

TP-01431

TP-01431

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
THIS MAP EDITION WILL NOT BE FIELD EDITED	
Map No. TP-01431	Edition No. 1
Job No. CM-8605	
Map Classification CLASS III, FINAL	
Type of Survey SHORELINE	
LOCALITY	
State TEXAS	
General Locality CORPUS CHRISTI BAY TO CUBA ISLAND	
Locality CAYO DEL GRULLO	
1987 TO 19	
REGISTERED IN ARCHIVES	
DATE	

TP-01431
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 10 (B) (B = 152.74mm) Wild RC 10 (Z) (Z = 153.15mm)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input checked="" type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE Coordinated Photography		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Central	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 90°	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
*87 BCN 7350-7351	09-30-87	1346	1:60,000	*	
**87 BCN 7359-7363	09-30-87	1359	1:60,000	*	
***87 ZR 3266-3268	11-10-87	1351	1:60,000	0.1 ft. above MLLW/ 0.2 ft. below MHW	
Odd numbers only *Even numbers only				Mean Tide Range -- Diurnal	

REMARKS *Tidal information for these photographs was not available. Infrared photography was taken at a midlevel stage of tide. Information was based on the tide station at Port Mansfield.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high-water line was compiled from office interpretation of the above listed compilation/bridging color photographs using stereo instrument methods.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

There was no mean lower low-water line compiled on this map.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No Survey	TP-01432	TP-01434 TP-01435	No Survey

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-01431

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD ~~INSPECTION~~ OPERATION Premark ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Dunford	Sept. 1987
2. HORIZONTAL CONTROL	RECOVERED BY N.A. ESTABLISHED BY D. Miller PRE-MARKED OR IDENTIFIED BY D. Miller	Sept. 1987 Sept. 1987
3. VERTICAL CONTROL	RECOVERED BY N.A. ESTABLISHED BY N.A. PRE-MARKED OR IDENTIFIED BY N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY N.A. LOCATED (Field Methods) BY N.A. IDENTIFIED BY N.A.	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY N.A.	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

Paneled

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
87 BCN 7348	PIPE, 1987		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Form 76-53
2 Forms 75-82A

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONTP-01431
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete	June 1988	Class III Manuscript		
Final Review	June 1988	Class III, Final Map	Jan 1989	Jan 1989

II. LANDMARKS AND AIDS TO NAVIGATION None

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: None3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

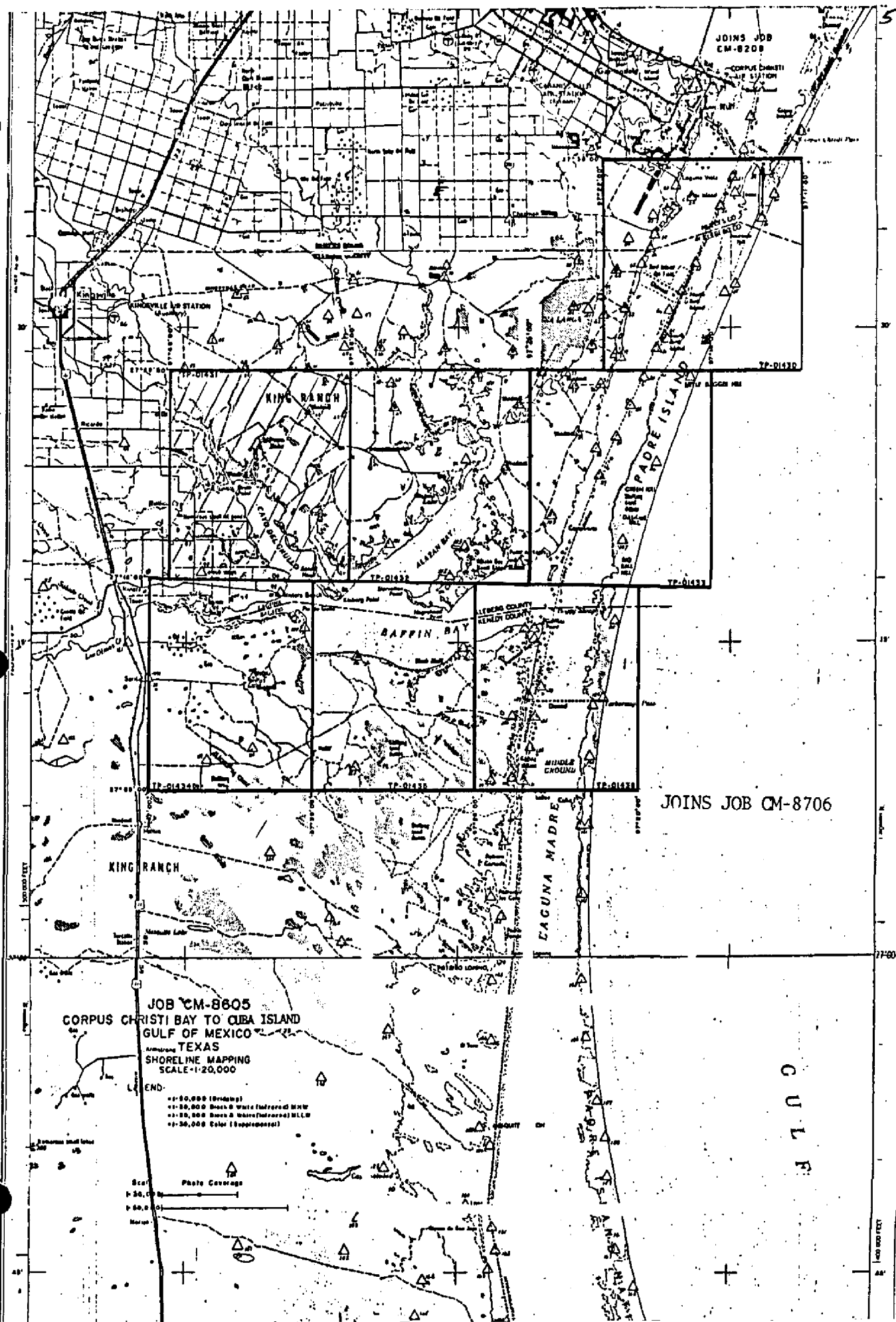
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
 3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-01431

This 1:20,000 scale map is one of seven maps in project CM-8605, Corpus Christi Bay to Cuba Island, Texas, the project includes Baffin Bay. The project extends from latitude $27^{\circ} 08' 00''$ north to latitude $27^{\circ} 38' 00''$ and longitude $97^{\circ} 11' 00''$ west to longitude $97^{\circ} 47' 00''$.

Field work prior to compilation was accomplished during September 1987. It consisted of premarking triangulation stations to satisfy aerotriangulation requirements.

Photographic coverage was provided in September 1987 with color film at 1:60,000 scale using the "B" camera (focal length 152.74 millimeters) and in November 1987 with infrared film at 1:60,000 scale using the "Z" camera (focal length 153.15 millimeters).

Analytic aerotriangulation was performed at the Washington Science Center in March 1988.

Compilation was performed at the Atlantic Marine Center from office interpretation of the 1:60,000 color and infrared photography in June 1988.

Final review was accomplished at the Atlantic Marine Center in July 1988. A Chart Maintenance Print for Marine Chart Branch and Notes to the Hydrographer Print for the Hydrographic Branch were prepared and forwarded.

This map is to be registered as a Class III, Final Map.

The original base manuscript and all pertinent data were forwarded to the Washington Science Center for final registration.

FIELD INSPECTION

TP-00551

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and premarking of the horizontal control necessary for the aerotriangulation of the project.

AEROTRIANGULATION REPORT
CM-8605
CORPUS CHRISTI BAY TO CUBA ISLAND, TEXAS
MARCH 1988

21. Area Covered

This report covers the area from Corpus Christi Bay, down to Cuba Island including Baffin Bay and Alazan Bay. The project consists of seven 1:20,000-scale sheets; TP-01430 through TP-01436.

22. Method

Four strips of 1:60,000-scale color photographs were bridged by analytical aerotriangulation methods using the STK comparator. The bridging strips were adjusted to ground using the General Integrated Analytical Triangulation Program (GIANT). Pre-marked control stations were used as horizontal control. Common points were transferred between strips to ensure adequate junctioning.

Ratio values were determined for the bridging photographs and the 1:60,000-scale MHW, MLLW and Mid Range infrared photographs. A copy of these values and a sketch of the photo coverage are attached to this report.

The base manuscripts were plotted on the Kongsberg plotter. The positions are in the Texas South, State Plane Coordinate System. This is a Lambert conformal conic projection. All positions are based on NAD 1983. In addition, 10mm ticks depicting NAD 1927 projection intersections were plotted at twice the interval of the NAD 1983 projection intersections.

23. Adequacy of Control

The control was adequate and meets the National Ocean Service requirements. A listing of closures to control is attached.

24. Supplemental Data

USGS topographic quadrangles were used to obtain vertical control for bridging. NOS Nautical Charts were used to locate aids and landmarks.

25. Photography

The coverage, overlap, and quality of the photographs were adequate for the job.

Submitted by,

Brian Thornton

Brian Thornton

Approved and Forwarded:

Don O. Norman

Don O. Norman

Chief, Aerotriangulation Unit

Ratio Values

CM-8605

1:60,000 Bridging Photographs RATIO VALUE

87 B(NC) 7312-7338	2.95
87 B(NC) 7344-7352	2.95
87 B(NC) 7355-7371	2.95
87 B(NC) 7397-7411	2.95

MHW 1:60,000 Black and White Infrared

87 Z(R) 2763-2787	2.92
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Mid Range 1:60,000 Black and White Infrared

87 Z(R) 3247-3255	2.90
87 Z(R) 3262-3270	2.89
87 Z(R) 3276-3282	2.91

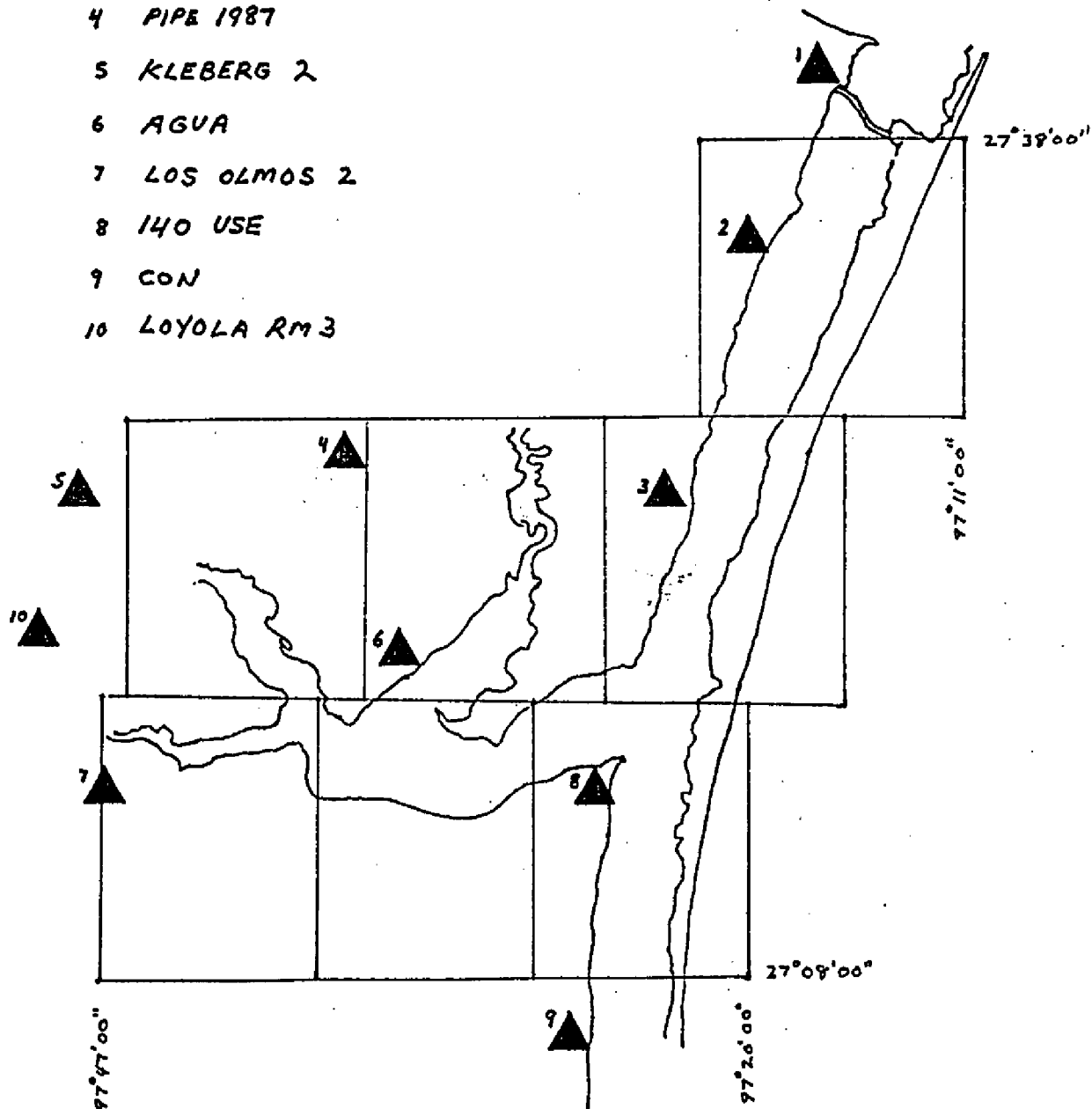
MLLW 1:60,000 Black and White Infrared

87 Z(R) 3230-3242	2.91
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FIT TO CONTROL

STATION NAMES	POINT NO.	VALUES IN FEET	
		X	Y
1. Laguna Madre N.Base, RM3	338101	+0.7	-1.1
2. Hardpan	332100	-0.6	+0.9
3. Sordo	326100	-0.3	+0.9
4. Pipe 1987	348100	-0.9	+2.3
5. Kleberg 2	352101	+2.2	+1.1
6. Agua	365100	-0.7	-1.1
7. Los Olmos 2	411101	-0.4	-1.6
8. 140 Use	320100	-1.7	-0.7
9. Con	312100	+1.0	-0.3
10. Loyola RM3	355101	+0.6	-0.4

- 1 LAGUNA MADRE NORTH BASE, RM3
- 2 HARDPAN
- 3 SORDO
- 4 PIPE 1987
- 5 KLEBERG 2
- 6 AGUA
- 7 LOS OLMOS 2
- 8 I40 USE
- 9 CON
- 10 LOYOLA RM3



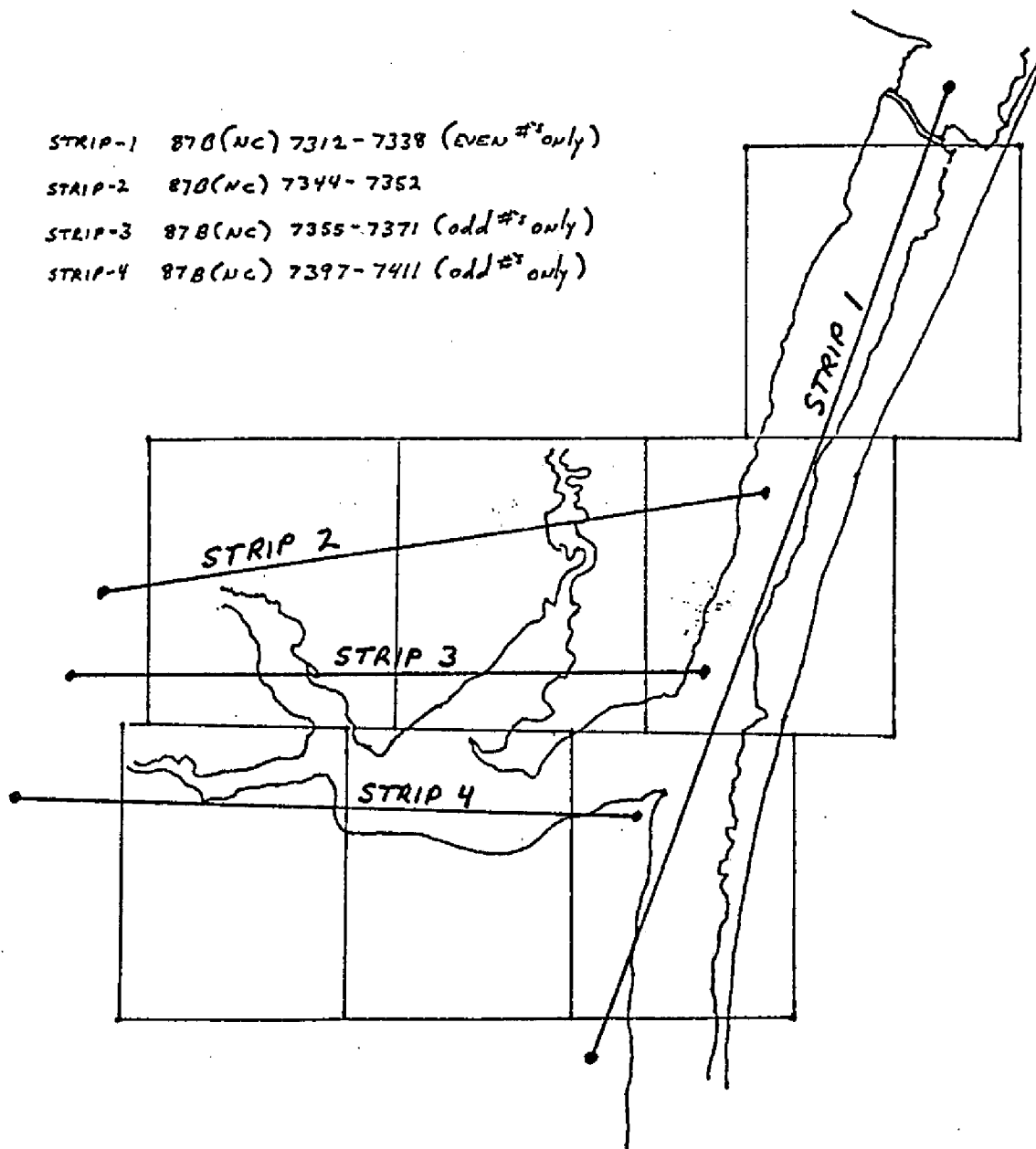
JOB CM 8605

CORPUS CHRISTI BAY TO CUBA ISLAND

TEXAS

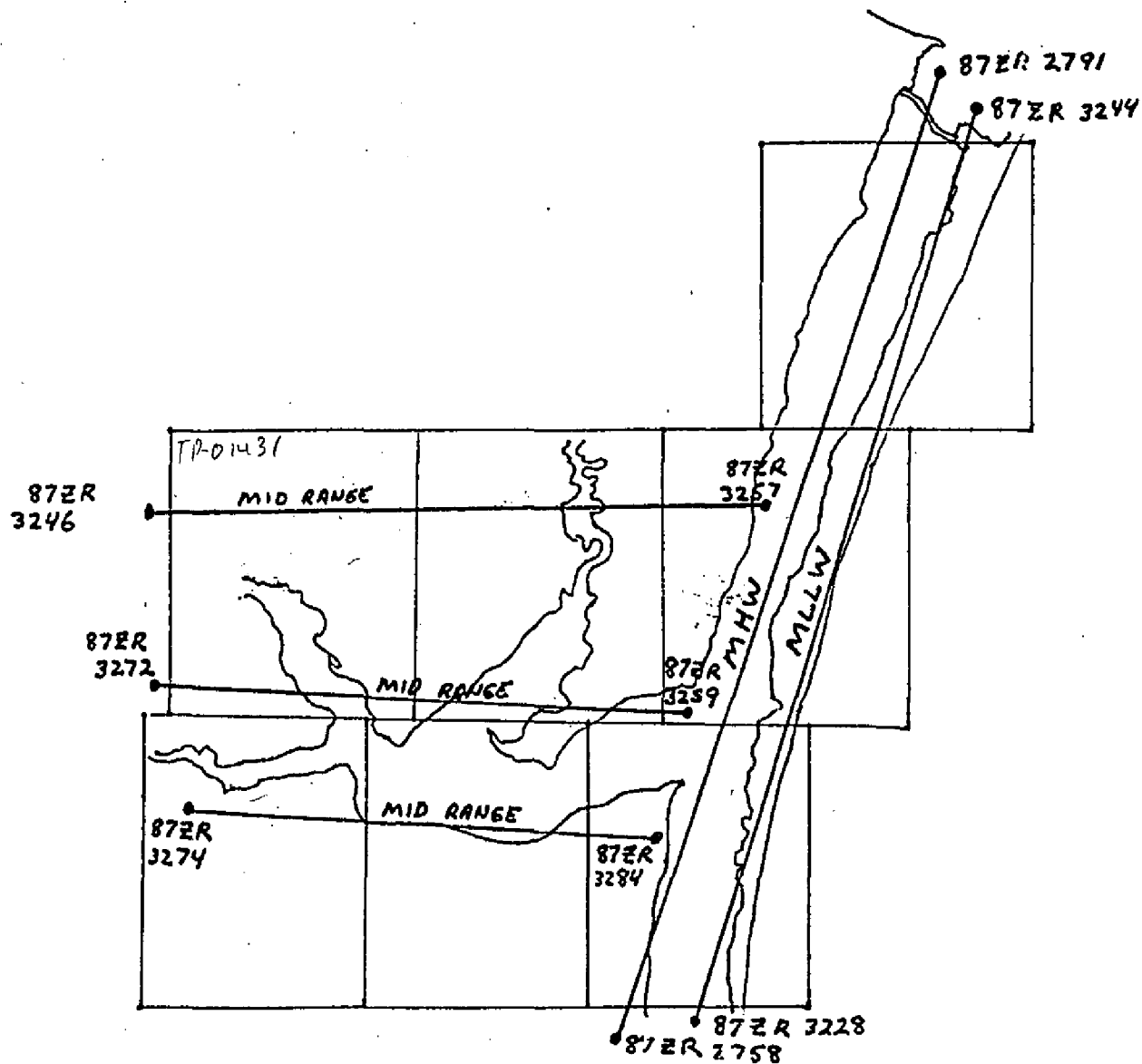
HORIZONTAL CONTROL

STRIP-1 87B(NC) 7312-7338 (EVEN #s only)
STRIP-2 87B(NC) 7344-7352
STRIP-3 87B(NC) 7355-7371 (odd #s only)
STRIP-4 87B(NC) 7397-7411 (odd #s only)



JOB CM-8605
CORPUS CHRISTI BAY TO CUBA ISLAND
TEXAS

BRIDGING PHOTOGRAPHY
1:60,000
SHORELINE MAPPING



JOB CM-8605
 CORPUS CHRISTI BAY TO CUBA IS., TEXAS
 INFRARED PHOTOGRAPHY
 1:60,000
 SHORELINE MAPPING

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER	GEODETTIC DATUM		GEOGRAPHIC POSITION		ORIGINATING ACTIVITY	REMARKS
					COORDINATES IN FEET STATE <u>Texas</u> ZONE <u>South</u>	1983 NA	ϕ LATITUDE λ LONGITUDE	Unit, AMC, Norfolk, VA		
TP-01431	CM-8605	Field Project Book	348100	✓	X=	ϕ 27° 26' 58.681" L			Coastal Mapping	
					Y=	λ 97° 36' 15.791" L				
					X=	ϕ				
					Y=	λ				
					X=	ϕ				
					Y=	λ				
					X=	ϕ				
					Y=	λ				
					X=	ϕ				
					Y=	λ				
					X=	ϕ				
					Y=	λ				
					X=	ϕ				
					Y=	λ				
					X=	ϕ				
					Y=	λ				
COMPUTED BY					COMPUTATION CHECKED BY					DATE
LISTED BY R. R. Kravitz					LISTING CHECKED BY F. Mauldin					DATE 5/26/88
HAND PLOTTING BY					HAND PLOTTING CHECKED BY					DATE

COMPILATION REPORT

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31. DELINEATION:

Delineation was accomplished using Wild B-8 stereo instrument compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:60,000 scale bridging/compilation color photographs.

Due to the lack of significant change in tide levels in the back bay areas, the infrared photography for this map was flown at a mid range stage of tide based on the gage at Port Mansfield. The infrared ratio photographs were used to assist in the interpretation of the shoreline. There was no mean lower low water line compiled on this map.

All photographs used to compile this map are listed on NOAA form 76-36B. The photography was adequate.

32. CONTROL:

The horizontal control was adequate. Refer to the Aerotriangulation Report, dated March 1988.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to this project. Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The apparent mean high water line was compiled from office interpretation of the 1:60,000 scale bridging/compilation color photographs. Infrared ratio photographs were used to assist in the interpretation of the shoreline.

36. OFFSHORE DETAILS:

Offshore detail was compiled by instrument methods using the 1:60,000 scale bridging/compilation color photographs.

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37. LANDMARKS AND AIDS:

Within the limits of this map, there were no charted aids to navigation and the charted landmarks could not be located photogrammetrically.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Refer to the Data Record Form 76-36B, item 5, of the Descriptive Report.

40. HORIZONTAL AND VERTICAL ACCURACY:

See item #32.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with the following U.S. Geological Survey Quadrangles:

Riviera Beach, Texas; dated 1952, photorevised 1975; scale 1:24,000

Kleberg Point, Texas; dated 1951, photorevised 1975; scale 1:24,000

Riviera Beach NW, Texas; dated 1952, photorevised 1975; scale
1:24,000

Riviera Beach NE, Texas; dated 1951, photorevised 1975; scale
1:24,000

Riviera, Texas; dated 1979; scale 1:24,000

Ricardo, Texas; dated 1979; scale 1:24,000

47. COMPARISON WITH NAUTICAL CHARTS:

11308; 14th edition; dated October 20, 1984; scale 1:40,000 SC

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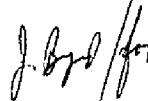
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

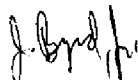
None.

Submitted by:



Robert R. Kravitz
Cartographic Technician
May 6, 1988

Approved:



James L. Byrd, Jr.
Chief, Coastal Mapping Unit

19
JUN 27 1988

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8605 (Corpus Christi Bay to Cube Island, Texas)

TP-01431

Cayo del Grullo

Drum Point

Fernando Creek

Jaboncillos Creek

Loyola Beach (locality)

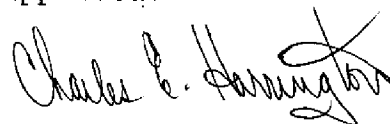
Neubauer Point

Pinto Creek

Radicha Creek

Sandy Hook

Approved:



Charles E. Harrington
Chief Geographer
Nautical Charting Division
Charting and Geodetic Services

REVIEW REPORT
SHORELINE

TP-01431

61. GENERAL STATEMENT:

See Summary included with this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS quadrangles:

KLEBERG POINT, TEXAS, dated 1951, photorevised 1975,
RICARDO, TEXAS, dated 1979,
RIVIERA, TEXAS, dated 1979,
RIVIERA BEACH, TEXAS, dated 1952, photorevised 1975,
RIVIERA BEACH NE, TEXAS, dated 1951, photorevised 1975, and
RIVIERA BEACH NW, TEXAS, dated 1952 photorevised 1975,
all six are 1:24,000 scale.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEY:

There is no contemporary hydrographic survey within the limits of this map.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with the following NOS Chart:

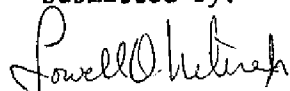
11308, 14th edition, dated October 20, 1984, scale 1:40,000 SC.

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66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the Project Instructions and meets the requirements for National Standards of Map Accuracy.

Submitted by:

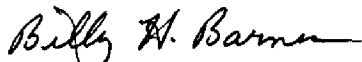


Lowell O. Neterer, Jr.

Final Reviewer

July 1988

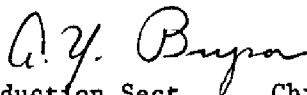
Approved for forwarding:



Billy H. Barnes

Chief, Quality Assurance Group, AMC

Approved:



Chief, Photogrammetric Production Sect.

Chief, Photogrammetry Branch

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

INSTRUCTIONS

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

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]