

9220

Diag. Cht. No. 1288

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. Ph-36(48)F Office No. T-9220

LOCALITY

State TEXAS

General locality LAGUNA MADRE

Locality PADRE ISLAND-CAMERON COUNTY

1945

CHIEF OF PARTY

G.E. Morris, Jr., Chief of Field Party.

A.L. Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE Sept 8-1953

8-1870-1 (1)

9220

DATA RECORD

T -9220

Project No. (II): Ph-36(48)F Quadrangle Name (IV):

Field Office (II): Brownsville, Texas

Chief of Party: George E. Morris, Jr.

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: Arthur L. Wardwell

Instructions dated (II) (III): 14 February 1949

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): **Inapplicable**

Scale Factor (III): **None**

Date received in Washington Office (IV) *NOV 9 1951*

Date reported to Nautical Chart Branch (IV): **NOV 10 1951**

Applied to Chart No. **897** Date:

Date registered (IV): **7-30-53**

Publication Scale (IV): ~~1:20,000~~ **not published**

Publication date (IV):

Geographic Datum (III): **N. A. 1927**

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

~~XXXXXXXXXXXXXXXXXXXX~~

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): **BEACH, 1939**

Lat.: **26° 11' 10".126 (311.6M)**

Long.: **97° 10' 36".672 (1018.3M)**

Adjusted
~~XXXXXXXXXX~~

Plane Coordinates (IV):

State:

Zone:

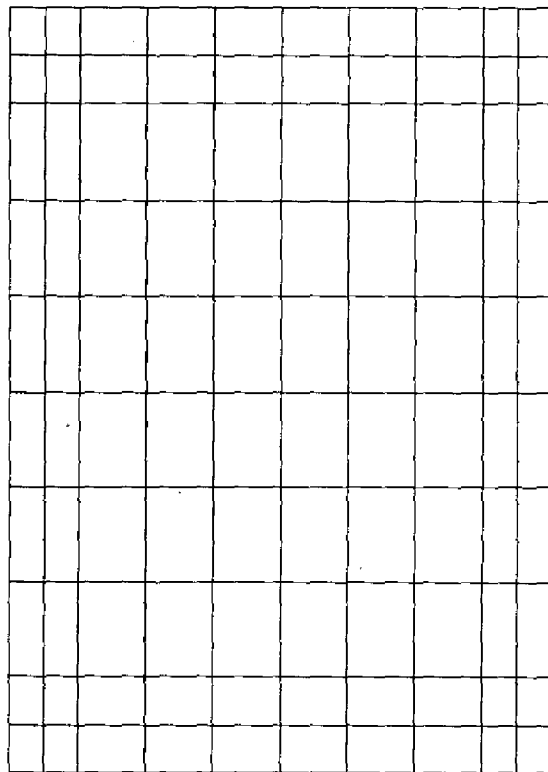
Y=

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.

26°15'00" 97°15'00"



26°07'30"

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

Planimetric Only

97°10'30"

DATA RECORD

Field Inspection by (II): **W. H. Nelson**
I. Y. Fitzgerald

Date: **December 1949**

Planetable contouring by (II): **Inapplicable**

Date:

Completion Surveys by (II): *W. H. Shearouse*

Date: *20 March 1952*

Storn and

Mean High Water Location (III) (State date and method of location): **Date of photographs and field inspection measurements (Sept. 1949 to Jan. 1950) Air Photo Compilation**

Projection and Grids ruled by (IV): **T.L.J. (W.O.)**

Date: **18 Sept. 1950**

Projection and Grids checked by (IV): **H.D.W. (W.O.)**

Date: **20 Sept. 1950**

Control plotted by (III): **I. I. Saperstein**

Date: **5 Feb. 1951**

Control checked by (III): **R. J. Pate**

Date: **9 Feb. 1951**

Radial Plot ~~contouring~~ **contouring** by (III): **M. M. Slavney**

Date: **23 March 1951**

Stereoscopic Instrument compilation (III): **Inapplicable**
Planimetry
Contours

Date:

Date:

Manuscript delineated by (III): **R. A. Reece**

Date: **July 1951**

Photogrammetric Office Review by (III): **R. R. Wagner**

Date: **31 Oct. 1951**

Elevations on Manuscript checked by (II) (III): **Inapplicable**

Date:

Camera (kind or source) (III): **Fairchild Cartographic - 6" Metrogon Lens - Camera "O"**
U.S.C. & G.S. Nine-lens 8 1/2" focal length

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
48-0-1500 to 1508 incl.	9 Dec. 1948	10:49-10:51	1:20,000	0.5
48-0-2091 to 2094 incl.	10 Dec. 1948	10:24-10:29	"	-
25733 to 25735, incl.	4 May 1950	14:03-14:04	"	0.1
25798 to 25800, incl.	4 May 1950	15:31-15:33	"	0.1

Note: In the Laguna Madre area the stage of tide is less than 1/2 foot.

Tide (III)

Reference Station: **Galveston, Texas**
Subordinate Station: **Brazos Santiago, Texas**
Subordinate Station:

Diurnal		
Ratio of Ranges	Mean Range	Range
0.9	0.9	1.3
0.9	0.9	1.3

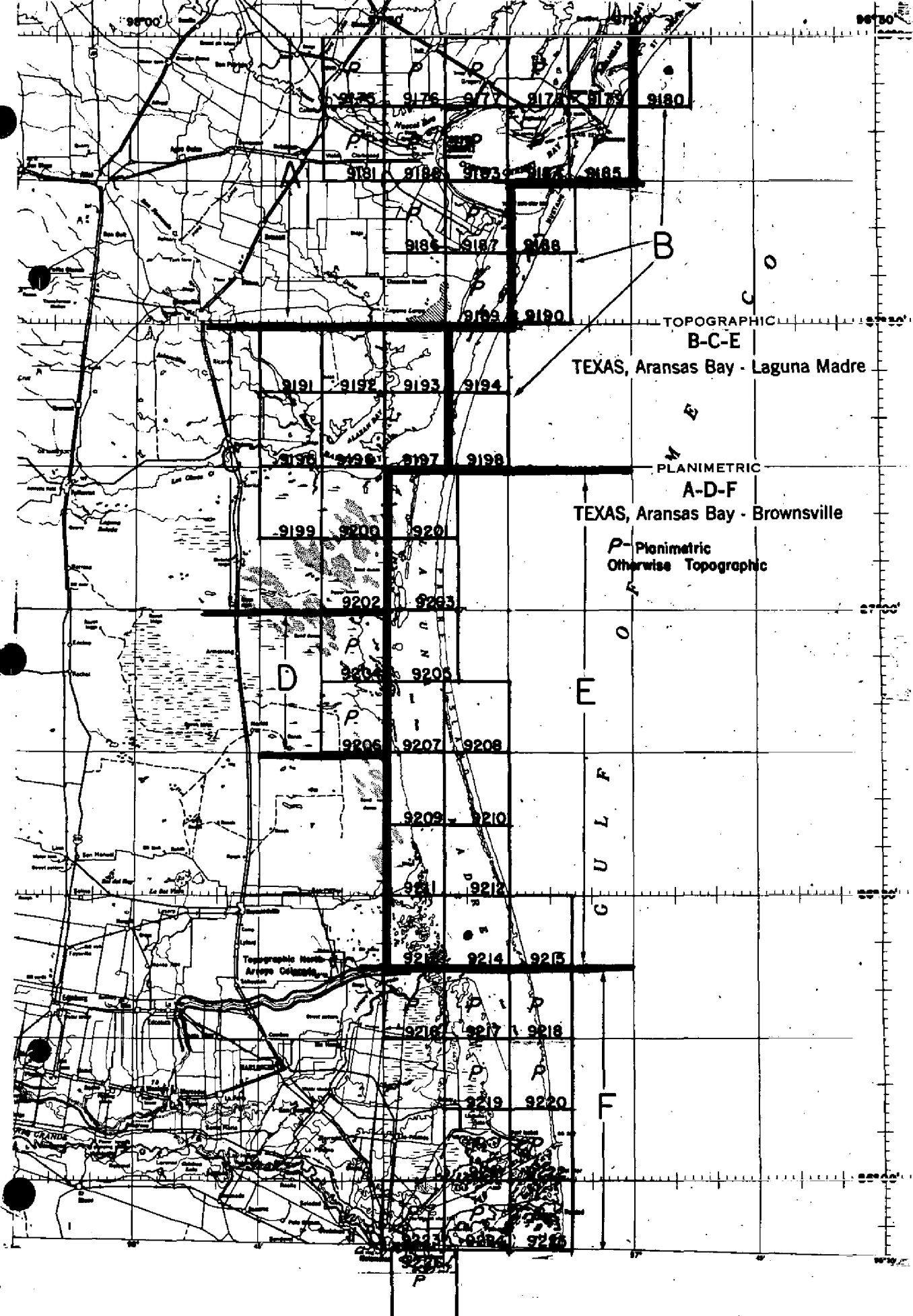
Washington Office Review by (IV): *C. Hanavich*
Final Drafting by (IV): *E. B. Hunter*
Drafting verified for reproduction by (IV): *W. O. Hollum*
Proof Edit by (IV): *H. Streifer*

Date: *5 August 1952*
Date: *5-6-53*
Date: *5-7-53*
Date: *6-4-53*

Land Area (Sq. Statute Miles) (III): **5**
Shoreline (More than 200 meters to opposite shore) (III): **20.5**
Shoreline (Less than 200 meters to opposite shore) (III): **0**
Control Leveling - Miles (II): **Inapplicable**
Number of Triangulation Stations searched for (II): **3** Recovered: **3** Identified: **3**
Number of BMs searched for (II): **0** Recovered: **0** Identified: **0**
Number of Recoverable Photo Stations established (III): **2**
Number of Temporary Photo Hydro Stations established (III): **0**

Remarks:

TOPOGRAPHIC AND PLANIMETRIC MAPPING PROJECT PH-36 (48)



TOPOGRAPHIC
B-C-E
TEXAS, Aransas Bay - Laguna Madre

PLANIMETRIC
A-D-F
TEXAS, Aransas Bay - Brownsville

P - Planimetric
Otherwise Topographic

TOPOGRAPHIC NORTH
Arroyo Colorado

Summary T- 9220

Project Ph-36(48) consists of fifty-two quadrangles at 1:20,000, each 7.5 minutes in latitude and longitude, covering the Gulf Coast of Texas and the Intracoastal Waterway from Aransas Bay to Brownsville and the Mexican Border. Adjoining the project to the north is a series of shoreline surveys in Part IV of Project Ph-14(46).

Information concerning Ph-36(48) in its broader aspects will be included in a project completion report to be compiled at the conclusion of the review of all surveys in this project.

Twenty-six of the quadrangles in this project are topographic surveys and are to be published at 1:24,000 scale by the Geological Survey. The other twenty-six quadrangles are planimetric surveys. Of these, nineteen are to be used as bases by the Geological Survey for the compilation of 7.5 minute topographic quadrangles and will not be published as planimetric maps. The remaining seven, T-9175, T-9176, T-9177, T-9181, T-9189, T-9204, and T-9206, will be published as planimetric maps.

Cloth-backed lithographic prints of the original map manuscripts at compilation scale and the descriptive reports for all maps in this project will be filed in the Bureau Archives. Cloth-backed copies of the published topographic quadrangles at 1:24,000 scale will also be filed.

All special reports except the Geographic Names Report will be filed in the Project Completion Report.

2. AREAL FIELD INSPECTION

Scattered sand dunes on shifting sand, and patches of low grassy dunes on a sand flat, cover most of this area. Along the west edge of the Gulf beach there is a broken line of scattered sand dunes. In general, these dunes are not over ten or fifteen feet high and they appear on the photograph as dark dots in a light area. Between the groups of dunes, and separating them, are sand flats which run from the Gulf beach across the island to Laguna Madre. To the west of the scattered dunes, and parallel to the beach, are patches of grassy dunes which, due to the storm water line and the tone of the sand flat which surrounds them, appear to be small islands. The grass appears as a dark tone; a narrow strip of drifting sand around each grassy area appears as a light tone; and, the surrounding sand flat appears as intermediate gray tones. The photographs are of good contrast and these lines of demarcation are easily seen.

Field inspection was done on contact prints of photographs 48-0-1501 through 48-0-1507.

3. HORIZONTAL CONTROL

All horizontal control stations were recovered and identified.

4. VERTICAL CONTROL

There is no vertical control within the limits of this quadrangle.

5. CONTOURS AND DRAINAGE

Not applicable.

6. WOODLAND COVER

There is no woodland cover to be shown.

7. SHORELINE AND ALONGSHORE FEATURES

The Gulf mean high water line was measured at intervals from identifiable detail on the field photographs. The low water line, because of diurnal tides at the time of shoreline inspection, could not be determined. The foreshore is sand with no bluffs, cliffs, piers, landings, submarine cables, or other shoreline structures.

The storm water line was indicated on the photographs in blue ink. On the west side of the island this line follows the edge of vegetation except in the shifting dune areas where it follows the westerly edge of the white areas of shifting sand.

Along the entire length of the island, in this quadrangle, there are areas in which the sand flats extend from Laguna Madre across the island to the low ridge immediately west of the MHWL of the Gulf of Mexico. These areas are bounded by the storm water line. All of them are covered by water during storm or rainy periods. At times some of them are completely dry, while at the same time, others have water in them. Those which are seldom dry have the darkest photographic tones. As the field inspection party was never there after an extended period of calm weather or an extended period of dry weather, it is not known whether all of these areas are ever completely dry.

In any case, all of these areas will be important landmark features to any person using a topographic map of the area, and for this reason, their value as such should be recognized and retained by the cartographer.

Tidal data for Laguna Madre has been received from the Humble Oil and Refining Company. This will be used in determining the shoreline after new photography is received. See "Special Report, Identification and Delineation of the Shoreline of the Laguna Madre, Project Ph-36(48)", to be submitted at a later date.

8. OFFSHORE FEATURES

There are no offshore features.

9. LANDMARKS AND AIDS

There are no landmarks or aids.

*There are two non-floating aids:
Harlingen-Port Isabel Light 99
See copies of Form 567 109 w.a.R.
in this report.*

10. BOUNDARIES, MONUMENTS, AND LINES

See "Special Report, Boundaries, Baffin Bay to the Rio Grande, Project Ph-36(48)", to be submitted at a later date.

11. OTHER CONTROL

The following recoverable topographic stations were established: CIST 1949, and GLOW 1949.

12. OTHER INTERIOR FEATURES

There is a telephone line running more or less parallel to and along the westerly edge of the beach. This line, two wires on twenty foot poles, runs the entire length of the quadrangle. The turns in the line have been indicated on the various photographs by a prick mark and a note. This telephone line is not in use at the present time, but is maintained by the U. S. Coast Guard in a standby condition.

There are no classifiable roads or buildings in this area.

13. GEOGRAPHIC NAMES

See "Special Report, Geographic Names, Port Mansfield (Red Fish Landing) to the Rio Grande, Project Ph-36(48)", to be submitted at a later date.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

"Special Report, Identification and Delineation of the Shoreline of Laguna Madre, Project Ph-36(48)", to be submitted at a later date.

"Special Report, Boundaries, Baffin Bay to the Rio Grande, Project Ph-36(48)", to be submitted at a later date.

"Special Report, Geographic Names, Port Mansfield (Red Fish Landing) to the Rio Grande, Project Ph-36(48)", to be submitted at a later date.

Records, Quadrangle T-9220(), letter of transmittal Ph-36 Field 55, forwarded to Washington Office 20 February 1950.

Submitted
17 February 1950

Wilber H. Nelson
Wilber H. Nelson
Cartographic Survey Aid

Approved
20 February 1950

George E. Morris, Jr.
George E. Morris, Jr.
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT.

21. AREA COVERED.

This photogrammetric plot was for all of Ph-36F(48) Texas, located along the Gulf of Mexico, on Laguna Madre to the Mexican border. The plot was run in two parts; the first comprised Surveys T-9216 to T-9220, inclusive, the second comprised T-9221 to T-9226, inclusive.

The sketches on page 15 and 16 show the arrangement of quadrangles, junction with Ph-36E(48), the centers of the photographs used and the control identified for the photogrammetric plots.

The sketch on page 16, for Photogrammetric Plot No. 2, shows the area south of T-9224 and T-9225 as crosshatched and labeled T-9224 Extension and T-9225 Extension; this area extends to the southern limit of Nautical Chart No. 1288.

22. METHOD.

Radial Plot:

Map Manuscripts. -- The map projections are on vinylite at a scale of 1:20,000 ruled with the polyconic projections in black and the Texas South grid in red. In addition to projections of 7'30" in latitude and longitude for Surveys T-9216 through T-9226, there were furnished extensions of 2' 30" latitude south for T-9224 and T-9225 to permit compilation to the southern limit of Nautical Chart No. 1288.

All control stations, including substitute points, were plotted, using beam compass and meter bar.

Photographs. -- There were two types of single-lens prints and some nine-lens prints used in this plot. All the single-lens were taken in 1948 with Camera "O".

Excepting Padre Island on the east, all of this project was covered by single-lens photographs ratioed to 1:20,000 scale from 1:40,000 negatives. These prints, with the fiducial marks, were made using the special glass plate in the enlarger. One hundred four (104) of these photographs were used, numbered as follows:

48-0-1292 to 48-0-1297, inclusive
 48-0-1303 to 48-0-1315, "
 48-0-1321 to 48-0-1326, "
 48-0-1425 to 48-0-1441, "
 48-0-1444 to 48-0-1460, "
 48-0-1465
 48-0-1466
 48-0-1468 to 48-0-1482, "
 48-0-2070 to 48-0-2076, "
 48-0-2083 to 48-0-2103, "

Ratioed prints 48-0-2077 and 48-0-2082 were ordered to provide photograph coverage along the southern border of T-9225 Extension. These prints were made without the glass plate for fiducial marks in the enlarger. They were used to complete the plot for an area the purpose of which is to provide planimetry for a nautical chart to be published at a 1:80,000 scale.

On the eastern side of Laguna Madre, the area of Padre Island was covered by single-lens contact prints taken with Camera "O", scale 1:20,000. Twenty-four (24) contact prints, numbered 48-0-1493 to 48-0-1516, inclusive, were used in the radial plot. There were additional contact prints along the western side of Laguna Madre but they were not needed.

Three flights of nine-lens, 1:20,000 scale, photographs were used in this radial plot. Two of the flights were along Laguna Madre, the other flight went northwest from Brownsville.

The following nine-lens photographs were used:

25730 to 25739, inclusive
 25794 to 25801, "
 25803
 25805 to 25808, "

Templets. -- Vinylite templets were made from all the photographs. Master templets, furnished by the Washington Office, were used with the nine-lens photographs and all of the single-lens, except 48-0-2077 and 48-0-2082, to correct for paper distortion and chamber displacement.

Note 1: -

Another station - not a control station - was mistakenly identified by the field inspector as 18C RP 48. Evidence furnished by the field editor indicates that sta 18C RP 48 has probably been destroyed.

48-0-1292 to 48-0-1297	inclusive
48-0-1303 to 48-0-1315	"
48-0-1321 to 48-0-1326	"
48-0-1425 to 48-0-1441	"
48-0-1444 to 48-0-1460	"
48-0-1465	
48-0-1466	
48-0-1468 to 48-0-1482	"
48-0-2070 to 48-0-2076	"
48-0-2083 to 48-0-2103	"

Radial prints 48-0-2077 and 48-0-2082 were ordered to provide photograph coverage along the southern border of T-2225 Extension. These prints were made without the glass plate for fiducial marks in the enlarger. They were used to complete the plot for an area the purpose of which is to provide planimetry for a nautical chart to be published at a 1:80,000 scale.

On the eastern side of Laguna Madre, the area of Padre Island was covered by single-lens contact prints taken with camera "0", scale 1:20,000. Twenty-four (24) contact prints, numbered 48-0-1492 to 48-0-1516, inclusive, were used in the radial plot. There were additional contact prints along the western side of Laguna Madre but they were not needed.

Three flights of nine-lens, 1:20,000 scale, photographs were used in this radial plot. Two of the flights were along Laguna Madre, the other flight went northwest from Brownsville.

The following nine-lens photographs were used:

25730 to 25739	inclusive
25794 to 25801	"
25803	
25805 to 25808	"

Templates. -- Vinylite templates were made from all the photographs. Master templates furnished by the Washington Office, were used with the nine-lens photographs and all of the single-lens, except 48-0-2077 and 48-0-2082, to correct for paper distortion and chamber displacement.

Closure and Adjustment to Control. -- It was decided to run the radial plot directly on the projections when checks showed the scale and junctions to be excellent. Projections for T-9216, T-9217, T-9218, T-9219 and T-9220 were fastened together for Plot No. 1, and T-9221, T-9222, T-9223, T-9224, T-9225 and T-9226 were assembled for Plot No. 2.

The radial plot was started using photograph centers and pass points established by the radial plot for Ph-36E(48), the area north of these surveys. A preliminary plot to determine if all control could be held was extended south through all of Ph-36F(48):

See next page

On T-9216, the "R. G. Smith Gin Tank, 1949" would not hold by 3.15 mm (63 meters); it was re-identified in the office and held on the plot.

See attached letter, dated 31 May 1951

On T-9222, it was not possible to hold "Port Isabel Concrete Stack, 1939" by 1.5 mm (30 meters).

See next page

On T-9225, "T T Sta. 3L (USGS)" did not hold by .5 mm (10 meters) and on checking it appeared to be misidentified; it was reidentified in the office and held on the plot.

See Note 1 opposite page

On T-9226, "Sub. Sta. IBC RP 48" did not hold by 37.5 mm (750 meters).

The final radial plot was begun with single-lens fixed templets in T-9216 and T-9217. Into these were adjusted the nine-lens templets along the west and east shores of Laguna Madre. The plot was then continued south with fixed nine-lens templets along the east shore of Laguna Madre into the well-controlled area in the center of T-9222. The other flight of nine-lens templets in Laguna Madre was then laid, followed by the single-lens contact templets on Padre Island. These, together with templets for ratio prints 48-0-2089 through 48-0-2096, gave a satisfactory radial plot for T-9218, T-9220 and the north half of T-9222. The plot was continued south from T-9217 through T-9219 into the well-controlled area of T-9221. This completed Radial Plot No. 1.

Radial Plot No. 2, (see sketch), was started by laying the templets for nine-lens photographs 25803 through 25808 in T-9223 and T-9224. Templets for 25801 and 25730 through 25733 were laid in T-9222 and T-9225. The templets for ratio prints were then laid starting from positions ascertained in Radial Plot No. 1 and proceeding to the southern limit of T-9223, T-9224 and T-9225. The plot was carried east from the controlled area in T-9226 then north into control on T-9225 for T-9224 Extension and T-9225 Extension.

23. ADEQUACY OF CONTROL.

Excepting the southern part of T-9224 and T-9225, including T-9224 Extension and T-9225 Extension, and Padre Island near the center of photographs 25795 and 25796, there was sufficient control for a good radial plot. In the area of T-9224 Extension and T-9225 Extension, there is no control to tie the ends of four parallel flights. This was also noted in a letter to this office from the Acting Director, dated 19 October 1950. Extreme care was taken in this area to help get the best possible accuracy. In the area on Padre Island, it is believed a satisfactory plot was obtained despite sparse control and nine-lens photograph centers in the water.

Four (4) "positively" identified control stations could not be held as originally identified:

R. G. Smith Gin Tank, 1949, No 12 on sketch for Plot No. 1, on T-9216, gave an intersection 3.15 mm (63 meters) from the geographic position. It was decided that the point pricked on the field print and shown on the M2226-12 card was the "hull burner" and not the tank which was reprinted in the office. This point was held and was corroborated in correspondence with the field party.

T. T. Sta. 3L (USGS), No. 56, on sketch for Plot No. 2, on T-9225, would not hold by .5mm (10 meters), as originally identified appeared to be pricked in the wrong "light area"; the "light area" that checked the reference measurement given on the Form 526 was pricked and held on the plot.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

COPY

POST OFFICE ADDRESS:

31 May 1951
TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

To: Chief, Division of Photogrammetry
U. S. Coast and Geodetic Survey
Washington 25, D. C.

Subject: Control in Ph-36F(48) Texas.

During the radial plot for Ph-36F(48), two "positively" identified horizontal control stations could not be held. These stations are: Port Isabel Concrete Stack, center, 1939 on T-9222, and Substitute Station LBC RP Monument 48, 1911 on T-9226.

The radial plot position of Port Isabel Concrete Stack, center, 1939 is about 30 meters (1.5 mm on the projection) and 250° in azimuth from the published position for the station. It is noted that the 1949 recovery for this station states: - "This intersection station as described in 1939 and 1940 was the center of a concrete stack at the Coastal Refinery Plant on SW edge of town of Port Isabel. There has never been a concrete stack in this vicinity, however, the iron stack at the refinery which was painted gray was removed in 1944. A new iron stack was built on the original foundation, 105 feet above ground, 117 feet above M.S.L."

The radial plot position of Substitute Station LBC RP Monument 48, 1911 is about 750 meters (3.75 cm on the projection) and 203° in azimuth from the geographic position as plotted from the published position of LBC RP Monument 48, 1911. The control station identification card sketch agrees with the photograph and the distance given from the station to the substitute station is only 81.2 meters. There is something anomalous in the recovery card for LBC RP Monument 48, 1911; - the 1942 and 1950 recovery both say that the mark is stamped "W776 1942" with no mention of the monument number, whereas the recovery of the other International Boundary Commission Stations state that the monument number is cast in the mark.

See
A12

It is noted that in the area affected by these two control stations, there is considered to be sufficient "positively" identified control that was held to give a tight accurate radial plot.

Arthur L. Wardwell
LCDR USC&GS
Officer in Charge
Tampa Photogrammetric Office

mms/mb

Port Isabel Concrete Stack, center, 1939,
No. 47 on sketch for Plot No. 2, on T-9222,
did not hold by 1.5mm (30 meters).

Substitute Station IBC HP Monument 48, 1911,
No 21 on the same sketch, on T-9226, did not
hold by 37.5 mm (750 meters).

These stations were the subject of a letter to the Chief, Division of Photogrammetry, dated 31 May 1951, a copy of which is a part of this report.

The position of Substitute Station Armadillo 2 R.M. 1913 on T-9217 was computed using two different "initials"; FOX, 1913 and LUTES, 1939. The control identification card gave FOX, 1913 as the initial in the space provided for "Azimuth Station", and gave LUTES, 1939 as the initial on the sketch portion of the card. The position computed using LUTES, 1939 held on the radial plot. The field party had left the area so a note is attached to the control station identification card to bring this to the attention of the Washington Office.

It is noted that ninety-four (94) stations were identified for the radial plot of Ph-36F(48) of which five (5) were classified as "doubtful" and of which four (4) were held.

24. SUPPLEMENTAL DATA.

Inapplicable.

25. PHOTOGRAPHY.

The photograph coverage was adequate and the definition was good.

Several of the nine-lens photographs were tilted but only one (25806) so severely as to require determination in this area of little relief. Photograph 25806 was tilted $4^{\circ} 28'$ so the isocenter and the mechanical center are on the photograph and the map manuscript.

Respectfully submitted,

Milton M. Slavney
Milton M. Slavney
Cartographer (Photo)
Tampa Photogrammetric Office

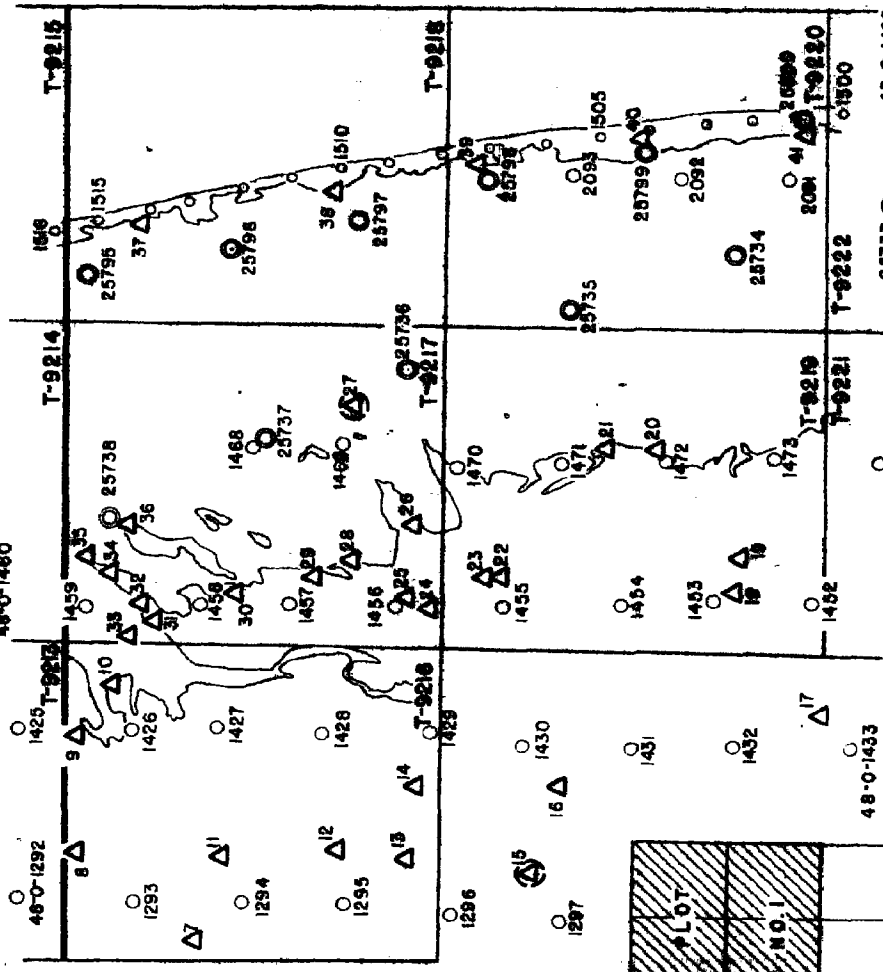
APPROVED AND FORWARDED:

Arthur L. Wardwell
Arthur L. Wardwell
Chief of Party

INDEX OF CONTROL

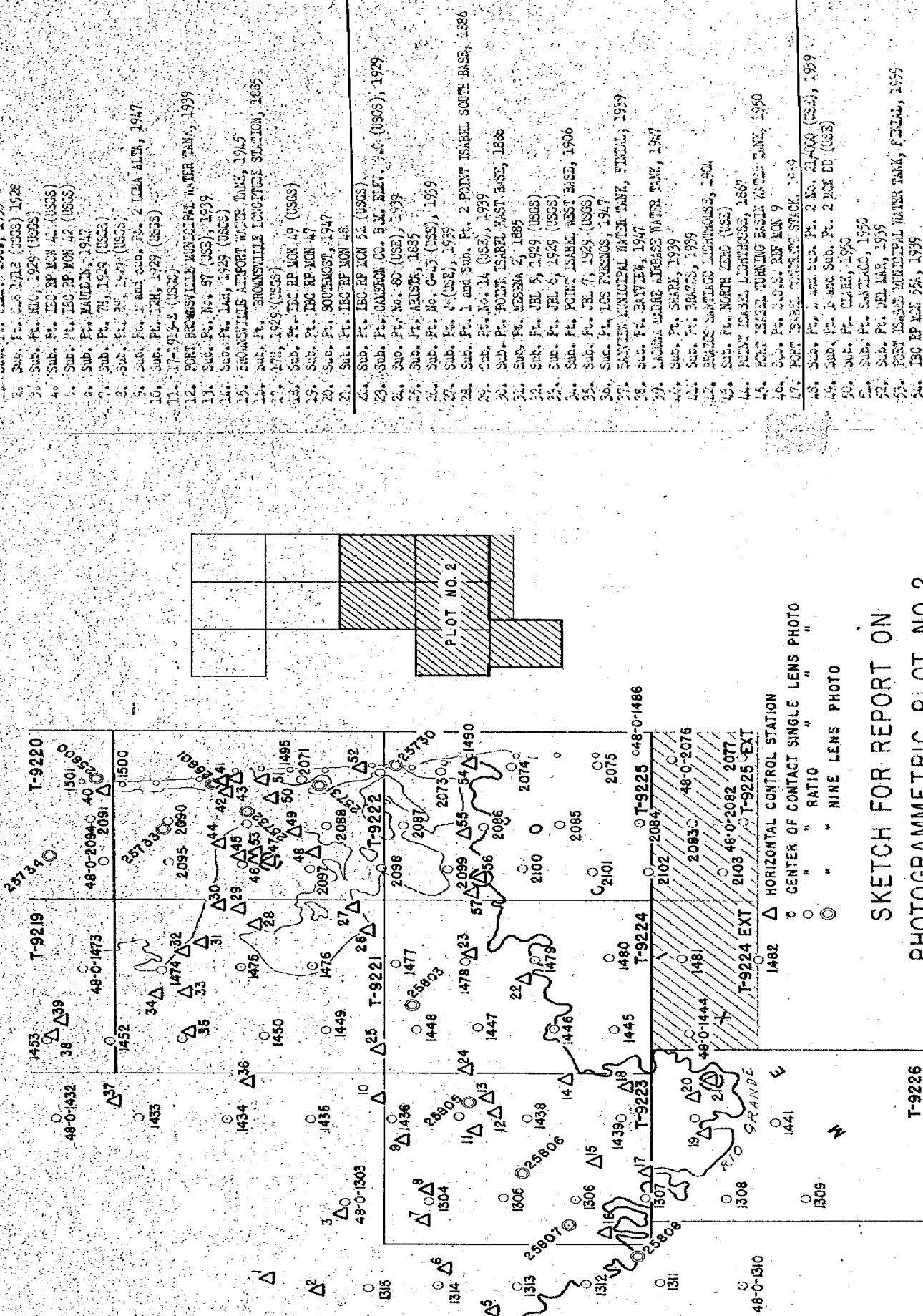
1. Sub. Pt. THE LAKE, 1929 (USGS)
2. Sub. Pt. THE LAKE, 1929 (USGS)
3. Sub. Pt. CRINSON, 1947
4. Sub. Pt. JUL 6, 1928 (USGS)
5. Sub. Pt. JUL 7, 1928 (USGS)
6. Sub. Pt. KIFF RANCH WINDMILL, 1949
7. Sub. Pt. ZOH, 1929 (USGS)
8. CHAMPURADO WINDMILL, 1949
9. JUL 27, 1929 (USGS)
10. Sub. Pt. WATER, 1913
11. Sub. Pt. COLORADO, 1949
12. E. G. SMITH RANCH, SAME 1949
13. Sub. Pt. JUL 17, 1929 (USGS)
14. Sub. Pt. RIVER, 1947
15. E. G. SMITH RANCH, SAME, 1949
16. Sub. Pt. LAUREN, 1947
17. BAYVIEW METEOROLOGICAL WATER TANK, FORMAL, 1939
18. Sub. Pt. BAYVIEW, 1947
19. LAUREN WOODS AIRMANS WATER TANK, 1947
20. Sub. Pt. JUL 19, 1929 (USGS)
21. Sub. Pt. JUL 19, 1929 (USGS)
22. WINDMILL SW OF MIL. STA. LUTHER, 1949
23. Sub. Pt. JUL 13, 1929 (USGS)
24. BAYVIEW WINDMILL, 1949
25. JUL 14, 1929 (USGS)
26. Sub. Pt. LUTHER, 1939
27. Sub. Pt. ALMADILLA 2 NW, 1913
28. JUL 27, 1929 (USGS)
29. Sub. Pt. JUL 26, 1929 (USGS)
30. JUL 27, 1929 (USGS)
31. Sub. Pt. JUL 27, 1929 (USGS)
32. Sub. Pt. JUL 27, 1929 (USGS)
33. Sub. Pt. EL 1 AEROSTO COLORADO U.S.A., 1947
34. Sub. Pt. EL 2 AEROSTO COLORADO U.S.A., 1947
35. Sub. Pt. COLORADO NW, 1949
36. Sub. Pt. WINDMILL, 1950 (USGS)
37. Sub. Pt. BAYVIEW, 1939
38. Sub. Pt. BAYVIEW, 1939
39. Sub. Pt. GULCH, 1939
40. Sub. Pt. BAYVIEW, 1939
41. Sub. Pt. SHANE, 1939

PH-36(48)E



△ HORIZONTAL CONTROL STATION
 ○ CENTER OF CONTACT SINGLE LENS PHOTO
 ○ " " " RATIO " " NINE LENS PHOTO

SKETCH FOR REPORT ON
 PHOTOGRAMMETRIC PLOT NO. 1
 OF PH-36(48)F



SKETCH FOR REPORT ON
 PHOTOGRAMMETRIC PLOT NO. 2
 OF PH-36(48)F

1. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
2. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
3. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
4. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
5. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
6. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
7. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
8. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
9. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
10. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
11. Sub. Pt. 1 and sub. Pt. 2 LIMA ALTA, 1947
12. PORT BROWNVILLE MUNICIPAL WATER TANK, 1939
13. Sub. Pt. No. 57 (USE), 1939
14. Sub. Pt. No. 144, 1939 (USGS)
15. BROWNVILLE AIRPORT WATER TANK, 1945
16. Sub. Pt. BROWNVILLE LONGITUDE STATION, 1885
17. Sub. Pt. BROWNVILLE LONGITUDE STATION, 1885
18. Sub. Pt. DEC RP MON 49 (USGS)
19. Sub. Pt. DEC RP MON 47
20. Sub. Pt. SOUTHWEST, 1947
21. Sub. Pt. DEC RP MON 48
22. Sub. Pt. DEC RP MON 52 (USGS)
23. Sub. Pt. WALTON CO. 5 A. BLT. C. (USGS), 1929
24. Sub. Pt. No. 80 (USE), 1939
25. Sub. Pt. AUSTIN, 1885
26. Sub. Pt. No. G-45 (USE), 1939
27. Sub. Pt. 1 (USE), 1939
28. Sub. Pt. No. 14 (USE), 1939
29. Sub. Pt. 1 and Sub. Pt. 2 POINT ISABEL SOUTH BASE, 1886
30. Sub. Pt. POINT ISABEL FIRST BASE, 1886
31. Sub. Pt. MESSINA 2, 1885
32. Sub. Pt. JEL 5, 1929 (USGS)
33. Sub. Pt. JEL 6, 1929 (USGS)
34. Sub. Pt. POINT ISABEL WEST BASE, 1906
35. Sub. Pt. JEL 7, 1929 (USGS)
36. Sub. Pt. LOS FRESNOS, 1947
37. BROWNVILLE MUNICIPAL WATER TANK, FIDEL, 1939
38. Sub. Pt. BROWNVILLE, 1947
39. LIMA ALTA AIRBASE WATER TANK, 1947
40. Sub. Pt. STARK, 1939
41. Sub. Pt. STARK, 1939
42. SUBS. STARKS, 1939
43. BROWNVILLE AIRBASE, 1904
44. Sub. Pt. NORTH LIMA (USE)
45. PORT ISABEL LIGHTHOUSE, 1887
46. PORT ISABEL TURNING BASIN WATER TANK, 1950
47. PORT ISABEL CONTROL STATION, 1939
48. Sub. Pt. 1 and sub. Pt. 2 No. 21400 (USE), 1939
49. Sub. Pt. 1 and sub. Pt. 2 MON DD (USE)
50. Sub. Pt. CLARK, 1950
51. Sub. Pt. SANTIAGO, 1950
52. Sub. Pt. JEL MARK, 1939
53. PORT ISABEL MUNICIPAL WATER TANK, FIDEL, 1939
54. DEC RP MON 52, 1939
55. DEC RP MON 51, 1939
56. Sub. Pt. No. 1329 (USGS)
57. Sub. Pt. BROWNVILLE, 1939

MAP T. 49220 PROJECT NO. Ph-36F(48) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
✓ HARLINGEN - PORT / ISABEL LT. 99, 1950	Field Comp.	N.A. 1927	26	09 18.08				556.4	(1,290.0)		
			97	14 17.66				490.5	(1,176.0)		
✓ HARLINGEN - PORT / ISABEL LT. 109, 1950	"	"	26	07 50.24				1,546.1	(300.4)		
			97	13 28.45				790.3	(876.5)		
✓ / BEACH, 1939	G4304 TO Page 132	"	26	11 10.126				311.6	(1,534.8)		
			97	10 36.672				1,018.3	(647.7)		
✓ / COAST, 1939	"	"	26	14 28.196				867.7	(978.7)		
			97	11 22.383				621.2	(1,044.0)		
✓ / SHARK, 1939	"	"	26	07 48.073				1,479.4	(367.0)		
			97	10 09.852				273.7	(1,393.1)		
S.P. BEACH 1939	Comp	"	26	11				119.0	(1,727.4)		
			97	10				935.3	(730.7)		
S.P. COAST 1939	"	"	26	14				806.5	(1,039.9)		
			97	11				619.8	(1,045.4)		
S.P. CHARK 1939	"	"	26	07				1,554.1	(292.3)		
			97	10				303.4	(1,363.4)		

MAP T. 9216 PROJECT NO. Ph-36F(48) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS (BACK)
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
COLORADO, 1949	Texas IV	N.A.	26 19	26.490				815.2	(1,031.3)	
	516	1927	97 27	13.424				372.3	(1,291.7)	
HODGE, 1947	G7199 IV 467	"	26 15	24.377				750.2	(1,096.3)	
			97 25	53.478				1,484.0	(181.0)	
R. G. SMITH RANCH, TANK, 1949	T.C. 179	"	26 17	39.579				1,218.1	(628.4)	
			97 27	27.116				752.3	(912.2)	
WATER, 1913	G4304 131	"	26 21	35.095				1,080.0	(766.5)	
			97 23	32.084				889.6	(774.0)	
JBL 6, 1928 (USGS)	USGS BK C8745 (Fld)Pge 6	"	26 18	31.17	959.3	(887.2)	+ 4.0m	963.3	(883.2)	
			97 33	37.90	1,051.3	(613.0)	-26.1m	1,025.2	(639.1)	
JBL 7, 1928 (USGS)	USGS BK C8745 (Fld)Pge 10	"	26 19	26.48	814.9	(1,031.6)	+ 4.0m	818.9	(1,027.6)	
			97 31	27.26	756.0	(908.0)	-26.1m	729.9	(934.1)	
GRISSON, 1947 (USGS)	G7199 IV 466	"	26 18	10.194				313.7	(1,532.8)	
			97 33	16.982				471.1	(1,193.3)	
KIPP RANCH WINDMILL, 1949 (USGS)	T.C. 179	"	26 21	31.944				983.1	(863.4)	
			97 31	03.378				93.7	(1,569.9)	
R. G. SMITH, TANK, 1949	"	"	86 12	55.872				1,719.4	(127.0)	
			97 26	45.908				1,274.4	(391.2)	
TEM 17A, 1929 (USGS)	USGS BK C8745 (Fld)Pge 36	"	26 15	59.147	1,820.2	(26.3)	+ 4.0m	1,824.2	(22.3)	
			97 34	16.187	449.2	(1,215.7)	- 26.1m	423.1	(1,241.8)	
TEM 18A, 1929 (USGS)	USGS BK C8745 (Fld)Pge 12	"	26 15	33.57	1,033.1	(813.4)	+ 4.0m	1,037.1	(809.4)	
			97 34	26.87	745.6	(919.4)	- 26.1m	719.5	(945.5)	
23H, 1929 (USGS)	U.S.E. W.O.	North Ameri- can	26 19	49.21	1,514.4	(332.1)	+ 4.0m	1,518.4	(328.1)	
			97 29	31.29	867.8	(796.2)	- 26.1m	841.7	(822.3)	

MAP T. 9216 PROJECT NO. Ph-36F(48) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS (BACK)
					FORWARD	(BACK)		FORWARD	(BACK)	
25H, 1929 (USGS)	CAMERON CITY USGS	North Ameri- can	26	22	20.82	640.7 (1,205.8)	4.0m	644.7 (1,201.8)		
			97	24	36.88	1,022.4 (641.0)	-26.1m	996.3 (667.1)		
JEL 16, 1929 (USGS)	"	"	26	15	22.29	686.0 (1,160.5)	4.0m	690.0 (1,156.5)		
			97	25	42.38	1,176.1 (489.0)	-26.1m	1,150.0 (515.1)		
JEL 17, 1929 (USGS)	"	"	26	15	37.59	1,156.8 (689.6)	4.0m	1,160.8 (685.6)		
			97	27	35.12	974.5 (690.4)	-26.1m	948.4 (716.5)		
/ CHANPURADO WINDMILL, 1949	TEXAS IV 519	N.A. 1927	26	22	16.005			492.6 (1,353.9)		
			97	27	26.020			721.4 (942.0)		
WATER AZ. MARKER, 1913 x PHOTOSTAT	U.S.E. Comp.	"	26	20	52.399			1,612.6 (233.9)		
			97	23	39.466			1,094.4 (569.4)		
S.P. CHANPUR ADO WINDMILL, 1949	"	"	26	22				313.6 (1,532.9)		
			97	27				446.0 (1,217.4)		
S.P. WATER, 1913	"	"	26	21				939.6 (906.9)		
			97	23				995.0 (668.6)		
S.P. KIPP RANCH WINDMILL, 1949	"	"	26	21			West	960.9 (885.6)		
			97	30				1,639.8 (23.8)		
S.P. COLORADO, 1949	"	"	26	19				812.1 (1,034.4)		
			97	27				387.9 (1,276.1)		
S.R. HODGE, 1947	"	"	26	15				732.9 (1,113.6)		
			97	25				1,475.4 (189.6)		
S.P. GRISSOM, 1947	"	"	26	18				320.9 (1,525.6)		
			97	33			West	464.3 (1,200.1)		
S.P. TBM 18A, 1929 (USGS)	"	"	26	15			West	1,140.9 (705.6)		
			97	34				662.2 (1,002.8)		

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -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)		FORWARD	(BACK)	
S.P. TBM 17A, 1929 (USGS)	Comp.	N.A. 1927	26 16				West	133.1 (1,713.4)		
S.P. JBL 6, 1928 (USGS)	"	"	97 34				West	398.4 (1,266.5)		
S.P. JBL 7, 1928 (USGS)	"	"	26 18				West	938.3 (908.2)		
			97 33					957.2 (707.1)		
			26 19				West	884.1 (962.4)		
			97 31					637.9 (1,026.1)		
S.P. JBL 17, 1929 (USGS)	"	"	26 15					1,148.7 (697.7)		
			97 27					939.2 (725.7)		
S.P. 23H, 1929 (USGS)	"	"	26 19					1,582.9 (263.6)		
			97 29					824.7 (839.3)		
HARI										
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COR										
POP										
326										

MAP T. 9217 PROJECT NO. PH-36F(18) SCALE OF MAP 1:20,000 SCALE OF FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
HORSE, 1950 (USE)	Field Comp.	N.A. 1927	26 21	04.61				141.9	(1,704.6)	
BUENA VISTA WINDMILL, 1949	T.C.	"	26 15	09.822				1,465.1	(1,198.5)	
JBL 14, 1929 (USGS)	USGS Photostat	North Am.	26 21	26.61	1,418.7	(427.8)	+4.0m	302.3	(1,544.2)	
JBL 25, 1929 (USGS)	"	"	26 17	31.52	970.0	(876.4)	+4.0m	961.8	(703.3)	
JBL 26, 1929 (USGS)	"	"	26 20	53.67	1,488.9	(175.6)	-26.1m	1,422.7	(423.8)	
JBL 27, 1929 (USGS)	"	"	26 21	18.62	516.4	(1,147.7)	-26.1m	712.3	(952.6)	
DOVE U.S.E. 1947	USE Photostat	N.A. 1927	26 19	05.28	162.5	(1,684.0)	+4.0m	974.0	(872.4)	
RL 1 ARROYO COLORADO USE, 1947	"	"	26 20	11.19	1,369.2	(477.3)	+4.0m	1,462.8	(201.7)	
RL 2 ARROYO COLORADO USE, 1947	"	"	26 22	01.38	38.3	(1,625.5)	-26.1m	12.2	(1,651.6)	
S.P. HORSE, 1950 (USE)	Comp.	"	26 20	56.801				1,748.1	(98.4)	
S.P. COLORADO RM, 1879	"	"	26 21	13.788				1,055.7	(608.0)	
S.P. LUTES, 1939	"	"	26 22	22.727				424.3	(1,422.2)	
			26 21	30.195				630.2	(1,033.5)	
			26 20	53.369				929.3	(917.2)	
			26 21					1,479.7	(183.9)	
			26 19					149.5	(1,697.0)	
			26 21					1,497.5	(166.1)	
			26 20					1,796.0	(50.5)	
			26 21					863.4	(800.0)	
			26 15					1,457.6	(388.9)	
			26 19					903.8	(761.1)	

MAP T-9217

PROJECT NO. Ph-36F (U8)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR U. COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
			LONGITUDE OR X-COORDINATE				FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	
S.P. ARMADILLO 2 RM, 1913	Comp.	N.A. 1927	26	16			1,497.0 (409.5)		
S.P. HIKE, 1913	"	"	26	16			1,505.7 (159.0)		
S.P. DOVE, 1947 (USE)	"	"	97	20			1,493.4 (353.0)		
S.P. RL 1 ARROYO COLORADO 1947 (USE)	"	"	97	21			976.7 (688.0)		
S.P. RL 2 ARROYO COLORADO 1947 (USE)	"	"	26	20			1,780.8 (65.7)		
S.P. JBL 26, 1929 (USGS)	"	"	26	21			1,022.7 (611.0)		
S.P. JBL 27, 1929 (USGS)	"	"	26	21			458.4 (1,388.1)		
S.P. ARMADILLO 2 RM, 1913	"	"	97	22			636.8 (1,026.9)		
			26	21			965.8 (880.7)		
			97	20			1,504.1 (159.5)		
			26	19			213.7 (1,602.8)		
			97	21			527.6 (1,136.5)		
			26	20			1,318.8 (527.7)		
			97	22			57.0 (1,606.8)		
			26	16			1,486.5 (360.0)		
			97	16			1,511.4 (153.3)		

1 Ft. = 304806 METER
 COMPUTED BY: IRVING I. SAPPERSSTEIN
 DATE: 15 January 1951
 CHECKED BY: RUSSELL J. PATE
 DATE: 17 January 1951
 M-2388-12

MAP T. 9219 PROJECT NO. Ph-36F(48) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -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 (BACK)
					FORWARD	(BACK)		FORWARD	(BACK)	
WINDMILL, SW OF LUTTES, 1949	T.C.179	N.A. 1927	26 13	41.70				1,283.3	(563.2)	
HARLINGEN - PORT ISABEL LT.59,1950	Field Comp.	"	26 14	23.32				1,442.3	(223.2)	
HARLINGEN - PORT ISABEL LT.69,1950	"	"	26 13	07.91				717.6	(1,128.8)	
HARLINGEN - PORT ISABEL LT.79,1950	"	"	26 15	58.83				712.7	(952.5)	
HARLINGEN - PORT ISABEL LT.89,1950	"	"	26 11	52.48				243.4	(1,603.0)	
HARLINGEN - PORT ISABEL LT.89,1950	"	"	97 15	32.03				1,633.1	(32.5)	
HARLINGEN - PORT ISABEL LT.89,1950	"	"	26 10	53.37				1,615.0	(231.4)	
HARLINGEN - PORT ISABEL LT.89,1950	"	"	97 15	10.79				889.3	(776.6)	
BAYVIEW MUNIC. W.T.FINIAL, 1939	G4304 Pge 135	"	26 07	27.048			West	1,642.4	(204.0)	
FOX, 1867	G4304 Pge 132	"	97 23	58.686			Used Cont.	299.6	(1,366.5)	
BAYVIEW, 1947	G7199 IV Pge 468	"	26 11	42.296				832.4	(1,014.0)	
LAGUNA, 1947	G7199 IV Pge 467	"	97 17	45.558				1,301.6	(544.8)	
LAGUNA MADRE AIRBASE W.T., 1947	G7199 IV Pge 473	"	26 09	07.677				1,264.9	(401.0)	
JHL 13, 1929	USGS (P) North American Pge 14	"	97 21	01.095				236.3	(1,610.2)	
JHL 19, 1929	"	"	26 12	32.343			West	30.4	(1,636.1)	
USGS	"	"	97 25	37.218			Used Cont.	995.3	(851.1)	
	"	"	26 09	09.599				1,033.2	(632.5)	
	"	"	97 20	20.568				295.4	(1,551.0)	
	"	"	26 14	01.44			4.0m	571.3	(1,095.2)	
	"	"	26 14	01.44			4.0m	48.3	(1,798.1)	
	"	"	97 20	44.61			-26.1m	1,212.1	(453.3)	
	"	"	26 10	44.72			4.0m	1,380.2	(466.2)	
	"	"	97 17	54.15			-26.1m	1,477.6	(188.5)	

MAP T. 9221

PROJECT NO. Ph-36F(48)

SCALE OF MAP 1:20,000

1 of 3

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -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)	
✓ ARISTA, 1885	TC 22	N.A. 1927	26 00 13.431 97 21 28.506				413.3 (1,433.1) 792.8 (875.8)		
✓ POINT ISABEL WEST BASE, 1906	"	"	26 06 19.573 97 19 14.853				602.3 (1,244.1) 412.7 (1,254.5)		
✓ POINT ISABEL SOUTH BASE, 1886	G4081 Pge 114	"	26 03 41.489 97 16 08.774				1,276.7 (569.6) 243.9 (1,423.9)		
✓ POINT ISABEL EAST BASE, 1886	"	"	26 04 44.158 97 15 11.014				1,358.9 (487.5) 306.1 (1,361.4)		
✓ MESENA 2, 1885	G6538 Pge 153	"	26 05 07.579 97 17 01.212				233.2 (1,613.2) 33.7 (1,633.7)		
✓ LOS FRESNOS, 1947	G7199 IV 468	"	26 03 53.186 97 22 57.205				1,636.7 (209.7) 1,590.0 (77.7)		
✓ J (USE), 1939	G4304 Pge 133	"	26 01 03.727 97 15 07.353				114.7 (1,731.7) 204.5 (1,464.0)		
✓ NO.14 (USE), 1939	"	"	26 04 14.987 97 15 08.436				461.2 (1,385.2) 234.5 (1,433.2)		
✓ NO.G-43 (USE), 1939	G4304 Pge 134	"	26 00 19.172 97 16 26.897				590.0 (1,256.4) 748.0 (920.6)		
✓ JBL 5, 1929 (USGS)	USGS BK C8810 FIG. PG. 11 AMERICAN	NORTH	26 05 36.13 97 17 06.82				1,111.9 (734.6) 189.5 (1,477.8)		
✓ JBL 6, 1929 (USGS)	"	"	26 05 32.01 97 19 12.60				985.1 (861.4) 350.1 (1,317.2)		
✓ JBL 7, 1929 (USGS)	" Pg. 9	"	26 05 24.67 97 20 56.37				759.2 (1,087.2) 1,566.5 (100.9)		

West of sheet limits

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
19H, 1929 (USGS)	USGS BK C8810 Fld. Pg 23	NORTH AMERICAN	26 01 45.23 97 19 54.51	1,394.9 (451.4) 1,515.6 (152.6)	+ 4.0m -26.1m	1,398.9 (447.4) 1,489.5 (178.7)				
20H, 1929 (USGS)	"	"	26 00 52.43 97 17 14.63	1,613.4 (233.0) 406.8 (1,261.6)	+ 4.0m -26.1m	1,617.4 (229.0) 380.7 (1,287.7)				
POINT ISABEL SOUTH BASE AZ. MK., 1886	"	N. A. 1927	26 03 97 15	Shown on manuscript with circle		1,769.6 (76.7) 1,432.0 (235.8)				
S. P. G-43 (USE)	"	"	26 00 97 16			592.0 (1,254.4) 780.5 (888.1)				
S.P. NO. 1 POINT ISABEL SOUTH BASE, 1886	"	"	26 03 97 16			1,245.0 (601.3) 288.1 (1,379.7)				
S.P. MESENA 2, 1885	"	"	26 05 97 17			285.1 (1,561.3) 33.3 (1,634.1)				
S.P. POINT ISABEL WEST BASE, 1906	"	"	26 06 97 19			530.6 (1,315.8) 106.5 (1,560.7)				
S.P. POINT ISABEL EAST BASE, 1886	"	"	26 04 97 15			1,323.2 (523.2) 305.6 (1,361.9)				
S.P. ARISTA, 1885	"	"	26 00 97 21			393.1 (1,453.3) 788.3 (880.3)				
S.P. NO. 14 (USE) 1939	"	"	26 04 97 15			445.3 (1,401.1) 257.6 (1,410.1)				
S.P. LOS FRESNOS, 1947	"	"	26 03 97 22			1,831.4 (15.0) 1,579.8 (87.9)				
S.P. JBL 5, 1929 (USGS)	"	"	26 05 97 17			1,111.0 (735.5) 222.2 (1,445.6)				

MAP T. 9222 PROJECT NO. Ph-36F(4.8) SCALE OF MAP 1:20,000 SCALL FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
BRAZOS, 1939	G4304 TC Pge 132	N.A. 1927	26 04	28.997				892.3	(954.1)		
DEL MAR, 1939	" "	"	26 00	41.719				1,413.6	(254.0)		
POINT ISABEL LIGHTHOUSE, 1867	G4304 Pge 135	"	26 04	38.679	Shown with red tri- angle on back.			1,283.8	(562.6)		
PORT ISABEL, COM- CRETE STACK, CENTER 1939	" Pge 136	"	26 03	34.827				311.3	(1,357.1)		
PORT ISABEL, MUN- ICIPAL WATER TANK, FINIAL, 1939	" "	"	26 04	26.144				1,190.3	(656.1)		<i>Finial destroyed by storm in 1950</i>
NO. 21 \neq 000 (USE), 1939	" Pge 133	"	26 03	14.572				726.6	(940.9)		<i>destroyed</i>
NORTH ZERO (USE)	USE PHOTOSTAT	"	26 02	05.309				1,071.7	(774.6)		
MON. D D (USE)	"	"	26 03	18.347				510.0	(1,157.8)		
USE REF. MON. 9	Letter from USE	"	26 03	44.148				1,358.6	(487.8)		
CLARKE (USE), 1950	Field Comp.	"	26 02	14.572				405.0	(1,262.7)		
SANTIAGO, 1950	"	"	26 02	05.309				163.4	(1,683.0)		
PORT ISABEL TURN- ING BASIN WATER TANK, 1950	"	"	26 03	56.324				1,566.0	(102.2)		
			26 04	07.725				237.7	(1,608.7)		<i>Removed from manuscri Pp</i>
			26 02	30.861				1,132.4	(535.3)		<i>accuracy un- known.</i>
			26 03	45.604				949.7	(896.7)		
			26 03	13.72				385.7	(1,282.3)		
			26 03	35.90				1,403.4	(443.0)		
			26 03	26.02				1,527.7	(140.1)		
			26 03	21.14				422.2	(1,424.2)		
			26 03	39.28				997.9	(669.9)		
			26 03	57.43				800.7	(1,045.7)		
			26 03	21.14				587.6	(1,080.2)		
			26 03	39.28				1,208.8	(637.6)		
			26 03	57.43				1,596.3	(71.4)		

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
✓ HARLINGEN - PORT ISABEL LIGHT 119, 1950	Field Comp.	N.A. 1927	26 06	21.70				667.8	(1,178.6)	
• HARLINGEN - PORT ISABEL LIGHT 139, 1950	"	"	97 12	38.86				1,079.8	(587.4)	
• HARLINGEN - PORT ISABEL LIGHT 139, 1950	"	"	26 04	12.95				398.5	(1,447.9)	
• HARLINGEN - PORT ISABEL LIGHT 139, 1950	"	"	97 12	02.31				64.2	(1,603.4)	
• BRAZOS SANTIAGO RANGE REAR LIGHT 1950	"	"	26 04	17.70				544.7	(1,301.7)	
• BRAZOS SANTIAGO RANGE REAR LIGHT 1950	"	"	97 09	25.10				697.6	(970.0)	
• BRAZOS SANTIAGO RANGE FRONT LIGHT 1950	"	"	26 04	03.77				116.0	(1,730.4)	
• BRAZOS SANTIAGO RANGE FRONT LIGHT 1950	"	"	97 09	48.28				1,341.9	(325.8)	
• BRAZOS SANTIAGO ENTRANCE RANGE REAR LIGHT, 1950	"	"	26 03	55.58				1,710.4	(136.0)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 10	25.39				705.7	(962.0)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 03	55.72				1,714.7	(131.7)	<i>sta. destroyed</i>
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 10	08.26				229.6	(1,438.1)	<i>sta. destroyed</i>
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 04	21.80				670.9	(1,175.5)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 09	57.20				1,589.8	(77.8)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 03	27.56				848.1	(998.3)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 10	52.51				1,459.6	(208.2)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 02	53.36				1,642.0	(204.3)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 11	49.42				1,373.8	(294.1)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 04	18.337				564.3	(1,282.1)	<i>sta. destroyed</i>
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 09	58.477				1,625.3	(42.3)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 00					1,322.4	(524.0)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 09					260.5	(1,407.9)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	26 04					901.1	(945.3)	
• BRAZOS SANTIAGO ENTRANCE RANGE FRONT LIGHT, 1950	"	"	97 09					1,371.4	(296.2)	

MAP T. 9223

PROJECT NO. Ph-36F(48)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
					FORWARD	(BACK)		FORWARD	(BACK)	
BROWNSVILLE LONGITUDE STATION, 1885	G4304 TC Pg 134	N.A. 1927	25 53	54.647				1,681.7	(164.7)	
NO. 87 (USE) 1939	"	"	97 29	27.919				777.1	(892.9)	
	"	"	25 57	08.276				254.7	(1,591.7)	
	"	"	97 23	39.081				1,087.3	(582.0)	
OLMITO, ECC., 1939 <i>(HWAF-1223)</i>	"	"	26 03	09.460				291.1	(1,555.3)	
BROWNSVILLE AIR- PORT TANK, 1945	G7199 IV Pg 469	"	97 31	39.650				1,102.2	(565.7)	
	"	"	25 54	26.14				804.4	(1,042.0)	
	"	"	97 26	16.02				445.9	(1,224.1)	
LOMA ALTA, 1947	"	"	25 59	37.120				1,142.3	(704.1)	
	"	"	97 25	21.432				596.1	(1,072.7)	
INTERNATIONAL, 1947	"	"	25 54	35.846				1,103.1	(743.3)	
	"	"	97 25	55.263				1,538.1	(131.8)	
MAULDIN, 1947	"	"	25 58	17.743				546.0	(1,300.4)	
	"	"	97 30	57.354				1,595.5	(73.6)	
PORT BROWNSVILLE, MUNICIPAL WATER TANK, FINIAL, 1939	G4304 Pg 136	"	25 57	07.469				229.8	(1,616.5)	
	"	"	97 24	12.055				335.4	(1,334.0)	
GULF ATLANTIC WARE- HOUSE CO. TANK, 1950	Field Comp	"	25 56	49.277				1,516.4	(330.0)	
	"	"	97 24	16.199				450.7	(1,218.7)	
IBC RP MON 41 {USGS}	USGS Rosita Quad Pg 31	North Ameri- can	25 56	45.41			4.0 m	1,397.4	(449.0)	
	"	"	97 32	47.45			-26.2m	1,320.2	(349.2)	
IBC RP MON 42 {USGS}	"	"	25 55	49.12			4.0 m	1,511.6	(334.8)	
	"	"	97 31	31.60			-26.2m	879.4	(790.3)	
IBC RP MON 49 {USGS}, 1910	USGS Browne- ville Quad Pg 1	"	25 53	30.36			4.0m	934.3	(912.1)	
	"	"	97 22	47.93			-26.2m	1,334.2	(336.0)	

1 FT. = 3048006 METER

COMPUTED BY IRVING I. SAFERSTEIN

DATE 13 Feb. 1951

CHECKED BY RUSSELL J. PATE

DATE 15 Feb. 1951

MAP T. 9223

PROJECT NO. Ph-36F(48)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
U-48 1918 (USGS) 1928 (14 T-9223)	USGS BK 8745 Fd. Pg 24	North Ameri- can	26 01	54.41	1,674.4	(172.0)	4.0m	1,678.4	(168.0)	
10 H, 1929 (USGS) (14 T-9223)	Log Quatos Quad Pg 1	"	97 32	11.35	315.6	(1,352.6)	-26.1m	289.5	(1,378.7)	
12 H, 1929 (USGS) (14 T-9223)	" Pg 5	"	26 01	10.76	331.1	(1,515.3)	4.0m	335.1	(1,511.3)	
	" Pg 1	"	97 28	50.68	1,409.2	(259.2)	-26.1m	1,383.1	(285.3)	
	" Pg 5	"	26 00	07.85	241.6	(1,604.8)	4.0m	245.6	(1,600.8)	
	" Pg 5	"	97 24	08.48	235.8	(1,432.8)	-26.1m	209.7	(1,458.9)	
8H, 1929 (USGS)	Fort Brown Quad Pg 5	"	25 58	59.62	1,834.7	(11.7)	4.0m	1,838.7	(7.7)	
	" Pg 5	"	97 27	29.19	811.9	(857.0)	-26.1m	785.8	(883.1)	
7H, 1929 (USGS)	"	"	25 58	49.09	1,510.6	(335.7)	4.0m	1,514.6	(331.7)	
	"	"	97 29	04.02	111.8	(1,557.1)	-26.1m	85.7	(1,583.2)	
14H, 1929 (USGS)	" Pg 8	"	25 55	01.44	44.3	(1,802.1)	4.0m	48.3	(1,798.1)	
	" Pg 8	"	97 22	39.13	1,089.0	(580.8)	-26.2m	1,062.8	(607.0)	
17H, 1929 (USGS)	" Pg 9	"	25 52	35.78	1,101.1	(745.3)	4.0m	1,105.1	(741.3)	
	" Pg 9	"	97 26	43.26	1,204.4	(466.0)	-26.2m	1,178.2	(492.2)	
17-1913-S (USGS)	" Pg 2	"	25 57	36.54	1,124.4	(721.9)	4.0m	1,128.4	(717.9)	
	" Pg 2	"	97 25	04.92	136.9	(1,532.4)	-26.2m	110.7	(1,558.6)	
7-1913-S (USGS)	" Pg 3	"	25 59	27.71	852.7	(993.7)	4.0m	856.7	(989.7)	
	" Pg 3	"	97 22	59.98	1,668.2	(0.6)	-26.1m	1,642.1	(26.7)	
CAMERON CO. TEX.-BM-1929 (USGS)	" Pg 6	"	25 59	46.8	1,440.	(406)	4.0m	1,444	(402)	
	" Pg 6	"	97 28	58.8	1,635	(33)	-26.1m	1,609	(59)	
IBC RP MON 46, US 6-5-1910	Brown- ville Quad Pg 1	North Ameri-	25 52	36.07	1,110.0	(736.4)	4.0m	1,114.0	(732.4)	
	" Pg 1	"	97 26	46.94	1,306.8	(363.6)	-26.2m	1,280.6	(389.8)	
S.P.	"	N.A.	25 58					545.8	(1,300.6)	
MAULDIN, 1947	Comp.	1927	97 30					1,621.4	(47.7)	

MAP T. 9223 PROJECT NO. Ph-36F(48) SCALE OF MAP 1:20,000 SCALE FACTOR 3 of 4

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
S.P. OLMITO, ECC., 1939	Comp	N.A. 1927	26 03 97 31				306.2 (1,540.2) 1,134.5 (533.4)		
S.P. BROWNSVILLE LONGITUDE, 1885	"	"	25 53 97 29				1,682.5 (163.9) 798.0 (872.0)		
S.P. NO. 87 (USE) - 1939	"	"	25 57 97 23				159.7 (1,686.7) 1,140.0 (529.3)		
S.P. 1 LOMA ALTA, 1947	"	"	25 59 97 25				1,140.6 (705.8) 653.6 (1,015.2)		
S. P. 2 LOMA ALTA, 1947	B	A	25 59 97 25				1,162.3 (684.1) 834.6 (834.2)		
S.P. 12H, 1929 (USGS)	"	"	26 00 97 24				324.6 (1,521.8) 164.6 (1,504.0)		
S.P. 10H, 1929 (USGS)	"	"	26 01 97 28				375.5 (1,470.9) 1,422.4 (246.0)		
S.P. 7H, 1929 (USGS)	"	"	25 58 97 29				1,507.1 (339.2) 73.7 (1,595.2)		
S.P. 14H, 1929 (USGS)	"	"	25 55 97 22				16.7 (1,829.7) 1,088.5 (581.3)		
S.P. IBC RP MON 42 (USGS)	"	"	25 55 97 31				1,523.2 (323.2) 882.9 (786.8)		
S.P. IBC RP MON 41 (USGS)	"	"	25 56 97 32				1,524.3 (322.1) 1,339.8 (329.6)		
S.P. IBC RP MON 49 (USGS)	"	"	25 53 97 22				806.3 (1,040.1) 1,252.3 (417.9)		

MAP T. 9224

PROJECT NO. Ph-36(48)F

SCALE OF MAP 1:20,000

SCALE FACTOR

1 of 1

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
IBC RP MON 52 (USGS) 1910	Brownsville Quad Pg 2	North Ameri- can	25 56	24.04	739.8	(1,106.6)	+ 4.0m	743.8	(1,102.6)		
NO. 80 (USE), 1939	G4304 TC Pg 134	N.A. 1927	97 18	20.40	567.6	(1,101.9)	-26.2m	541.4	(1,128.1)		
CAMERON CO. B.M. ELEV. 9.0 (USGS) 1929	USGS Photo- stat	North Ameri- can	25 57	32.413	1,319.2	(527.1)	+ 4.0m	1,323.2	(523.1)		
S.P. NO. 80 (USE) 1939	Comp.	N.A. 1927	97 17	27.603	326.9	(1,342.3)	-26.2m	300.7	(1,368.5)		
S.P. CAMERON CO. BM ELEV. 9.0 (USGS)	"	"	25 57	42.87				990.9	(855.5)		
S.P. IBC RP MON 52	"	"	97 22	11.75				890.2	(779.0)		
			25 57					1,299.3	(547.)		
			97 17					215.7	(1,453.5)		
			25 56					889.8	(956.6)		
			97 18					632.5	(1,037.0)		

1 FT. = 3048006 METER
COMPUTED BY: IRVING I. SAPERSTEIN
DATE: 21 Feb. 1951
CHECKED BY: MILTON M. SLAVNEY
DATE: 22 March 1951
M-2388-12

MAP T. 9226

PROJECT NO. Ph-36F(48)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
SOUTHMOST, 1947	G7199 IV Pg 468	N.A. 1927	25 51 44.772 97 23 27.233				1,377.8 (468.6) 758.2 (912.3)		
IBC RP MON. 47 1911	Browns- ville Quad. Pg 1	North Ameri- can	25 51 07.22 97 25 02.12	222.2 (1,624.1) 59.0 (1,611.7)	+ 4.0m -26.2m	226.2 (1,620.1) 32.8 (1,637.9)			
IBC RP MON. 48 1911	"	"	25 51 12.09 97 22 43.20	372.0 (1,474.3) 1,202.9 (467.8)	+ 4.0m -26.2m	376.0 (1,470.3) 1,176.7 (494.0)			
S.P. IBC RP MON. 48	Comp.	N.A. 1927	25 51 97 22			417.4 (1,428.9) 1,106.9 (569.8)			
S.P. IBC RP MON. 47	"	"	25 51 97 25			235.4 (1,610.9) 4.2 (1,666.5)			
S.P. SOUTHMOST, 1947	"	"	25 51 97 23			1,362.6 (483.8) 558.0 (1,112.5)			

notes sta 10c Apr 48, 1911, was not recovered and evidence from the field indicates that this station has probably been destroyed.
C.H.

1 FT. - 3048006 METER
COMPUTED BY IRVING I. SAFERSTEIN

DATE 23 Feb. 1951

CHECKED BY MILTON M. SLAVNEY

DATE 26 Feb. 1951

M-2388-12

COMPILATION REPORT T-9220

31. DELINEATION.

The graphic method was used.

The scale of the single and nine-lens photographs used was good.

The field inspection was adequate.

32. CONTROL.

Sufficient control was established and the placement was good. Only a few detail points were required.

33. SUPPLEMENTAL DATA.

None

34. CONTOURS AND DRAINAGE.

There is no drainage.

Contours are inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate.

The low-water line was shown as indicated by the field inspector.

36. OFFSHORE DETAILS.

None.

37. LANDMARKS AND AIDS.

No statement.

38. CONTROL FOR FUTURE SURVEYS.

Two (2) topographic stations are being submitted on Form 524 and are listed and included under Item 49.

39. JUNCTIONS.

A satisfactory junction has been made with T-9218 on the north, T-9219 on the west and T-9222 on the south. Project limits are to the east.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with U. S. G. S. Quadrangle, PADRE ISLAND NO. 1, scale 1:31,680, edition of 1935. The two surveys are in fair agreement.

47. COMPARISON WITH NAUTICAL CHARTS.

1288 Comparison was made with U.S.C. & G.S. Nautical Chart No. ~~1238~~, published September 1941 and corrected to October 13, 1950. Shoreline was all that could be compared. The west shoreline of the Gulf Beach is continually changing; as are the shifting sand dunes it bounds, so that there is very little resemblance between the nautical chart and the map manuscript.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

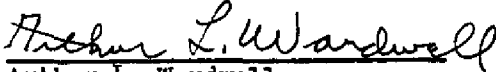
None.

ITEMS TO BE CARRIED FORWARD.

None.


Richard A. Reece
Carto. Photo. Aid

APPROVED AND FORWARDED:


Arthur L. Wardwell
Arthur L. Wardwell
Chief of Party

48. GEOGRAPHIC NAME LIST.

CAMERON COUNTY
COMMISSIONERS PRECINCT NO. 1

*(precincts are not shown. This
is accordance with other intro-
ductions.)*

GULF OF MEXICO

INTRACOASTAL WATERWAY

LAGUNA MADRE

LONG POINT

PADRE ISLAND

TEXAS

Names underlined in
red are approved.

8-4-52

L. Heck

49. NOTES FOR THE HYDROGRAPHER.

The following topographic stations may be useful to
the hydrographer:

CIST, 1949

GLOW, 1949

DEPARTMENT OF COMMERCE
PHOTOGRAMMETRIC REVIEW SECTION U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED } STRIKE OUT ONE
TO BE DELETED }

Tampa, Florida

July 3, 1950

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 *Richard A. Reece*

Richard A. Reece
Tampa Photogrammetric Office

Arthur L. Wardwell Chief of Party.

CHARTING NAME	STATE	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE	LONGITUDE		DATUM							
				°	'	°	'	D. P. METERS	D. P. METERS					
LT. 99	TEXAS	HARLINGEN-FORT ISABEL. Black square daymark with yellow border on dolphin	Appd. to 8978 7-15-52 H.P.H.	26	09	97	14	139.1 556.4	122.625 490.5	N.A. 1927	Triang.	JULY 1950	X	1288
LT. 109		HARLINGEN-FORT ISABEL. Black square daymark with yellow border on dolphin	Appd. to 8978 7-15-52 H.P.H.	26	07	97	13	386.525 1546.1	197.575 790.3	"	"	"	X	"

Field Edit Report, T-9220

51. Methods.--The beach was ridden and the area checked generally. The storm water line on the west side of the island was visited in several spots where the compilation appeared questionable. Spoil areas and reference line piles along the Intracoastal Waterway were inspected from a skiff.

A blue print, obtained from the Corps of Engineers, is furnished showing the reference line piles. They are at 1,000 foot intervals throughout this quadrangle and have been plotted on the Field Edit Sheet by first plotting the ones opposite the Harlingen-Port Isabel Lights 99 and 109, drawing a straight line and stepping them off. The piles opposite the lights are at right angle to the centerline of the Intracoastal Waterway channel and 25 feet northeast of the lights. Paper distortion required minor adjustment in plotting the piles and it is believed the compiler can plot them more accurately on the map manuscript by following the above outlined procedure.

All field edit information is shown on the Field Edit Sheet or cross-referenced to a photograph on the Field Edit Sheet. Photographs 48-0-1502, 1504, 1506, and 1507 were used.

52. Adequacy of compilation.--Compilation of the map details is adequate and will be complete after application of field edit information.

53. Map accuracy.--No tests were made.

54. Recommendations.--None offered.

55. Examination of proof copy.--If an examination is considered necessary it is recommended that the proof copy be sent to Mr. George C. Colley, Port Isabel, Texas. Mr. Colley has been a boat operator and fishing guide in the area for many years and is believed to be as familiar with the area as anyone. He has agreed to make the examination.

Respectfully submitted,
20 March 1952

William H. Shearouse
William H. Shearouse,
Cartographer

REVIEW REPORT
Planimetric Map T-9220
5 August 1952

62. Comparison with Registered Topographic Surveys:

T-1476A	(1879-80)	1:20,000
T-1045	(1867)	1:20,000
T-6705B	(1939)	1:20,000
T-6706A	(1939)	1:20,000

A comparison between the new and the old surveys shows that the shoreline along the Gulf Coast has receded. The extent of this recession ranges from about 200 to 320 meters on the older surveys and about 0 to 70 meters on the newer surveys. No radical changes in the general directional trend of the shoreline were noted. In a comparison with the 1867 & 1879 surveys, numerous changes were noted in the shoreline configuration along the Laguna Madre. Since the old surveys, the Intracoastal Waterway has been constructed.

The old topographic surveys are superseded by the new map (T-9220) for nautical charting.

63. Comparison with Maps of Other Agencies:

Padre Island No. 1 Quadrangle; USGS; Edition 1935; 1:31,680

The Intracoastal Waterway does not appear on the USGS map.

A true comparison of the shoreline (Padre Island) on the Laguna Madre side could not be made because of the difference in shoreline interpretation, i. e., MHW line on the USGS map, and the storm high-water line on the new Survey.

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

Chart No. 1288, 15 January 1951, 1:80,000

Numerous shoreline changes were noticed along Padre Island in the Laguna Madre area.

66. Adequacy of Results and Future Surveys:

This map complies with the project instructions and the National Map Accuracy Standards.

In the Laguna Madre area, the water stages vary widely with meteorological conditions. In view of this, it was decided to omit the high-water line where it is indefinite and unmarked by visible evidence on the ground, and in its stead to indicate by a broken line symbol the approximate limits of areas which were subject to inundation. This decision was arrived at mainly for these reasons:

- (1) The difficulty found in identifying the MHW line from photographs of this as well as other

similar areas throughout the project.

- (2) It was considered impractical to resolve this problem by extensive leveling.

For a more detailed study and investigation of this matter, refer to the correspondence and sundry reports to be attached to the completion report which will be submitted when the review of the surveys on this project has been completed.

The reasons and the decision reached in adopting the special treatment accorded to the shoreline delineation are discussed in the pages of correspondence and instructions attached to the Descriptive Report for T-9214.

Reviewed by:

Charles Hanavich
 Charles Hanavich

Approved by:

S. V. Gillith
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 Division of Photogrammetry

W. Edmonson
 Chief, Nautical Chart Branch
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