIFICATION

- 1) VIOLA, 1933 X (-3.9, +1.5) Y (-3.4, +3.2)
- 2) SHALT, 1964 A (0.0) B (-.5, -1.2)
- 3) VIOLA, 1933 - STATION #1-A (-1.8, +.9) C (-2.7, +2.4) - STATION #2-A (+2.9, +2.1) B (-3, +2.1) C (+4.2, +1.4)
- 4) ANNEA. SHERWOOD & REYNOLDS CO. TX, 1944 A (+1, -1) 5B (-4, -2.1)
- 5) CORPUS CHRISTI, ROAD STA. KEY'S TURN, 1944 (+1.6, +3.6)
- 6) " " " " " GENT. POLICE CO., NUECES BAY PARK, 1944 { E. STR (+4.1, +.7)
 W. STR (+5.9, -.4)
- 7) " " " " " SO. ALBERT CO. STR, 1934 (-.7, +1.6)
- 8) " " " " " MUNICIPAL TANK, 1934 (-2.7, -1.8)
- 9) " " " " " PORT TANK, 1931 (+4.6, -2.4) 55 (0.0)
- 10) " " " " " CATH. DOME CROSS, 1949 (-2.2, -2.4)



COMPILATION REPORT
T-12502 (CHART 524)
CORPUS CHRISTI, TEXAS
MAY 1965

31. Delineation

The chart manuscript was delineated on the B-8 stereoplotter utilizing 1963 1:30,000 panchromatic and 1:10,000 color photography. These plates were also used in bridging the area. In addition, two U. S. Geological Survey plates at 1:24,000 scale, were used in compilation (see Item 35). Field inspection on the 1:10,000 color and 1:30,000 panchromatic photography was completed and the inspected details applied. A discrepancy print of the chart was field edited and the additions and corrections made were applied. Additional color prints of the area at 1:10,000 scale were available and they afforded an excellent interpretation of the shoreline and planimetric details.

32. Control

There are numerous triangulation stations in this area. Control used in the bridge held well. There were additional landmarks identified during field inspection that were triangulation stations. These positions held well with the bridge points on the B-8 stereoplotter. The elevations read on the B-8 agreed with the elevations supplied by the field inspector.

33. Supplemental Data

Six Corps of Engineers dredging blueprints sent in from the field editor were used to locate submerged pipeline and cable crossings. An oblique photo of Emerald Cove, along with theodolite fixes, was used to compile a new breakwater and light.

34. Contours and Drainage

Inapplicable

35. Shoreline and Alongshore Details

The shoreline and planimetry south of 27°47' was not covered by Bureau photography. Glass plates of

1960 photography obtained from the U.S. Geological Survey at a scale of 1:24,000 were used to compile this area. Two individually controlled models were set to complete the Nueces Bay Causeway to the north. With the exception of the southern area, shoreline inspection was considered adequate.

36. Offshore Details

No unusual problems were encountered during compilation. The location of piling and dolphins by the field inspector and field editor was complete.

37. Landmarks and Aids

All landmarks and aids have been listed by the field on 567 Forms. Those located photogrammetrically were scaled and entered on the 567 Forms. Several landmark buildings recommended by the field editor were shown on the chart.

38. Control for Future Surveys

None

39. Junctions

Inapplicable

40. Horizontal and Vertical Accuracy

See Item 32. The manuscript complies with the National Standards of Accuracy and Project Instructions.

41. thru 45.

Inapplicable

46. Comparison with Existing Maps

A comparison was made with Bureau Surveys T-9181, T-9182 and T-9183 dated October 1951, issued May 1953. A comparison print was prepared that records in detail differences of importance to hydrographic and chart reviewers.

47. Comparison with Nautical Charts

A comparison was made with Nautical Chart 523, scale 1:40,000 with an inset of 1:20,000 scale, dated 5th Edition 1963, revised Feb. 24, 1964. South of latitude 27°47' extensive shoreline changes have occurred. These consisted of breakwaters, bulkheads, light and beach development by fill and groins. This area was under development at the time of compilation. The area as shown on Chart 523 was delineated from a chart letter. Photogrammetric bridging positions and field surveys indicated this area, including the light shown at Emerald Cove, to be out of position. (See Summary, paragraph 3.) This area is correctly compiled on this manuscript and a 567 Form submitted for the correct position of the above mentioned light.

Submitted by:

R. A. Carter

R. A. Carter

Cartographic Technician

Approved by:

K. N. Maki

K. N. Maki

Chief, Compilation Section

FIELD EDIT REPORT
Project 21416 - Chart 524
Corpus Christi, Texas

51. METHODS

Field edit was conducted in accordance with "Instructions - FIELD EDIT - Project 21416; Chart Topography, Chart 524, Nueces Bay, Texas," dated February 15, 1965, reference WSC-6314. Specific items numbered 1 thru 5 in said Instructions were dealt with as follows:

1. A launch was used to run close to the shoreline and compare compiled features with the actual ones. Piers, dolphins, piling, and other cultural features, as well as the mean high-water line were visually inspected for omissions and accuracy of delineation. Required corrections have been indicated on an ozalid Discrepancy Print which was used as a Field Edit Sheet with cross references being made to related data listed after 5 below.

2. Questions shown in red on the Discrepancy Print were answered on that print or a reference entered showing where needed information may be found.

3. A micro-wave relay tower at approximate Lat. 27° 47' 15", Long. 97° 24' 10" does exist. This tower is at the broadcasting studio of Channel 6 Television Station, call letters KRIS-TV. In addition to being a relay tower it is an excellent landmark for charts and has been so recommended on Form 567. The image of the tower has been marked on photograph 63W903; a Control Station Identification card was not made.

4. All charted landmarks and fixed aids to navigation were visually inspected, the date being entered under "date of location" on Form 567.

A Form 567 is being submitted for two additional landmarks.

5. The section from Lat. 27° 47' Southward was ridden over and certain notes made on the Discrepancy Print.

Recovery Notes, Form 526 are being submitted for the 5 triangulation stations requested - 4 recovered, 1 destroyed.

Field edit information will be found on the Discrepancy Print, panchromatic contact prints 63W900, 903, 904, 905, color contact photos. 63W945, 950, 985 thru 989 and an oblique photograph titled EMERALD COVE. In addition 3 sheets of street maps obtained from the City of Corpus Christi engineering department are submitted for street information in the section South of Lat. 27° 47' not covered by photographs, a set of 6 blue prints furnished by the Corps of Engineers submitted mainly for accurate location of submerged pipeline crossings but may be found otherwise useful, and an oil company city map which shows location of triangulation stations recovered for extension of bridge (see item 5).

52. ADEQUACY OF COMPILATION

Upon application of field edit information the compilation will be adequate.

53. MAP ACCURACY

Visual inspection indicates horizontal position of streets and other features to be very good with the exception of the breakwater and seawall just South of Lat. 27° 47'. Fixes obtained and submitted in sketchbook 1 should correct this discrepancy.

54. RECOMMENDATIONS

None offered.

55. EXAMINATION OF PROOF COPY

Not believed necessary.

56. GEOGRAPHIC NAME

The name EMERALD COVE is known locally but is not considered well enough established to recommend for charting.

57. Mr. C. R. Barron, Asst. Resident Engineer, Corps of Engineers, U. S. Army, was very cooperative during the period of field edit and it is believed he would be pleased to supply any additional data that may be needed.

Forwarded and Approved

Submitted

3/5/65

Joseph K. Wilson
Joseph K. Wilson
Chief, Photo Party 759

William H. Shearouse
William H. Shearouse
Chief, Sub-unit, Party 759

REVIEW REPORT
T-12502 (CHART 524)
CHART COMPILATION
MAY 1965

61. General Statement

(See page 1, Summary)

62. Comparison with Registered Topographic Surveys

A comparison was made with Bureau surveys T-9181, T-9182 and T-9183. These surveys were compiled from 1948 - 1950 aerial photography and field edited in October 1951. Extensive dredging has extended the waterway west of the Tule Lake Channel as compiled on T-9182. This waterway is now extended to the Viola Turning Basin at approximately 97°31'05".

63. Comparison with Maps of Other Agencies

None. (See Item 6 of the enclosed Photogrammetric Instructions, dated April 29, 1964.)

64. Comparison with Hydrographic Surveys

None were made. (See Item 6 mentioned above.)

65. Comparison with Nautical Charts

During compilation and prior to field edit a comparison was made with Chart 523, scale 1:40,000 with 1:20,000 insets. Discrepancies with this chart were noted on the Discrepancy Print and resolved during field edit.

See Item 47 of the Compilation Report for a discussion of this comparison.

66. Adequacy of Results and Future Surveys

The map complies with project instructions including the new methods devised for chart compilation. See Item 32 (Control) of the Compilation Report for the accuracy obtained with this project.

This map complies with the National Standards of Accuracy.

Approved by:

Charles Henry
C.E.
Chief, Photogrammetric Branch

Reviewed by:

Jeter P. Battley Jr. A.S.G.
Cartographer

L. J. Woodcock
Chief, Photogrammetry Division

Chief, Nautical Chart
Division

GEOGRAPHIC NAMES REPORT

PROJECT 21416

Corpus Christi, Texas

MAP REFERENCES:

- A - U.S. Geological Survey Corpus Christi Texas Quadrangle
- B - Coast & Geodetic Survey Chart 523
- C - Map of Industrial District of Port of Corpus Christi
- D - Dredging Chart for Channel to Viola - U.S. Eng. Galveston District

CONSULTANTS:

- 1. William S. Minor c/o U.S. Engineers Office Corpus Christi, Tex.
- 2. Dwayne Orr Chief Engineer, Nueces County Navigation District, Corpus Christi, Tex.
- 3. Derwood Wise Marina Supervisor, Park and Recreation Dept. Corpus Christi, Tex.
- 4. Billy Pugh Boatyard Superintendent, I head Pier. P.O.Box 802 Corpus Christi, Tex.
- 5. William Cox Charter Boatman YMCA Corpus Christi, Tex.
- 6. Capt. H.N. Roberts Charter Boat Captain 741 Ashland Corpus Christi, Tex.

BASE MAP

U.S. Geological Survey Corpus Christi Quadrangle

John C. Lajoie
 Respectfully Submitted

John C. Lajoie
 Super. Surveying Tech.

ALTA VISTA - This name was applied to the area adjacent to the old hotel of the same name. It is not used locally since the hotel was torn down. A-3-6 *Name deleted - a.g.w.*

ALTA VISTA REEF - This name is applied locally to the south portion of the shoal area shown on C&GS Chart 523. The Texas Fish and Game Commission has named all the reefs and shoals in the Corpus Christi area and the name is shown in this location on a chart in thier office. B-3-4-6- *Name not used a.g.w.*

The name still persists. Portside Basin. a.g.w.
AVERY POINT - This name was applied to a projection on the south shore of Nueces Bay prior to the dredging of the turning basin which takes its name from the land area it displaced. Avery Point was dredged out and pumped into Nueces Bay to form the north side of the Tule Lake Channel. As a physical feature, the point no longer exists. A-B-1-2-4-6

CORPUS. CHRISTI BEACH - This name is applied to the beach area between Corpus Christi Harbor entrance and Rincon Point and is shown on Map Reference A as North Beach. 1-2-3-4-6 *OK a.g.w.*

CORPUS CHRISTI BREAKWATER - This name is used locally for the breakwater which protects the harbor entrance and the small boat harbor. There is no particular name for the feature viz. Sam Houston Memorial Breakwater. 1-2-3-4-6 *OK a.g.w.*

CORPUS. CHRISTI CHANNEL - Proposed and Light List name for the dredged channel through Corpus Christi Bay to the Harbor. It is understood that the Nueces County Navigation District has requested that this name be used in reference to this feature. B-1-2 *not used here. a.g.w.*

CORPUS CHRISTI SHIP CHANNEL - A name used locally for the dredged channel through Corpus Christi Bay to the Harbor. This name is used by watermen because of the large amount of big ship traffic. A-4-5-6 *not used here. a.g.w.*

INDUSTRIAL CANAL - Name applied to the dredged channel between the Main Turning Basin and the Avery Point Turning Basin. B-C-D-1-2 *OK a.g.w.*

INDUSTRIAL CHANNEL - Name applied to the dredged channel between the Main Turning Basin and the Avery Point Turning Basin. It is, in reality, a channel rather than a canal since no locks or towing equipment are involved. A-4-5-6- *not used here. a.g.w.*

NORTH BEACH - This name is used on Map Reference A to apply to the area known locally as Corpus Christi Beach. A *not used. a.g.w.*

NUECES - This name is not used locally. Believed to be the name of an old railroad siding. A *not used a.g.w.*

PORT ARANSAS * CORPUS CHRISTI WATERWAY * This is the name assigned by the U.S. Engineers to the dredging contracts for the dredged channel through Corpus Christi Bay because of the origin of the dredged channel at Port Aransas. C-D-1

not used - a.j.w.

VIOLA CHANNEL - This was the project name for the extension of the Tule Lake Channel to the turning basin at Viola. It is a portion of Tule Lake Channel. D-1

not used a.j.w.

~~NONFLOATING AIDS OR~~ LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~

STRIKE OUT TWO

Corpus Christi, Texas. February, 1964

I recommend that the following objects which ~~have~~ (have not) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing by J.C. Lejoux

F. Natale,
By John S. Hayes
Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION Verified	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE #		LONGITUDE #		DATUM						
				°	'	°	'							
TEXAS	33 TOWER	Corpus Christi, Radio Station KEYS Tower, 1949 - Steel, HT 300' (EL 335)		27	48	97	27	NA	1949	Triang.			523 524	
	34 HOTEL	Corpus Christi, Breakers Hotel, N. Elevator Shaft 1934. (EL 65')		27	49	97	23	"	1934	"			"	
	35 TANK	Corpus Christi, Port Tank 1931 - Steel HT 139' (EL 151)		27	48	97	23	"	1931	"			"	
	36 STACK	Corpus Christi, Southern Alkali Corp. Stack 1984 - Concrete HT 224' (EL 249')		27	48	97	25	"	1934	"			"	
	37 STACK	Corpus Christi, American Smelting & Refining Co. Stack 1949 - Concrete HT 299' (EL 324')		27	48	97	27	"	1949	"			"	
	38 STACK	Corpus Christi, Central Power & Light Co. Mueers Bay Power Station East Stack 1949 - Concrete HT 154' (EL 164')		27	49	97	25	"	1949	"			"	
	39 STACK	Corpus Christi, Central Power & Light Co. Mueers Bay Power Station West Stack 1949 - Concrete HT 154' (EL 164')		27	49	97	25	"	1949	"			"	
	40 CHURCH	Corpus Christi, Cathedral Dome, Cross, Higher of Two, 1949		27	47	97	23	"	1949	"			"	
	41 S. CUP.	Corpus Christi, N. Municipal Tank (Sam Rankin St) 1934 - Steel HT 140' (EL 175)		27	47	97	24	"	1934	"			"	
	42 STACK	Corpus Christi, Central Light and Power Co. Stack 1931 - Concrete HT 153' (EL 158')		27	47	97	23	"	1931	"			"	
	43 STACK	Halliburton Stack - concrete HT 141' (EL 151)		27	49	97	25	"	2-64	Photo			"	
	44 TALLEST BLDG	Wilson Tower Bldg. HT 269' (EL 310')		27	47	97	23	"	2-64	"			"	
	45 SPIRE	Methodist Church Spire HT 151' (EL 161')		27	46	97	23	"	2-64	"			"	
	46 TANK	New Granas Compress Tank - Steel HT 127' (EL 139')		27	48	97	24	"	2-64	"			"	

This form shall be prepared in accordance with Hydrographic Manual, Publication 20-2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

~~NONFLOATING AID~~ OR LANDMARKS FOR CHARTS

~~RESEARCHED
REVISER~~
TO BE DELETED

STRIKE OUT TWO

Corpus Christi Texas February, 1964

I recommend that the following objects which ~~have not~~ *(have not)* been inspected from seaward to determine their value as landmarks be ~~deleted~~ *(deleted from)* the charts indicated.

The positions given have been checked after listing by

John C. Hayes

F. Natella by John C. Hayes
Chief of Party

CHARTING NAME	STATE	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION VERIFIED	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*		LONGITUDE*								DATUM
				°	'	°	'							
STACK	Texas	Corpus Christi, new municipal incinerator stack 1931		27 48	15 779	97 24	17 076	NA 1927	1931 2-22-65	✓	✓	✓	523 524	

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

NONFLOATING AIDS FOR CHARTS

TO BE CHARTED

STRIKE OUT TWO

~~TO BE REMOVED~~
~~TO BE REMOVED~~

Corpus Christi Texas February, 19 64

I recommend that the following objects which ~~have~~ (have not) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing by _____

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION Verified	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE*		LONGITUDE*		DATUM							
				°	'	°	'								
	27	7829.6	Tule Lake Channel Range E Rear Lt.	27	48	57.721	97	28	11.975					523	
	20	7830.3	Tule Lake Channel Range F Front Lt.	27	49	10.451	97	28	49.932					524	
	28	7830.4	" " " " Rear Lt.	27	48	52.842	97	28	23.833	X				"	
	29	7830.7	Viola Channel Entrance Range Front Lt.	27	50	34.512	97	30	53.803					"	
	30	7830.8	Tule Lake Channel Range G Front Lt.	27	50	1062.3	97	30	1472.2					"	
	31		Viola Channel Entrance Range Rear Lt.	27	50	43.576	97	31	07.061					"	
	32		Tule Lake Channel Range G Rear Lt.	27	50	1341.3	97	31	193.2					"	
	31		Tule Lake Channel Range H Ft. Lt.	27	50	38.145	97	31	31.255					"	
	32		Tule Lake Channel Range H Rear Lt.	27	50	42.015	97	31	855.2					"	
				27	50	1293.2	97	31	1344.4					"	

Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, Publication 20-2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

NONFLOATING AIDS ~~FOR CHARTS~~ FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~ } STRIKE OUT TWO

Corpus Christi Texas February 19 64

I recommend that the following objects which ~~have~~ (have not) been inspected from seaward to determine their value as landmarks be charted on ~~(revised form)~~ the charts indicated.
The positions given have been checked after listing by _____

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION VERIFIED	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*		LONGITUDE*								DATUM
				° ' "	D. M. METERS	° ' "	D. P. METERS							
	14 ' 7817	Tule Lake Channel Lt. Corpus Christi Chan. Cobb West Range Ft. Lt.		27 48	35.896 1104.9	97 23	34.259 937.7	Photo	2-64 2-20-65	-	-	523 524		
	15 ' 7818	" " " " " Rear Lt.		27 48	35.564 1094.7	97 24	59.910 1639.8	" "	2-64 2-18-65	-	-	" "		
	16 ' 7823	Industrial Canal Range Front Lt.		27 49	12.621 388.5	97 25	55.800 1527.2	" "	2-64 2-18-65	-	-	" "		
	17 ' 7824	Industrial Canal Range Rear Lt.		27 49	16.322 502.4	97 26	04.878 133.5	" "	2-64 2-22-65	-	-	" "		
	18 ' 7827.3	Tule Lake Channel Range A Ft. Lt.		27 49	30.352 934.2	97 26	09.850 269.6	" "	2-64 2-22-65	-	-	" "		
	19 ' 7827.4	" " " " " Rear Lt.		27 49	35.801 1102.0	97 25	55.479 1518.3	" "	2-64 2-18-65	-	-	" "		
	20 ' 7828.3	Tule Lake Channel Range B Ft. Lt.		27 49	10.451 321.7	97 28	49.932 1366.6	" "	2-64 2-18-65	-	-	" "		
	21 ' 7828.4	" " " " " Rear Lt.		27 49	11.851 364.8	97 28	56.626 1549.8	" "	2-64 2-20-65	-	-	" "		
	22 ' 7828.5	Tule Lake Channel Range C Front Lt.		27 48	50.983 1569.3	97 27	13.398 366.7	" "	2-64 2-20-65	-	-	" "		
	23 ' 7828.6	" " " " " C Rear Lt.		27 48	49.790 1532.6	97 27	07.611 208.3	" "	2-64 2-18-65	-	-	" "		
	24 ' 7829.3	Tule Lake Channel Range D Front Lt.		27 49	40.140 1235.5	97 29	47.278 1293.8	" "	2-64 2-18-65	-	-	" "		
	25 ' 7829.4	" " " " " Rear Lt.		27 49	42.849 1318.9	97 29	53.267 1457.7	" "	2-64 2-18-65	-	-	" "		
	26 ' 7829.5	Tule Lake Channel Range E Front Lt.		27 49	00.429 13.2	97 28	17.998 492.6	" "	2-64 2-22-65	-	-	" "		

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

USCOMM-DC 10234-P61

25

NONFLOATING AIDS ~~FOR CHARTS~~ FOR CHARTS

TO BE CHARTED
~~TO BE REVERSED~~
~~TO BE DELETED~~
STRIKE OUT TWO

Corpus Christi, Texas. February 1964

I recommend that the following objects which ~~have~~ (have not) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.
The positions given have been checked after listing by

F. Natella by J.C.P.
Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION VERIFIED	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE*		LONGITUDE*		DATUM						
				° ' "	D.M. METERS	° ' "	D.P. METERS							
TEXAS	1	Corpus Christi Breakwater Beacon 1934		27 48	00.282	97 23	10.432	NA	Triang.	1934	-	-	523	
	2	Corpus Christi Breakwater Lt		27 47	23.333	97 22	40.950	1927	"	2-18-65	-	-	524	
	3	Corpus Christi Lt.		27 48	718.2	97 23	1122.1	"	"	1949	-	-	"	
	4	Corpus Christi Channel Lt. 85		27 48	7036.4	97 23	461.3	"	"	2-18-65	-	-	"	
	5	Corpus Christi Channel Lt. 86		27 48	44.245	97 23	18.268	"	Triang.	1964	-	-	"	
	6	Corpus Christi Channel Lt. 80		27 48	1361.9	97 23	500.0	"	"	2-18-65	-	-	"	
	7	Corpus Christi Channel Lt. 82		27 48	39.034	97 21	57.988	"	Photo	2-64	-	-	"	
	8	Corpus Christi Harbor Outer Range Lt. 1		27 48	1201.5	97 22	1587.2	"	"	2-18-65	-	-	"	
	9	Corpus Christi Harbor Outer Range Lt. 2		27 48	39.333	97 22	49.987	"	Photo	2-64	-	-	"	
	10	Corpus Christi Harbor Outer Range Lt. 3		27 48	26.877	97 22	1368.2	"	"	2-18-65	-	-	"	
	11	Tule Lake Channel Lt. 1		27 48	827.3	97 22	62.8	"	"	2-64	-	-	"	
	12	Tule Lake Channel Lt. 2		27 49	25.003	97 21	51.487	"	"	2-18-65	-	-	"	
	13	Tule Lake Channel Lt. 3		27 49	769.6	97 26	1409.3	"	"	2-64	-	-	"	
14	Tule Lake Channel Lt. 11		27 48	1699.4	97 27	40.760	"	"	2-18-65	-	-	"		
15	Viola Channel Lt. 1		27 49	45.601	97 29	45.579	"	"	2-64	-	-	"		
16	Viola Channel Lt. 2		27 49	1403.6	97 29	1247.3	"	"	2-18-65	-	-	"		
17	Viola Channel Lt. 2		27 49	46.081	97 29	38.190	"	"	2-64	-	-	"		
18	Tule Lake Channel Lt. 12		27 49	1418.4	97 27	1045.1	"	"	2-18-65	-	-	"		
19	Tule Lake Channel Lt. 12		27 49	90.175	97 27	49.077	"	"	2-64	-	-	"		
20	Tule Lake Channel Lt. 12		27 49	95.4	97 27	1343.2	"	"	2-18-65	-	-	"		

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC REVIEW

~~NON-FLOATING~~ **LANDMARKS FOR CHARTS**

TO BE CHARTED
~~NON-FLOATING~~
~~LANDMARKS FOR CHARTS~~

STRIKE OUT TWO

Corpus Christi, Texas

February 25 19 65

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(charts)~~ the charts indicated.

The positions given have been checked after listing by William H. Shearouse

Joseph K. Wilson Chief of Party 759

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION Verified	HARBOR CHART	NEARBY CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE*		LONGITUDE*		DATUM							
			°	'	°	'								
KRIS-TV TOWER	Red and Orange, skeleton steel micro-wave relay tower at broadcasting studio ht. 275 (305)	27 47.3	27 47.3	43 6.0	97 26.2	24 1.2	N.A. 1927	Photo Plot 21A16	2/22/65	X	X		823, 824, 892, 893	
TANK	ELEVATED, Aluminum, on skeleton steel legs ht. 125 (163) A (Corpus Christi, Municipal Tank (12th and Morgan) 1934.)		27 46	38.949	97 24	17.203	N.A. 1927	Triang 21A16	1934 2/24/65		X		523, 892, 893, 524, 1286	

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

* TABULATE SECONDS AND METERS

U.S. Department of Commerce
Coast and Geodetic Survey
Washington 25, D.C.

6314/LFB

, December 9, 1963

Portland District Officer
Coast and Geodetic Survey
405 Custom House
Portland, Oregon

Instructions - FIELD - Project 21416, Chart Topography, Chart
524, Nueces Bay, Texas

1. Purpose

This project will provide modern chart topography for new
Chart 524 to be compiled at 1:10,000 scale.

2. Assignment

All field operations are assigned to the Portland Field Unit.

3. Photography

Basic panchromatic photography was obtained in September 1963,
at 1:30,000 scale with the RC-8 camera. Special purpose color
photography at 1:10,000 scale was also obtained in September
1963. Contact prints of this photography will be provided for
the location of aids to navigation and for shoreline inspection
in congested areas.

4. Project Diagram

A project diagram will be furnished on which are shown project
limits, horizontal control, photograph centers and tidal bench
marks.

5. Field Operations

Field operations shall be limited to the following:

.01 Horizontal Control

- 1 All horizontal control stations for which positions
and descriptions are available in Washington have
been plotted on the project diagram. All Bureau
stations within the project limits shall be searched

5. Field Operations continued

- .01 1 for; submit Form 526 for each station. Restrict recovery of control outside the project limits to those stations needed to meet horizontal control identification requirements.
- 2 Basic horizontal control identification requirements for aerotriangulation are indicated on a specially prepared copy of the project diagram which will be furnished as part of the field data. Horizontal control shall be identified in accordance with Photogrammetry Instructions No. 22, Revised, November 1, 1959, with additional requirements for analytical bridging to include identification of two substitute stations for each marked station. Identify one substitute station for each elevated station that is identified by direct methods. Where practicable, select substitute points on opposite sides of the primary station.
- 3 Stereoscopes and 7-power wire loop magnifiers will be used to select points for control identification using the 1:30,000 scale panchromatic photography. If difficulty is encountered during the course of control identification, 2X enlargements of the contact prints should be requested in the areas of difficulty.
- .02 Aids to Navigation and Landmarks
- 1 A complete investigation shall be made of fixed aids to navigation and of landmarks. Indicate those charted landmarks to be carried forward and those charted landmarks that are to be deleted; recommend new landmarks to be charted as appropriate.
- 2 Photoidentify all landmarks to be carried forward and all new landmarks to be charted.
- 3 If a landmark cannot be positively identified on the photographs, do the following:
- (a) Locate new landmarks by third-order ground survey methods.

5. Field Operations continued

- .02 3 (b) Make a careful ground inspection of a landmark to be carried forward in order to determine whether it may have been rebuilt or moved slightly. If there is any doubt, locate the landmark by third-order ground survey methods.
- 4 Photoidentify all fixed aids to navigation, insofar as practicable.
- 5 Locate the following fixed aids to navigation by third-order ground survey methods if not located previously by triangulation of at least third-order accuracy:
- (a) Fixed aids to navigation that are steel or masonry structures.
 - (b) All aids that cannot be photoidentified in accordance with item 4 above.
 - (c) All off-lying aids that, even though identifiable on the photographs, are more than one-third the width of the mapping photograph from the shore with no land on the seaward side. The intent here is to locate by ground survey those aids to navigation that are so far offshore that the photogrammetric plot might provide a weak position.
- 6 Determine by ground survey or photogrammetric methods the azimuth of all navigational ranges marked by fixed aids that have not been determined previously by triangulation.
- 7 Submit Form 567 for aids to navigation and landmarks in accordance with current practices.
- .03 Geographic Names
- A systematic investigation of geographic names is required. Preliminary name sheets will be furnished. Submit the usual formal report.
- .04 Buildings
- Buildings of landmark value for the nautical chart

5. Field Operations continued

.04 shall be field inspected in accordance with Photogrammetry Instructions No. 54, dated January 2, 1958.

.05 Bridge and Cable Crossings

Restrict field measurements to horizontal and vertical clearances of bridges and vertical clearances of overhead cables to those that are not charted on the latest print of the largest scale chart of the area. Report those clearances on letter-size chart sections.

.06 Interior Features

Interior features other than landmarks for nautical charts and landmark buildings shall be omitted, except for roads. Field inspection of roads shall be restricted to those state and federal highways which are numbered and generally indicated on the USGS quads by red overlay symbols. Also, all usable roads, regardless of surface, that lead to a pier, wharf, lighthouse, landing or the MEWL (or lead to the general vicinity of these features) shall be field inspected and indicated on the field inspection photographs by the DFL symbol. State and federal highways are to be indicated in the same manner, except that the numbers shall be included. Streets in built-up areas will be charted, but streets within military reservations shall be omitted. Railroads will be included only if they connect to shore points.

6. Costs

All costs incurred on this project shall be charged to Cost Code 21416.

7. Standby Orders

The chief of the field unit shall immediately inform the New Orleans District Officer when he arrives in the project area. The telephone number of that office is 527-6551. Furnish both office and residence addresses and telephone number or numbers. Mailing and telegraphic addresses are also required. If the chief of the field unit will be absent from the working area for a day or more, he is to inform the District Officer

7. Standby Orders continued

in advance of those absences. When the project is completed, inform him of the day the unit leaves the area.

In the event of an attack on the project area, the chief of the field unit shall select a city or town that is a minimum of thirty miles from the attack area and move the unit to that location. Inform the District Officer of the new address, etc., and report on conditions in that area.

If the personnel and equipment on the unit are needed to assist in Civil Defense activities during the survival phase of the emergency, the chief of the unit shall inform the District Officer and request permission to assist the Civil Defense authorities. In the event the District Officer cannot be reached, comply with requests of Civil Defense authorities.

If there is an attack but the project area is neither damaged nor contaminated, continue field operations but be prepared to move out within six hours after receipt of orders from this office or the District Officer. Those orders may require the unit to assist in establishing emergency airfields, recover control, perform photoinspection for establishment of emergency harbors, furnish information for bomb damage assessment, and such other survey activities as may be directed.

8. Modification of Instructions

If changes in procedures and methods seem advisable, please make appropriate recommendations to this office.

9. Receipt.

These instructions shall be acknowledged.

James C. Lewis, Jr.
Acting Director

cc:
NODO, 7, 21, 211, 6314,
632, 6321, 6327, 83,
831, 832, 834

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON 25, D.C.

NO. 6320

March 31, 1964

Chief, Photogrammetric Branch

Instructions - AEROTRIANGULATION - Project 21416, Corpus Christi, Texas

- References: (1) Instructions - Field - Project 21416, dated December 9, 1963
- (2) Instructions - COMPILATION - dated April 3, 1964

1. General

This project will provide topographic information for new Nautical Chart 524, scale 1:10,000. The project is comprised of one manuscript T-12502.

2. Photography

Project photography is comprised of two sets: two (2) flights of panchromatic, flown in 1963, scale 1:30,000; and two (2) flights of color, flown in 1963, scale 1:10,000.

3. Bridging

Two bridges are required: one 1:30,000 scale flight, photographs 63-W 898 through 906; and a portion of one 1:10,000 scale flight, photographs 63-W 941 through 947.

Field identified control for the color bridge consists of only two stations. Bridging with the panchromatic photography is required first to provide additional control for the color photography bridge. The panchromatic photography bridge will, in addition, provide control (bridge points identifiable on the color photography) for the color photography in the area not covered by the color photography bridge.

4. Compilation

Photogrammetric Branch

Compilation is assigned the ~~Tampa District Office~~. The panchromatic photography can be applied by graphic methods or by Kelsh plotter; Kelsh plates will be used in bridging. Color plates are required for bridging only - duplicate color transparencies will be used in compilation.

5. Worksheets and Manuscripts

The scale of the manuscript and the inset is 1:10,000. In addition to the Original Manuscript, three 1:10,000 scale Mercator projections (worksheets) will be furnished to the Compilation office.

The bridged area is covered by two of the worksheets; Mercator values of bridge data and related data involves only these two manuscripts or worksheets. For plotting on the worksheets, the Aerotriangulation Section shall provide Mercator values (produced by electronic computer) of bridge points, landmarks and aids to navigation (located by either field methods or by the bridge), and state grid intersections (5,000 ft. interval). - The central parallel for the new chart - also the Original Manuscript and worksheets - is $27^{\circ} 49' 00''$. - Worksheets limits are: (1) Latitude $27^{\circ} 46' 30''$ to $27^{\circ} 51' 05''$ - Longitude $97^{\circ} 20' 40''$ to $97^{\circ} 27' 40''$; (2) Latitude $27^{\circ} 47' 00''$ to $27^{\circ} 51' 30''$ - Longitude $97^{\circ} 27' 00''$ to $97^{\circ} 33' 00''$.

6. Forms 567 (Tabulation and Submission)

The method and procedures described in the Provisional General Instructions shall be followed. Forms 567 were not submitted to the Nautical Chart Division by the field party. Hand tabulated forms were submitted to the Photogrammetry Division. The Aerotriangulation shall have the forms typed; submit the appropriate set to the Nautical Chart Division; and then follow the described procedure.

7. Schedule

Project completion is scheduled for October 1, 1964. Unless the present schedule in the Aerotriangulation Section is changed, completion of bridging for the subject project will not be accomplished before the middle of May at the earliest. Field edit will have to be started by the first of September to allow time for the field check, and application of changes and final review in the compilation office.

The scheduling of field, bridging, and completion operations as discussed in the preceding paragraph allows only 3 months (approximately) for compilation. ~~Since this project is the first of its type for the Tampa office, completion of bridging at an earlier date is desirable.~~

8. Modification

Appropriate recommendations shall be made if changes in procedures or methods seem advisable.

J. E. Waugh

J. E. Waugh
Chief, Photogrammetry Division

cc: 631,6301,6314,6320
6321,6327

(37) E. J. M.

IN REPLY, PLEASE ADDRESS THE DIRECTOR, COAST AND GEODETIC SURVEY, AND NOT THE SIGNER OF THIS LETTER, AND REFER TO

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON 25, D.C.

NO. 6320

.April 29, 1964

Chief, Photogrammetric Branch

Instructions for Photogrammetric Compilation, Project 21416,
Nautical Chart Topography, Corpus Christi, Texas

- References: (1) Instructions - Field - Project 21416,
dated December 9, 1963
- (2) Instructions - Aerotriangulation - Project
21416, dated March 31, 1964

1. General

The assignment of project compilation to the Tampa Office was referred to in the Aerotriangulation Instructions (Reference 2). The assignment of compilation has been changed to the Washington Office.

The purpose of this project is to provide topographic information for new Nautical Chart 524, scale 1:10,000. The chart will cover Corpus Christi Harbor and the Turning Basin. Extended coverage to the west of Viola Turning Basin will be charted as a 1:10,000 scale inset.

Except as amended by the subject instructions, the procedures and methods described in the Provisional General Instructions for compiling chart topography shall be followed.

2. Project Data

2.1 Photography

- 2.1.1 Panchromatic, scale 1:30,000 (two flights)
- 2.1.2 Color, scale 1:10,000 (two flights)

2.2 Manuscript - One (1) Original Manuscript (Mercator projection), T-12502, ruled on vinylite.

2.3 Worksheets - Two (2) Mercator projections, ruled on vinylite.

One (1) Mercator projection, cronaflex copy of the Original Manuscript.

- 2.4 Field Data
- 2.5 Bridge Data
- 2.6 Cronaflex Copy of Bureau Survey T-9182, scale 1:20,000
- 2.7 Ozalid Copies of Bureau Surveys T-9181 and T-9183, scale 1:20,000
- 2.8 Copy of Nautical Chart ⁵²³~~522~~, scales 1:20,000 and 1:40,000
- 2.9 B-8 Plates - Photographs 63-W 912 and 63-W 913

3. Aerotriangulation

Refer to reference 2.

4. Compilation Methods and Procedures

The compilation method can be graphic or B-8. B-8 plates (color and panchromatic) and duplicate color transparencies (for those color photographs not used in bridging) will be provided.

In ruling the Original Manuscript, the Chart Division did not include the border lines for the chart or the border lines between the inset and interior details on the chart. Inset location and compilation limits have been indicated by pencilled lines on the Original Manuscript by the Chart Division. Border lines are not to be ruled in the Photogrammetry Division.

After the Chart Division Copy of the manuscript is produced, a border line or lines can be ruled on the Original Manuscript in the area between the inset and interior details shown on the chart.

Projection lines values and a brief title - to include "INSET" and scale - shall be provided for the inset. This information is required for the Registration Manuscript Copy only.

One area of the Manuscript - south border - is not covered by project photography. A copy of Bureau survey T-9182, scale 1:20,000 is provided for application of details to the Original Manuscript. This area shall be field edited in detail.

A second area of the manuscript - Corpus Christi Causeway (Rincon Point to Indian Point) - is not covered by the bridge photography. Sufficient horizontal control has been identified to set a Kelsh model (63-W 913 and 912) for compiling this area. Kelsh plates will be provided.

6. Cartographic Comparison

Comparison is required only with the following data: Bureau Surveys T-9181, T-9182, T-9183; Nautical Chart ~~6474~~ and Geological Survey Quadrangles. 523

7. Field Edit

The manuscript will be field edited.

8. Schedule

Project completion is scheduled for October 1, 1964.

9. Modification

Appropriate recommendations will be made if changes in procedures or methods seem advisable.

J. E. Waugh
J. E. Waugh
Chief, Photogrammetry Division

cc:631,6301,6314,
6320,6321,6327
TDO

February 15, 1965

IN REPLY REFER TO: WSC-6314

Norfolk Regional Officer
Coast and Geodetic Survey
439 West York Street
Norfolk, Virginia 23510

Instructions - FIELD EDIT - Project 21416; Chart Topography,
Chart 524, Nueces Bay, Texas

Ref: (1) Instructions - FIELD - Project 21416, 6314/LFB,
dated December 9, 1963

(2) Instructions for Photogrammetric Compilation,
Project 21416, dated April 29, 1964.

These instructions are provided for your assignment of field
edit surveys on the Gulf Coast.

Color photography combined with pre-compilation field inspection
of the project area resulted in a reliable interpretation of
charted features and map detail. Therefore, field edit of
interior features such as roads, railroads and buildings is
not required. Concentrate field edit to the shoreline and
its immediate vicinity. Specific items for attention of the
field editor are as follows:

1. Examine the shoreline and alongshore features while
cruising just offshore in a launch or skiff, carefully
comparing the compiled features with the actual ones and
give special attention to piling, dolphins and similar
structures and the MHWL alongside piers. Furnish all
data and information required to apply any necessary
corrections to the manuscript.
2. Examine and dispose of all items noted on the
Discrepancy Print.
3. Verify existence of a micro-wave relay tower
reported by chart letter to be located at Lat. $27^{\circ} 47' 15''$;
Long. $97^{\circ} 24' 10''$. If the tower does exist, identify
on the field photographs for photogrammetric location
or, if outside photographic coverage, locate it by
ground survey methods.

4. Verify, by a visual inspection, all charted landmarks and fixed aids to navigation. Indicate the date of verification by entering the day, month and year in the "Date of Location" column of the duplicate copies of Forms 567 furnished as part of the field edit data. No changes in the aids to navigation have been reported to the Nautical Chart Division.

5. That section of the area from Lat. 27° 47' southward to the southern neat line is questionable in both content and horizontal accuracy. All detail in the section was compiled from existing maps and a plan furnished by the U. S. Engineers because a change in the charting limits, made after photography was obtained, created a holiday in photographic coverage. New photography is scheduled to fill the holiday, but it will not be available for field edit. The field editor shall furnish all information required to adequately complete this section from an office interpretation of the scheduled photography. It is anticipated that a short bridge may be necessary to control the one or two models that will be required to complete the section. Recover and submit recovery notes for each of the following horizontal control stations in order that the required stations can be satisfactorily office identified:

1. Corpus Christi, Municipal Tank (12th and Morgan Streets)
2. Corpus Christi, Spohn Hospital, Steel Stack
3. Corpus Christi, Wynn Seale Junior High School, Stack
4. Corpus Christi, New Senior High School, Stack
5. Corpus Christi, Trinity Lutheran Church, Cross

Charge all costs to Cost Code 21416.

If changes in methods or procedures specified in these instructions appear desirable, please make appropriate recommendations to this office.

Receipt of these instructions shall be acknowledged.

H. Arnold Karo
 H. Arnold Karo
 Director

cc:
 NOFO, 7, 6314, 6320, 6321,
 83, 831, 832, 833, 834

6470

XERO COPY

XERO COPY

XERO COPY

XERO COPY

GEOGRAPHIC NAMES LIST

T-12502

Avery Point
Avery Point Turning Basin
Chemical Turning Basin
Corpus Christi
Corpus Christi Bay
Corpus Christi Beach
Corpus Christi Breakwater
Industrial Canal
Main Turning Basin
Nucces Bay
Nueces River
Rincon Point
Tule Lake
Tule Lake Turning Basin
Viola Turning Basin

A. J. Wraight

A. J. Wraight
Geographic Branch