Form 664
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey  PLANIMETRIC
Field No. Office No. T-9223

LOCALITY
State			TEXAS
General locality	RIO GRANDE VALLEY
Locality	BROWNSVILLE SHIP CHANNEL TO BROWNSVILLE

1945.2

CHIEF OF PARTY
George E. Morris, Jr., Chief of Field Party
Arthur L. Wardwell, Tampa Photogrammetric Office

LIBRARY & ARCHIVES
DATE	MAR 25 1955

Mar 1955 - any 1955
DATA RECORD

T-9223

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

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): JAN 21 1952  Date reported to Nautical Chart Branch (IV): FEB 27 1952

Applied to Chart No. Date: Date registered (IV): 11-23-53

Publication Scale (IV): Not to be published  Publication date (IV):

Geographic Datum (III): N.A. 1927

MHW Vertical Datum (III):

except as follows: Elevations shown as (M) refer to mean high water Elevations shown as (m) refer to sounding datum i.e., mean low water or mean lower low water

Reference Station (III): BROWNSVILLE LONGITUDE STA., 1885

Lat.: 25° 53' 54.667" (1681.7M) Long.: 97° 29' 27.919" (777.1M)

Adjusted

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

Field Inspection by (II): W. H. Nelson
G. B. Torbert

Planetable contouring by (II): Inapplicable

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

Mean High Water Location (III) (State date and method of location):
3 Aug. 1950 Air Photo Compilation

Projection and Grids ruled by (IV): S. W. (W.O.)

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

Control plotted by (III): R. J. Pate

Control checked by (III): I. I. Saperstein

Radial Plot by (III): M. M. Slavney

Stereoscopic Instrument compilation (III):
Planimetry Inapplicable
Contours

Manuscript delineated by (III): R. Dossett

Photogrammetric Office Review by (III): J. A. Giles

Elevations on Manuscript checked by (III): J. A. Giles Not applicable

Date: June-July 1950
July-August 1950

Date: 21 April 1952

Date: 21 Sept. 1950

Date: 21 Sept. 1950

Date: 21 Feb. 1951

Date: 7 Mar. 1951

Date: 23 May 1951

Date: 14 Dec. 1951

Date: 20 Dec. 1951

Date: 14 Dec. 1951
Camera (kind or source) (III): U.S.C. & G.S. Nine-lens, 8½" focal length
Fairchild Cartographic - 6" Metrogon lens, Camera "0"

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>25805, 25806-25807</td>
<td>4 May 1950</td>
<td>1540, 1541, 1542</td>
<td>1:20,000</td>
<td>No Tide</td>
</tr>
<tr>
<td>48-0-1436 to</td>
<td></td>
<td>1433 to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1440, incl.</td>
<td>8 Dec. 1948</td>
<td>1437, incl.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48-0-1303 to</td>
<td></td>
<td>1243 to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1307, incl.</td>
<td></td>
<td>1247, incl.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48-0-1311 to</td>
<td></td>
<td>1251 to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1315, incl.</td>
<td></td>
<td>1254, incl.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide (III)
Reference Station: Inapplicable
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): C. Hannicken
Final Drafting by (IV): G. W. H. Hunter
Drafting verified for reproduction by (IV): W. O. Halvorin

Proof Edit by (IV): W. Stengler

Land Area (Sq. Statute Miles) (III): 67 (also 2 sq. mi. in MEXICO)
Shoreline (More than 200 meters to opposite shore) (III): 12
Shoreline (Less than 200 meters to opposite shore) (III): 58.9
Control Leveling - Miles (II): 0.0
Number of Triangulation Stations searched for (II): 27 (13) Recovered: 16 (10) Identified: 11 (8)
Number of BMs searched for (II): 65 (4) Recovered: 51 (4) Identified: 51 (3)
Number of Recoverable Photo Stations established (III): 1
Number of Temporary Photo Hydro Stations established (III): 0

Remarks:

( ) Outside of quadrangle.
Project Ph-36(46) 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(46) 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 are filed in the Project Completion Reports.
2. AREAL FIELD INSPECTION

This planimetric quadrangle lies in the southern part of Texas, along the Rio Grande River, approximately sixteen miles west of the Gulf of Mexico. The City of Brownsville is located in the southeastern section. The principal agricultural products are cotton, citrus fruit, and truck farming. The entire farming area is a rich black, sandy soil, and irrigated by a vast network of ditches and canals.

The City of Brownsville is rapidly growing at its perimeter. It is served by two railroads, three Federal Highways and several State Highways. The ginning and compressing of cotton are the major industries of the city. Brownsville is also a port of entry for shipping via air, water, and land. Importation of Mexican and Central American sea-food is gaining economic importance.

Port Brownsville lies approximately six miles to the east of Brownsville and is accessible by two State Highways and by boat from the Gulf of Mexico through a channel dredged from Port Isabel. The channel is dredged to a depth which affords draft for ocean-going vessels. The exportation of cotton and oil, as well as the importation of tropical fruit and fish, are the principal products handled. One oil refinery is located at this port.

Field inspection was performed on two nine-lens photographs, 1:20,000 scale, and one ratio, single lens photograph, 1:20,000 scale: Nos. 25806, 25804, and 48-0-1439. Due to the rapid growth at the perimeter of Brownsville, there will be a great change by the time the field editor arrives.

Photography was recent, May 1950, for the nine-lens photographs, and no difficulty was encountered in interpretation of the photographs. The entire rural area is of a rather dark gray tone with the ditches and canals just a shade or two darker, with the exception of ditches or canals that have water in them. The water may be either very light gray, almost white, or almost black depending on the reflection of the sun on the water. There are several areas where there is no cultivation that appear to be scrub that are open areas. This is due to the mottled tone of the photographs.

3. HORIZONTAL CONTROL

One new station, GULF ATLANTIC WAREHOUSE CO WATER TANK 1950, (an intersection station), was located during field inspection by third-order methods, primarily as a landmark for charts. This tank was constructed in late May and early June 1950, subsequent to single-lens and nine-lens photography and was not identified.
The following are stations which were recovered but not identified for the reasons given:

INTERNATIONAL 1947: Only one of three stations in locality required to be identified.

IBC RP 44 USGS: Only a short distance from BROWNSVILLE LONGITUDE STATION 1885.

NO 5H USGS: A short distance from LOS FRESNOS MUNICIPAL WATER TANK 1939.

IBC RP 46 USGS: A short distance from NO 17H USGS.

CAMERON COUNTY BM USGS: Only a short distance from NO 14H USGS.

NO 7 1913 S USGS was not searched for because the key to locked gate and landowner's permission to enter the area could not be obtained.

The following USGS stations were recovered and identified: IBC RP 41, IBC RP 42, IBC RP 49, NO 7 1913, NO 7H 1929, NO 8H 1929, NO 12H 1929, NO 14H, NO 17 1913, NO 17H 1929, NO 87(USE), NO 5H 1929, NO H10 1929, U 48.

The following stations were reported lost: CAMERON COUNTY TEXAS BM, FORT BROWNSVILLE EAST RADIO TOWER 1939, FORT BROWNSVILLE WEST RADIO TOWER 1939, IBC RP 43(USGS), IBC RP 45(USGS), NO 11H(USGS), NO 16H(USGS), NO 23 1913(USGS), OHIO TEXAS SUGAR FACTORY TALL BRICK STACK 1913, OLMITO FACTORY N STACK 1913, OLMITO FACTORY S STACK 1913, FORT BROWNSVILLE AIRPORT BEACON 1939, STATION 757 X 48(USGS), 6H(USGS).

4. Horizontal control was identified on the following 1:20,000 scale, single lens, ratio prints: 48-0-1301, 48-0-1303, 48-0-1304, 48-0-1306, 48-0-1307, 48-0-1312, 48-0-1313, 48-0-1314, 48-0-1316, and 48-0-1436 through 48-0-1439.

4. VERTICAL CONTROL

The following third-order bench marks of the USGS were reported recovered and identified, on 1:20,000 scale, nine-lens photograph No. 25806: E 678; F 678; G 678; H 678; HK 5(C.Co.); K 3(C.Co.); K 4(C.Co.); K 5(C.Co.); K 11(C.Co.); J 6(C.Co.); 46 A IBC; J 2(C.Co.); J 4(C.Co.); J 5(C.Co.); J 7(C.Co.); J 10(C.Co.); J 11(C.Co.); J 12(C.Co.); J 13(C.Co.); J 14(C.Co.); J 15(C.Co.); J 16(C.Co.); J 17(C.Co.); J 18(C.Co.); J 19(C.Co.); L 776; M 679; N 679; Q 679; R 679; S 679; T 679; U 679; A 777(IBC); B 777(IBC); C 777(IBC); D 777(IBC); E 777(IBC); F 777(IBC); H 777(IBC); K 777(IBC); L 777(IBC); M 777(IBC); N 777(IBC); P 777(IBC); Q 777(IBC); NO 7H 1929(USGS); S 678; D 49; NO 5(USGS) north of quadrangle, N 10(USGS) north of quadrangle, U 48 north of quadrangle. The accuracy of the Bench Marks set by Cameron Co. is unknown. These stations are not listed by Goodin.

The following bench marks of the USGS, accuracy unknown, were reported recovered and identified, on 1:20,000 scale, nine-lens photograph No. 25806: NO 8H 1929; NO 17H-1929, NO 12H 1929, 14H.
5. **CONTOURS AND DRAINAGE**

As this is a planimetric quadrangle, no contouring was performed.

The entire area is relatively flat and the only drainage of natural
features are a few resacas and the Rio Grande River. The entire area,
however, is covered with a network of irrigation ditches and canals.

6. **WOODLAND COVER**

Woodland cover was found to be mesquite and was classified as scrub
"S", in accordance with Photogrammetry Instructions No. 21, dated August 1948.

7. **SHORELINE AND ALONGSHORE FEATURES**

Shoreline in this area is along the banks of the channel to Port
Brownsville. Several docks and piers are found in the turning basin and
have been delineated on the photographs. One small private yacht basin
has also been shown.

Shoreline inspection was performed on nine-lens photograph No 25804.

8. **OFFSHORE FEATURES**

There are no offshore features to be mapped in this area.

9. **LANDMARKS AND AIDS**

Two tanks at Port Brownsville were recommended for charting. GULF
ATLANTIC WAREHOUSE CO WATER TANK 1950 had been constructed subsequent to
photography and was located during field inspection.

Two aeronautical aids were located within the quadrangle: Rio Grande
Valley International Airport Beacon and the Low Frequency Range Station
northeast of the airport. These have been indicated on photograph No.
25806. See Form 567.

10. **BOUNDARIES, MONUMENTS, AND LINES**

All information on boundaries will be found in "Special Report,
Boundaries, Project Ph-36(48), Baffin Bay to the Rio Grande."

11. **OTHER CONTROL**

A fourth-order triangulation position on GONO-1950 was determined.
This is the radio tower of Continental Oil Co. at Port Brownsville.

12. **OTHER INTERIOR FEATURES**

Roads were classified in accordance with Photogrammetry Instructions
Buildings and structures in the rural area were classified according to Photogrammetry Instructions No. 29, dated 1 October 1948.

There were no bridges or cables over navigable waters.

The Rio Grande Valley International Airport has been delineated on the photographs.

13. GEOGRAPHIC NAMES


14. SPECIAL REPORTS AND SUPPLEMENTAL DATA


Form 567, Landmarks for Charts, to be submitted at a later date.

Form 567, Aeronautical Aids, to be submitted at a later date.

Data, Quadrangle T-9223( ), forwarded to the Baltimore Office 18 August 1950, on letter of transmittal Ph-36 Field 86.

Data, Supplemental Control T-9223, forwarded to the Washington Office 17 August 1950 on Form 413 No. Ph-36-Field-91.

Submitted
16 August 1950

George B. Torbert
Cartographic Survey Aid

Approved

George E. Morris, Jr.
Chief of Party
PHOTOGRAMMETRIC PLOT REPORT:

Submitted with T-9220.

31. **DELINEATION.**

Compiled by the graphic method.

All single-lens photographs were of good scale. Nine-lens photographs 25805 and 25807 were of reasonably good scale. Nine-lens photograph 25806 was so badly tilted that it was usable only for location of detail points.

Field inspection was unusably good.

No field inspection was made south of the Rio Grande and the compiler has classified no roads nor shown any geographic names.

32. **CONTROL.**

Horizontal control was satisfactory with respect to identification, placement and density. For listing of control refer to T-9220.

33. **SUPPLEMENTAL DATA.**

None.

34. **CONTOURS AND DRAINAGE.**

Reference Item 5.

35. **SHORELINE AND ALONGSHORE DETAILS.**

The shoreline of this map manuscript is confined to the Rio Grande, Brownsville Ship Channel, lakes and ponds. The only shoreline details visible are at the Brownsville Turning Basin at the terminal of the Brownsville Ship Channel. These details have been delineated as indicated on the photographs and by field inspection notes. Proposed details have been omitted.

Shoreline inspection was adequate.
36. **OFFSHORE DETAILS.**

None.

37. **LANDMARKS AND AIDS.**

Reference Item 9.

38. **CONTROL FOR FUTURE SURVEYS.**

One (1) Topographic Station "GONG, 1950" was submitted on Form 524 to be applied to the map manuscript; however, the theodolite cuts mentioned were not received in the Tampa Office and the tower could not be identified on the photographs. Pertinent data are being forwarded to the field editor. Data for location of tower obtained from field editor. This station has been listed under Item 49.

39. **JUNCTIONS.**

Joins U.S.G.S. Quadrangle "LOS FRESNOS" 1:31,680, on the north, T-9224 on the east and T-9226 on the south. No contemporary survey on the west.

Junctions are satisfactory.

40. **HORIZONTAL AND VERTICAL ACCURACY.**


46. **COMPARISON WITH EXISTING MAPS.**

Comparison was made with U.S. Geological Survey Quadrangle EAST BROWNsville, Texas, scale 1:31,680, edition of 1936, reprinted 1945. The outstanding difference noted is the BROWNsville SHIP CHANNEL, which has been constructed since the publication of the above quadrangle.
47. **COMPARISON WITH NAUTICAL CHARTS.**

Comparison has been made with Nautical Chart 1288, scale 1:80,000, edition of 1941, corrected to 13 October 1950. Comparable shorelines north of the Rio Grande are in agreement.

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.**

None.

**ITEMS TO BE CARRIED FORWARD.**

None.

**APPROVED AND FORWARDED:**

![Signature]

Rudolph Dossett  
Carto. Photo. Aid

Arthur L. Wardwell,  
Chief of Party
48. GEOGRAPHIC NAME LIST.

- ANNIE S. PUTAGNAT SCHOOL
- BLACK SCHOOL
- BROWNSVILLE
- BROWNSVILLE SHIP CHANNEL
- BROWNSVILLE HIGHWAY
- *BOCA CHICA RD.
- **BOCA CHICA BLVD. (in city limits)
- CAMERON COUNTY
- CANALES SCHOOL
- CENTRAL BLVD.
- COMMISSIONERS PRECINCT NO. 1
- COMMISSIONERS PRECINCT NO. 2
- DAKOTA AVENUE
- EL NUEVO TEMPLE
- EL JARDIN SCHOOL
- FORT BROWN
- GATEWAY BRIDGE
- IMMEDIATE CONCEPTION CHURCH
- IMMEDIATE CONCEPTION SCHOOL
- INDIANA AVENUE
- JERONIMO BANCO NO. 131
- LAS COMAS BANCO 125
- LINDEN PARK
- LOMA ALTA
- LOMA ALTA LAKE
- LOS EJANOS SCHOOL
- LOS TOMATES BANCO NO. 122
- LOZANO BANCO NO. 137
- MATAMOROS
- MEXICO
- MISSOURI PACIFIC RR
- MINNESOTA AVENUE
- MENDENHALL SCHOOL
- OKLAHOMA AVENUE
- OLD FORT ISABEL ROAD
- OUR LADY OF GUADALUPE SCHOOL

* To be checked by Field Editor.

Note: Names preceded by "*" are names of churches or schools in the city of Brownsville that are not (the names) to be shown.
GEOGRAPHIC NAME LIST (CONTINUED).

- PALM BLVD
- PAREDES LINC ROAD
- PORT BROWNSVILLE
- PRIMERA IGLESIA CHRISTIANA
- RANCHO VIEJO FLOODWAY
- RESACA DE LA PALMA
- RESACA DE LA PALMA BATTLEFIELD
- RESACA DEL RANCHO VIEJO
- RESACA SCHOOL
- RINGOLD PARK
- RIO GRANDE
- RIO GRANDE VALLEY INTERNATIONAL AIRPORT
- SAN MARTIN LAKE
- SAN MIGUEL BANCO 88
- SOUTHMOST COLLEGE
- SOUTHMOST ROAD
- SOUTHERN PACIFIC RR
- TAMALIPAS
- TEXAS
- TEXAS STATE 48
- TEXAS STATE 4
- TEXAS STATE FARM ROAD 511
- U.S. 77
- U.S. 83
- U.S. 281
- UNITED STATES

or Ringgold?

Names underlined in red are approved.
10-20-52.
L. Heck

(Based on project Names Report)
NONFLOATING AIDS FOR CHARTS

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

The positions given have been checked after listing by

Ralph DeSantis, Tampa Photo Office

J. E. Waugh

Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>TEXAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>HUGHESVILLE CHANNEL LIGHT B9</td>
<td></td>
</tr>
<tr>
<td>HUGHESVILLE CHANNEL LIGHT B6</td>
<td></td>
</tr>
<tr>
<td>HUGHESVILLE CHANNEL LEADING LIGHT &quot;F&quot;</td>
<td></td>
</tr>
</tbody>
</table>

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

*TABULATE SECONDS AND METERS
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

Rudolph Dossett, Tampa Photogrammetric Office

<table>
<thead>
<tr>
<th>State</th>
<th>Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charting Name</td>
<td>Description</td>
</tr>
<tr>
<td>V-TANK</td>
<td>Gulf Atlantic Warehouse Co. Tank</td>
</tr>
<tr>
<td>V-TANK</td>
<td>At Port Brownsville, Navigation</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids for landmarks for charts.
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

Rudolph Dossett, Tampa Photogrammetric Office

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF LOCATION AND SURVEY NO</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXAS</td>
<td>RIO GRANDES VALLEY INTERNATIONAL</td>
<td>BEACON</td>
<td></td>
<td>25 51</td>
<td>1074</td>
<td>Radial</td>
<td>1927</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AIRPORT CONTROL TOWER</td>
<td></td>
<td></td>
<td>97 25</td>
<td>1448</td>
<td>Plott</td>
<td>1 March</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAA LOW FREQUENCY RADIO RANGE</td>
<td>BEACON</td>
<td></td>
<td>25 56</td>
<td>1540</td>
<td>n</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CENTER OF FIVE TOWERS</td>
<td></td>
<td></td>
<td>97 26</td>
<td>342</td>
<td>n</td>
<td>n</td>
<td></td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating...
PHOTOGRAMMETRIC OFFICE REVIEW

T-9223


CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy M.M.S. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) J.G. 7. topo topo topo topo topo 8. Bench marks J.G.


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines J.G.

MISCELLANEOUS


40. Jesse A. Giles

Reviewer

William A. Rasure

Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

M-2623-12
51. **Methods.**—Field edit was accomplished by riding all roads and streets to check their classification and to verify the existence and classification of other planimetric features.

Field edit west of 97 degrees 30 minutes—an extension of the original project limit—was done directly on photographs 48-O-1311 and 1313. All details to appear on the final draft were indicated regardless of present delineation on the field edit map manuscript.

Many of the Resacas in Brownsville and immediate vicinity differ from those found elsewhere in that they contain water year-round and should be mapped as ponds instead of washes. During high-water stages of the Río Grande River water is pumped into them through ditches and stored for emergency use.

These ditches are also used for irrigation purposes. There is an extensive irrigation system in the Río Grande Valley and practically all the ditches and canals in this quadrangle are for that purpose.

Field edit information will be found on Field Edit Sheets Nos. 1 and 2 and the following photographs: 48-O-1304, 1305, 1306, 1307, 1311, 1313, 1436, 1437, 1438, and 1439. Field edit information, shown on the photographs, was located by direct identification or measurements from identifiable points. Features on the Field Edit Sheets were by planetable.

Violet ink was used for additions and corrections, and green for deletions.

52. **Adequacy of compilation.**—Field edit brought to light numerous details to be added to the map manuscript. After this is done, compilation will be adequate.

53. **Map accuracy.**—No testing was done. However, points used to take-off and tie-in the planetable traverses indicate the horizontal accuracy to be excellent.

54. **Recommendations.**—None offered.

55. **Examination of proof copy.**—It is recommended that the proof copy be sent to Mr. F. L. Rockwell, City Engineer of Brownsville, for examination. Mr. Rockwell is very familiar with the area and has agreed to make the examination. His address is City Hall, Brownsville, Texas.

No discrepancies in geographic names were noted.

56. **Vertical control.**—During the course of ground comparison several bench mark witness posts were noticed but no symbol shown on the map manuscript. Descriptions were not on hand and recovery notes were not written,
nor a systematic search for bench marks made.

Following is a list of those found: H 178, T 678, U 678, C 679, and K 679. All are in good condition and were identified on photograph 48-0-1436 by direct marking. Added to map manuscript.

Respectfully submitted,
21 April 1952

William H. Shearouse
William H. Shearouse,
Cartographer
62. **Comparison with Registered Topographic Surveys.**— None

63. **Comparison with Maps of Other Agencies.**—
   - East Brownsville Quadrangle, USGS, Edition 1936,
     Reprint 1943, 1:31,680

   The Brownsville Ship Channel has been constructed since
   the publication of the USGS map.

64. **Comparison with Contemporary Hydrographic Surveys.**— None

65. **Comparison with Nautical Charts.**—
   - Chart No. 1288, 15 January 1951, 1:80,000

   Three aids to navigation listed in the light list and
   indicated on the map manuscript are now shown on the nautical
   chart.

66. **Adequacy of Results and Future Surveys.**— This map complies
    with the project instructions and National Map Accuracy Standards.

    For the special treatment accorded to the shoreline delineation
    of San Martin Lake, refer to the Descriptive Report for T-9214.

Reviewed by:

[Signature]
Charles Hanavich

APPROVED

[Signature] 23 Dec 1954
L. C. Landis
Chief, Review Section
Div. of Photogrammetry

[Signature]
Chief, Nautical Chart Branch
Division of Charts in

[Signature]
Chief, Div. of Photogrammetry

[Signature]
Chief, Div. of Coastal Surveys
### NAUTICAL CHARTS BRANCH

**SURVEY NO. T-9223**

Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-18-59</td>
<td>1288</td>
<td>O.J. Hoffman</td>
<td>Examined Before After Verification and Review No con.</td>
</tr>
</tbody>
</table>

Before After Verification and Review

Before After Verification and Review

Before After Verification and Review

Before After Verification and Review

Before After Verification and Review

Before After Verification and Review

Before After Verification and Review

Before After Verification and Review

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

Give reasons for deviations, if any, from recommendations made under “Comparison with Charts” in the Review.