

TP 01143

TP 01143

NOAA FORM 76-35 (3-76) 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-01143	Edition No. 1
Job No. CM-8108	
Map Classification Class III	
Type of Survey Shoreline	
LOCALITY	
State Texas	
General Locality Alexander Island	
Locality Lynchburg To Spilmans Island	
1982 TO 19	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		1	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY ☒ ORIGINAL ☐ RESURVEY ☐ REVISED	
		SURVEY TP. <u>01143</u> MAP EDITION NO. (1) MAP CLASS III JOB <u>CM-8108</u>	
PHOTOGRAMMETRIC OFFICE Rockville Md.		LAST PRECEDING MAP EDITION	
OFFICER-IN-CHARGE Ronald Brewer		TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED	
		JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation 5/26/83 Office 8/9/83		Field 10/30/81	
II. DATUMS			
1. HORIZONTAL: ☒ 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL: ☒ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☐ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Lambert Conformal Conic Projection		4. GRID(S)	
		STATE Texas	ZONE South Central
5. SCALE 1:10000		STATE	ZONE
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY		Thornton	6-83
METHOD: Analytical LANDMARKS AND AIDS BY		Thornton	6-83
2. CONTROL AND BRIDGE POINTS PLOTTED BY		Thornton	6-83
METHOD: Coradomat CHECKED BY		N/A	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY		Jim Taylor	8-83
COMPILATION CHECKED BY		Jim Schad	8-83
INSTRUMENT: Wild B-8		N/A	
SCALE: 1:10000		N/A	
4. MANUSCRIPT DELINEATION PLANIMETRY BY		Chuck Heazel	10-83
CHECKED BY		James Schad	10-83
METHOD: Smooth Drafted		N/A	
CHECKED BY		N/A	
SCALE: 1:10000 HYDRO SUPPORT DATA BY		N/A	
CHECKED BY		N/A	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		N/A	
6. APPLICATION OF FIELD EDIT DATA BY		N/A	
CHECKED BY		N/A	
7. COMPILATION SECTION REVIEW BY		J. Schad	10-84
8. FINAL REVIEW BY		E. Allen	1-85
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		E. Allen	4-85
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		J. Schad	5/85
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		E. DAUGHERTY	MAY 1985

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

COMPILATION SOURCES

TP-01143

1. COMPILATION PHOTOGRAPHY

CAMERA(S) WILD RC-10(B) F/L= (152.74 MM.)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		☒ (C) COLOR ☐ (P) PANCHROMATIC ☐ (I) INFRARED		ZONE	☒ STANDARD ☐ DAYLIGHT
☒ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☐ TIDE CONTROLLED PHOTOGRAPHY				Central	
				90 th	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
82-B(C) 9961-9966	11/5/82	9:40	1:30000	1.02 Ft.	

REMARKS

Based on predicted tides-reference station Galveston -substation Morgan Point

2. SOURCE OF MEAN HIGH-WATER LINE:

The photographs listed above

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

Not Compiled

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 1:20000 Scale	WEST
TP-01139	TP-01144	TP-01145 TP-01146	TP-01142
REMARKS			

HISTORY OF FIELD OPERATIONS

TP-01143

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.S.Tibbetts	3/82
2. HORIZONTAL CONTROL	RECOVERED BY R.S.Tibbetts ESTABLISHED BY " N/A "	3/82
	Identified By: R.S.Tibbetts	3-3-82
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 ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	N/A
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

Photoidentified

2. VERTICAL CONTROL IDENTIFIED

N/A

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
81E(C)5983	Park, 1955 Sub Station A Park, 1955 Sub Station B Park, 1955 Sub Station C		

3. PHOTO NUMBERS (Clarification of details)

N/A

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

N/A

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

N/A

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

Aerial field photographs, CSI card (NOAA form 76-53), ground photographs and NOAA computations and observations form with computation print-outs bound in the Field Project Book CM-8108 Houston Ship Channel

RECORD OF SURVEY USE

TP-01143

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline Manuscript	10/5/83	Class III Map		
Final Reviewed Map	May 1985	Class III Map	May 1985	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
8Pages	NOAA (76-40)	May 1985	Nonfloating Aids and Landmarks
2Pages	*PLM	May 1985	*Possible Landmark Features

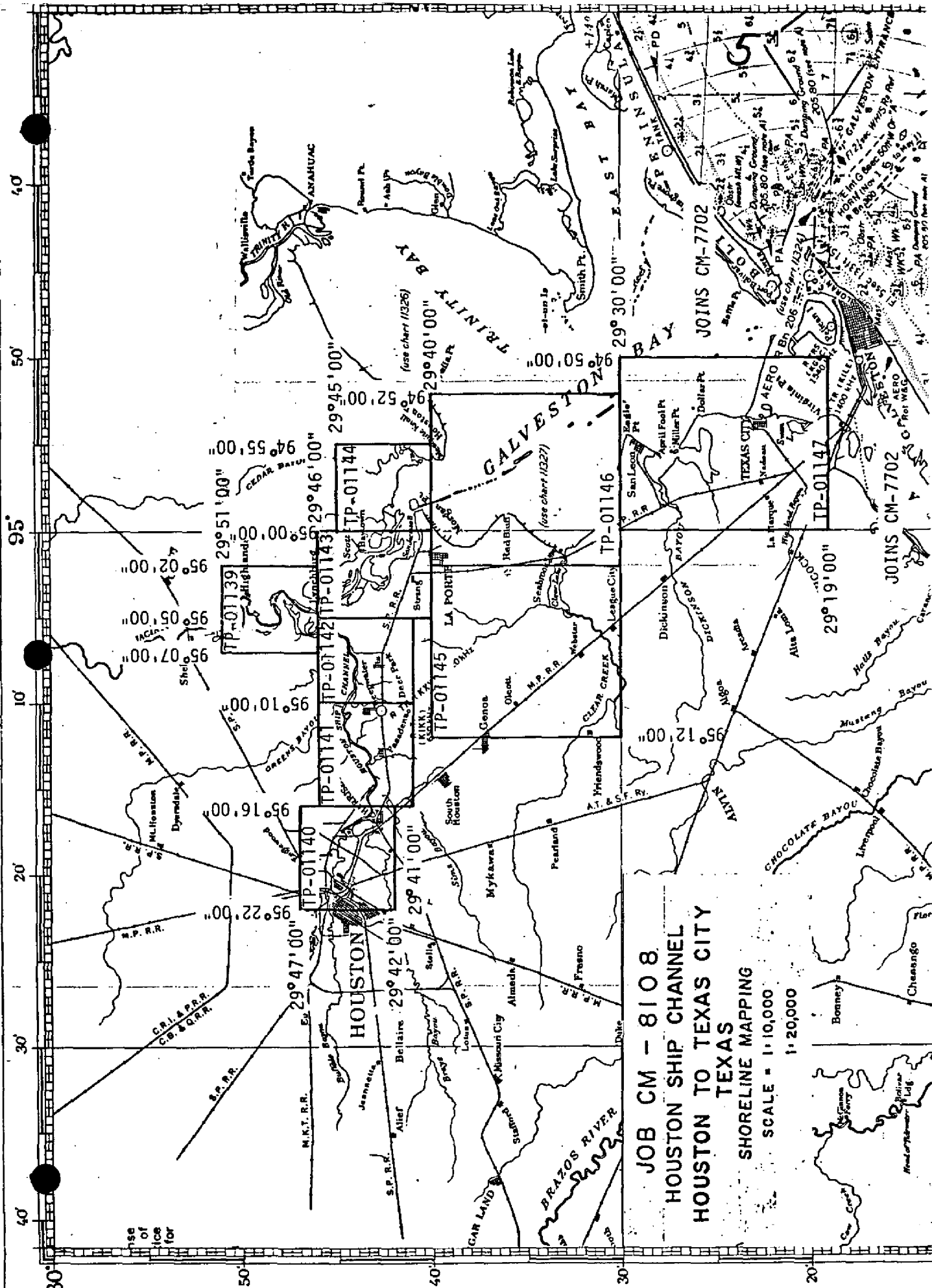
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

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 ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



JOB CM - 8108
HOUSTON SHIP CHANNEL
HOUSTON TO TEXAS CITY
TEXAS
SHORELINE MAPPING

SCALE = 1:10,000

1:20,000

SUMMARY

TP-01143

This 1:10,000 scale final shoreline map is one of nine maps that comprise project CM-8108, Houston Ship Channel, Houston to Texas City, Texas.

The purpose of this survey is to provide data to be used in nautical chart maintenance and new chart construction.

Field operations consisted of aerial photography, and the recovery and establishment of horizontal control necessary for the aerotriangulation of the project.

Natural color photographs were used to complete this segment of survey. The 1:50,000 scale photographs were taken November 11, 1981, and October 15, 1982. The 1:30,000 scale photographs were taken November 5, 1982. The 1981 photographs were exposed with the Wild RC-8(E) camera and the 1982 photographs with the Wild RC-10(B) camera.

Compilation was performed by the Coastal Mapping Unit, Rockville, Maryland. Final review was conducted by personnel of the Coastal Mapping Unit.

FIELD INSPECTION

TP-01143

There was no field inspection prior to compilation. Field work accomplished was limited to the taking of the color photographs and the recovery and establishment of horizontal control necessary for the aerotriangulation.

CM-8108

Photogrammetric Plot Report

Houston Ship Channel, Texas

June 1983

21. Area Covered

This report pertains to two 1:10,000 scale sheets, TP-01139 and TP-01143 of project CM-8108, Houston Ship Channel. The remaining seven sheets in the project will be completed at a later date.

22. Method

Two strips of 1:50,000 scale color photographs were bridged by analytical means, using field identified control. Tie points were "dropped" to the 1:30,000 scale photographs to be used as control to adjust those strips and to ensure a good fit between flight lines. Ratio values were determined for the 1:30,000 scale color photographs. The bridging photographs were adjusted using the Texas, South Central Zone coordinate system. The coordinate system was used to plot the base sheets.

23. Adequacy of Control

The control for this section of the project was adequate for the job and is within the National Standards of Map Accuracy. We also noted excessive film distortion in the film positives based on our fiducial readings. This problem has appeared in the past. A copy of the fit to control is attached to this report.

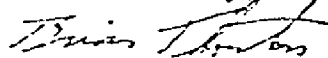
24. Supplemental Data

USGS quadrangles were used to provide vertical control for strip adjustments.

25. Photography

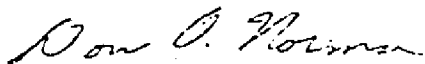
The coverage, overlap, and quality of the 1982B(C) and 1981E(C) photographs were adequate for the job.

Submitted by,



Brian Thornton

Approved and Forwarded:



Don O. Norman
Chief, Aerotriangulation Unit

CM-8108

Photogrammetric Plot Report

Addendum

Houston Ship Channel, Texas

July 1983

Base sheet TP-01144 has been plotted and sent to compilation with sheets TP-01139 and TP-01143. In order to obtain complete coverage of sheet TP-01144, compilation will have to set a model of the 1:50,000 scale photographs and pick points to control an unadjusted model of the 1:30,000 scale photography

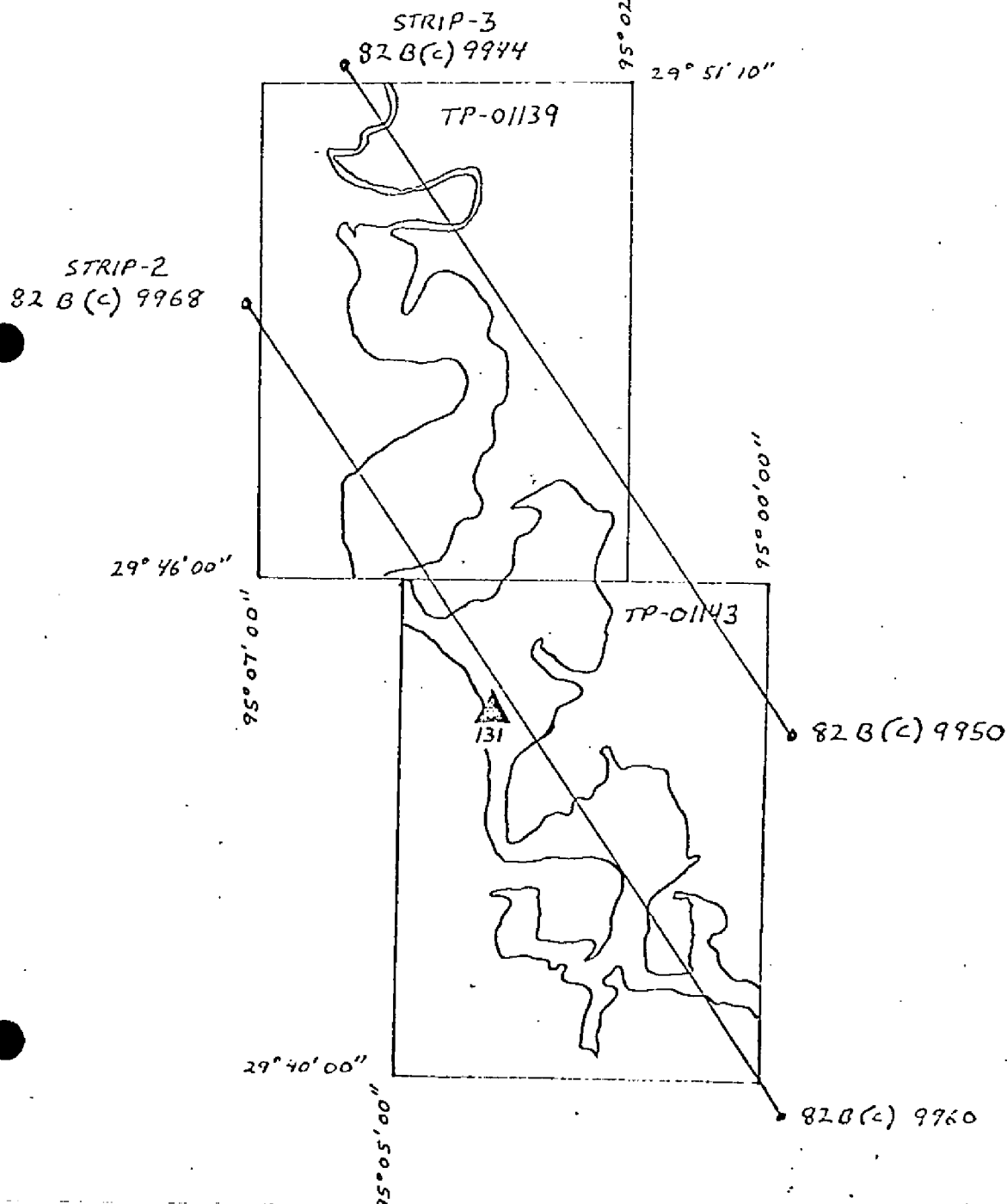
JOB CM-8108
HOUSTON SHIP CHANNEL

TEXAS
SHORELINE MAPPING

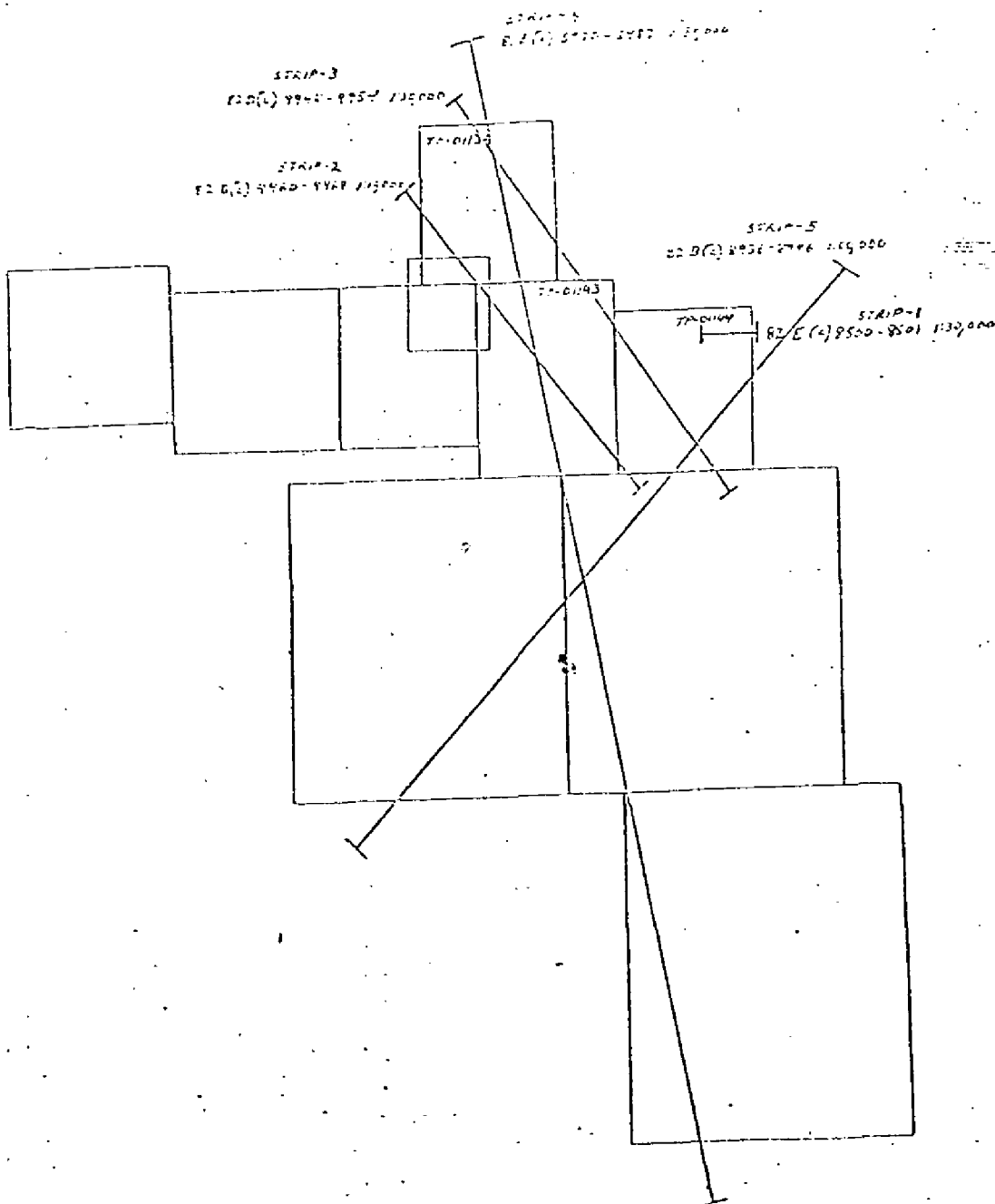
SCALE 1:10,000
BRIDGING PHOTOGRAPHY 82 B C

▲ TRIANGULATION

131 PARK, 1955



//



Fit to Control
X and Y Values in Feet

Strip #2 1:50,000 scale photography

NAME	POINT NO.	X	Y
Tie from Strip 4	960801	1.7	-.0
" " " "	960802	-1.4	.4
LA Porte Municipal Water Tank 1963	961141	-7.7	2.1
Tie from Strip 4	961803	-3.1	-2.4
Tie from Strip 4	961804	-2.9	-1.2
La Porte St. Marys Church Cross			
1932	981100	1.2	-.2
△ Sub point A	981101	1.5	-.6
Sub point B	981102	1.4	.7
Tie from Strip 4	961801	-1.5	-1.0
Tie from Strip 4	961802	-2.6	-1.4
Houston Ship Channel Range C			
Rear Light 1955	962150	.7	4.1
Houston Ship Channel Range C			
Front Light 1955	962151	.2	3.7
Houston Ship Channel Range F			
Rear Light 1955	962152	4.3	4.6
△ Tie from Strip 4	962801	-3.5	-.1
Tie from Strip 4	962802	-3.3	-.9
" " " "	962803	-3.9	1.7
" " " "	962804	-5.8	0.4
" " " "	962805	-6.5	0.5
" " " "	963801	2.1	-1.1
" " " "	963802	2.4	.3
" " " "	964801	5.0	-.2
" " " "	964802	2.3	-.9
" " " "	964803	-4.8	-0.8

<u>NAME</u>	<u>POINT NO.</u>	<u>X</u>	<u>Y</u>
Park, 1955 Sub Point A	983101	3.0	4.6
Sub Point B	983102	2.8	2.4
△ Sub Point C	983103	2.7	.8
San Jacinto Battlefield Monument			
1963	965140	.9	.4
Tie from Strip 4	965801	5.0	-2.6
" " " "	965802	4.6	-2.3
" " " "	966803	-2.2	-0.8
" " " "	966804	-3.9	-1.7
" " " "	966801	1.5	-2.1
" " " "	966802	2.6	-.7
Channel View Municipal Water Tank			
1952	967141	1.0	-3.1
Tie from Strip 4	967801	4.0	-1.6
Tie from Strip 4	967802	2.7	-2.0
△ Channel View WC and ID No. 84			
Water Tank	968140	-.8	-.1
Tie from Strip 4	968801	7.2	-1.3
" " " "	968802	7.4	-1.9
" " " "	968803	-0.1	-0.2
" " " "	968804	0.6	-0.4

Strip #3 1:30,000 scale photography

△ Tie from Strip 4	944801	2.3	-.7
△ " " " "	944802	2.4	-.3
△ " " " "	944803	-2.6	2.6
" " " "	944804	-2.6	3.7
" " " "	945801	.6	-.0
" " " "	945802	.6	1.3
△ Tie from Strip 4	945803	1.2	1.9

<u>NAME</u>	<u>Point No.</u>	<u>X</u>	<u>Y</u>
Highlands Municipal Water Tank	946156	1.0	1.4
Tie from Strip 4	946801	1.7	.8
" " " "	946802	1.2	.5
△ " " " "	947801	.1	.2
△ " " " "	947802	-2.4	.3
" " " "	948801	1.1	.2
Tie from Strip 4	948802	1.5	.7
Baytown Radio Station Krel			
Center Mast of 3	948157	4.0	2.8
△ Tie from Strip 4	949801	1.6	-1.3
" " " "	949802	.1	-1.7
" " " "	950801	-2.7	-3.4
△ Tie from Strip 4	950802	-1.7	-2.8
△ Tie from Strip 5	951801	1.1	2.6
" " " "	951802	3.0	1.4
△ " " " "	952801	2.2	2.0
△ " " " "	952802	2.5	2.6
" " " "	953801	1.1	.2
" " " "	953802	-.1	.0
△ " " " "	954801	-2.9	-1.8
Tie from Strip 5	954802	-3.6	-.6
△ Stations Held in the Strip Adjustments			

<u>NAME</u>	<u>POINT NO.</u>	<u>X</u>	<u>Y</u>
<u>Strip #4</u> 1:50,000 scale photography			
△ Nass, 1933 Sub Point A	970101	-0.7	-0.1
Sub Point B	970102	8.3	2.7
Texas City Municipal Tank 9th			
Ave. & 14th St., North 1960	974100	4.2	2.3
△ Sub Point A	974102	3.2	2.0
Sub Point B	974102	3.1	3.5
△ Hanson, 1933 Sub Point A	978101	-7.5	-2.2
Sub Point B	978102	-11.7	3.2
Tie from Strip 5	941801	1.4	-3.7
" " " "	941802	1.3	-3.6
" " " "	941803	-1.1	.0
" " " "	941804	-1.8	.0
La Porte St. Marys Church Cross			
1932	981100	3.4	-2.4
△ Sub Point A	981101	2.5	-2.0
△ Sub Point B	981102	3.8	2.5
Park, 1955 Sub Point A	983101	-0.6	-0.2
Sub Point B	983102	-0.7	4.7
△ Sub Point C	983103	-0.8	0.5
Sheldon, Southland Paper Mill Inc.			
Stack, 1968			
△ Sub Point A	987101	-2.4	-2.4
Sub Point B	987102	0.2	1.9
△ Sub Point C	987103	1.8	1.8

Strip #5 1:50,000 scale photography

<u>NAME</u>	<u>POINT NO.</u>	<u>X</u>	<u>Y</u>
Barrow 2, 1963 Sub Point A	936102	-0.8	-0.9
△ Sub Point B	936103	0.2	0.2
△ Tie from Strip 4	941801	-0.5	1.2
△ " " " "	941802	-0.3	1.0
La Porte St. Marys Church Cross			
1932	981100	-8.1	-3.1
△ Sub Point A	981101	0.8	-2.3
Sub Point B	981102	0.8	4.2
Tie from Strip 4	941803	1.8	-2.6
" " " "	941804	2.4	-2.7
△ Whitcomb, 1968 Sub Point A	945101	-0.1	-0.1
Sub Point B	945102	0.1	1.1
Sub Point C	945103	2.2	-1.6

CM-8208

Houston Ship Channel, Texas

June 1983

Ratio values for 1:30,000 scale bridging photography.

82B(C) 9944 to 9950 Ratio 2.980

82B(C) 9960 to 9968 Ratio 2.981

Photogrammetric Plot Report

Houston Ship Channel, Texas

CM-8108

January 1984

21. Area Covered

This report pertains to six sheets, three 1:10,000 scale sheets, TP-01140 to TP-01142. Three 1:20,000 scale sheets, TP-01145 to TP-01147. The area covered is the shorelines of Houston Ship Channel, the west shore of Galveston Bay from Morgan Point to Virginia Point and the Clear Lake area.

22. Method

Five strips were bridged by analytical aerotriangulation methods. Strips four and five were bridged on the Wild STK and strips one, six, and seven were bridged on the NOSAP. Strip one is 1:30,000 scale and the other four strips are 1:50,000 scale. Field identified control and tie points were used for the strip adjustment. Ratio values were determined for the bridging photographs as well as 1:50,000 MLLW IR photography. State Plane Coordinates in the Texas, South Central Zone were used for the strip adjustments and for plotting on the Coradomat.

23. Adequacy of Control

The control was adequate for the job and was within the National Standards of Map Accuracy.

24. Supplemental Data

USGS quadrangles was used to provide vertical control for the strip adjustments.

25. Photography

The photography was adequate for the job.

Submitted by,



Rick Johanson

Approved and Forwarded:



Don O. Norman
Chief, Aerotriangulation Unit

Houston Ship Channel, Texas

CM-8108

January 1984

NOTE TO COMPILER:

RE: Houston Radio Station KNUZ Mast 1952

The published position and the aerotriangulation position for this mast, indicate a large enough discrepancy to show suspect that the mast has been torn down and rebuilt.

The published position (PT. NO. 45) and the Aerotriangulation Position (PT. NO. 487445) were both plotted.

Point 961401 is a water tank that may be of land mark value.

Houston Ship Channel, Texas

CM-8101

Fit to Control
X and Y in Feet

	<u>Name</u>		<u>Point No.</u>	<u>X</u>	<u>Y</u>
	<u>Strip 1</u>				
△	65 Rice, 1942	Sub Pt A	484101	1.1	-2.1
△		Sub Pt B	484102	-0.8	1.9
	50 Fire, 1942	Sub Pt A	489101	0.3	3.6
△		Sub Pt B	489102	-0.4	-0.6
△		Sub Pt C	489103	-0.7	1.1
	2 Galena Park Water Tank 2 1968		490108	4.7	5.0
	117 Houston Ethyle Gas Corp Water Tower, 1952	Sub Pt A	492101	1.3	0.5
△		Sub Pt B	492102	-0.2	-1.0
△	21A Deer Park Shell Refining Co. Tallest Stack 1955		494121	0.4	-0.8
	125 San Jacinto Battle Field Monument 1963		965140	0.0	5.9
	131 Park, 1955	Sub Pt A	983101	0.8	1.5
△		Sub Pt C	983103	-0.4	0.1
	<u>Strip 6</u>				
	203 Texas City, Municipal Tank 9th Ave. & 14th Street North, 1960	Sub Pt A	974101	0.4	3.1
△		Sub Pt B	974102	1.9	5.0
	213 Nass., 1933	Sub Pt A	970101	4.3	2.4
△		Sub Pt B	970102	4.4	1.4

Name	Point No.	X	Y
△ Tie from Strip 4	963802	-0.2	-1.5
△ " " " "	964801	-1.1	-0.1
△ " " " "	964802	0.4	-2.0
△ " " " "	965801	-1.8	2.4
△ " " " "	965802	1.8	2.0
△ " " " "	966801	0.7	-1.8
△ " " " "	966802	2.6	-1.9
△ " " " "	967801	-2.2	-3.2
△ " " " "	967802	-1.6	-3.1
△ " " " "	968801	-1.7	0.0
△ " " " "	968802	-4.2	-3.1
△ " " " "	969801	-2.5	-1.4
△ Tie from Strip 4	969802	-1.0	1.6

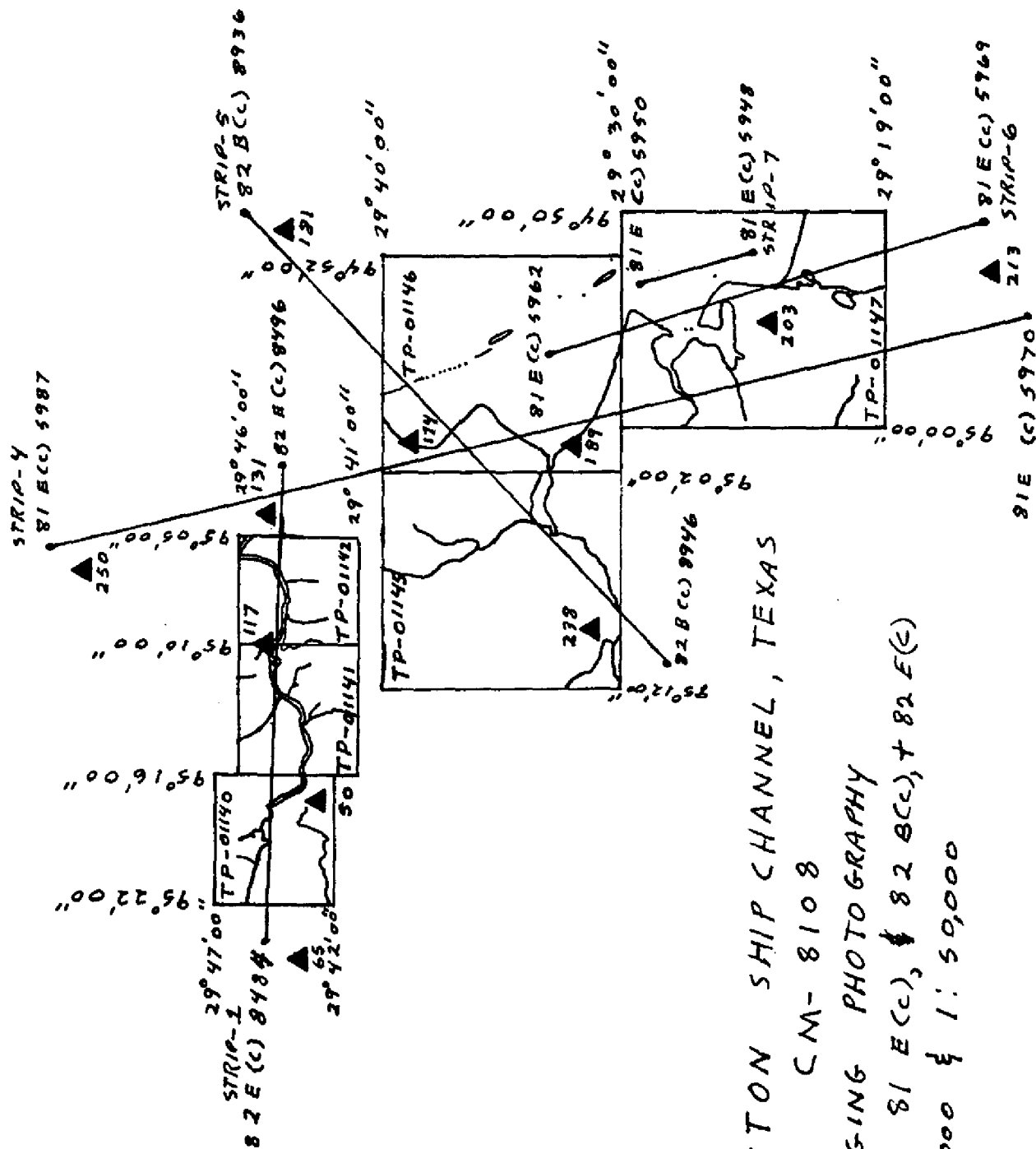
Strip 7

△ Tie from Strip 6	498801	0.1	1.5
△ " " " "	498802	0.2	-1.0
△ " " " "	498803	0.3	-1.0
△ " " " "	498804	-0.6	0.8
△ " " " "	498805	0.2	0.1
△ Tie from Strip 6	498806	-0.2	0.0

<u>NAME</u>	<u>POINT NO.</u>	<u>X</u>	<u>Y</u>
<u>Strip #4</u> 1:50,000 scale photography			
△ Nass, 1933 Sub Point A	970101	-0.7	-0.1
Sub Point B	970102	8.3	2.7
Texas City Municipal Tank 9th			
Ave. & 14th St., North 1960	974100	4.2	2.3
△ Sub Point A	974102	3.2	2.0
Sub Point B	974102	3.1	3.5
△ Hanson, 1933 Sub Point A	978101	-7.5	-2.2
Sub Point B	978102	-11.7	3.2
Tie from Strip 5	941801	1.4	-3.7
" " " "	941802	1.3	-3.6
" " " "	941803	-1.1	.0
" " " "	941804	-1.8	.0
La Porte St. Marys Church Cross			
1932	981100	3.4	-2.4
△ Sub Point A	981101	2.5	-2.0
△ Sub Point B	981102	3.8	2.5
Park, 1955 Sub Point A	983101	-0.6	-0.2
Sub Point B	983102	-0.7	4.7
△ Sub Point C	983103	-0.8	0.5
Sheldon, Southland Paper Mill Inc.			
Stack, 1968			
△ Sub Point A	987101	-2.4	-2.4
Sub Point B	987102	0.2	1.9
△ Sub Point C	987103	1.8	1.8

Strip #5 1:50,000 scale photography

	<u>NAME</u>	<u>POINT NO.</u>	<u>X</u>	<u>Y</u>
	Barrow 2, 1963 Sub Point A	936102	-0.8	-0.9
△	Sub Point B	936103	0.2	0.2
△	Tie from Strip 4	941801	-0.5	1.2
△	" " " "	941802	-0.3	1.0
	La Porte St. Marys Church Cross			
	1932	981100	-8.1	-3.1
△	Sub Point A	981101	0.8	-2.3
	Sub Point B	981102	0.8	4.2
	Tie from Strip 4	941803	1.8	-2.6
	" " " "	941804	2.4	-2.7
△	Whitcomb, 1968 Sub Point A	945101	-0.1	-0.1
	Sub Point B	945102	0.1	1.1
	Sub Point C	945103	2.2	-1.6



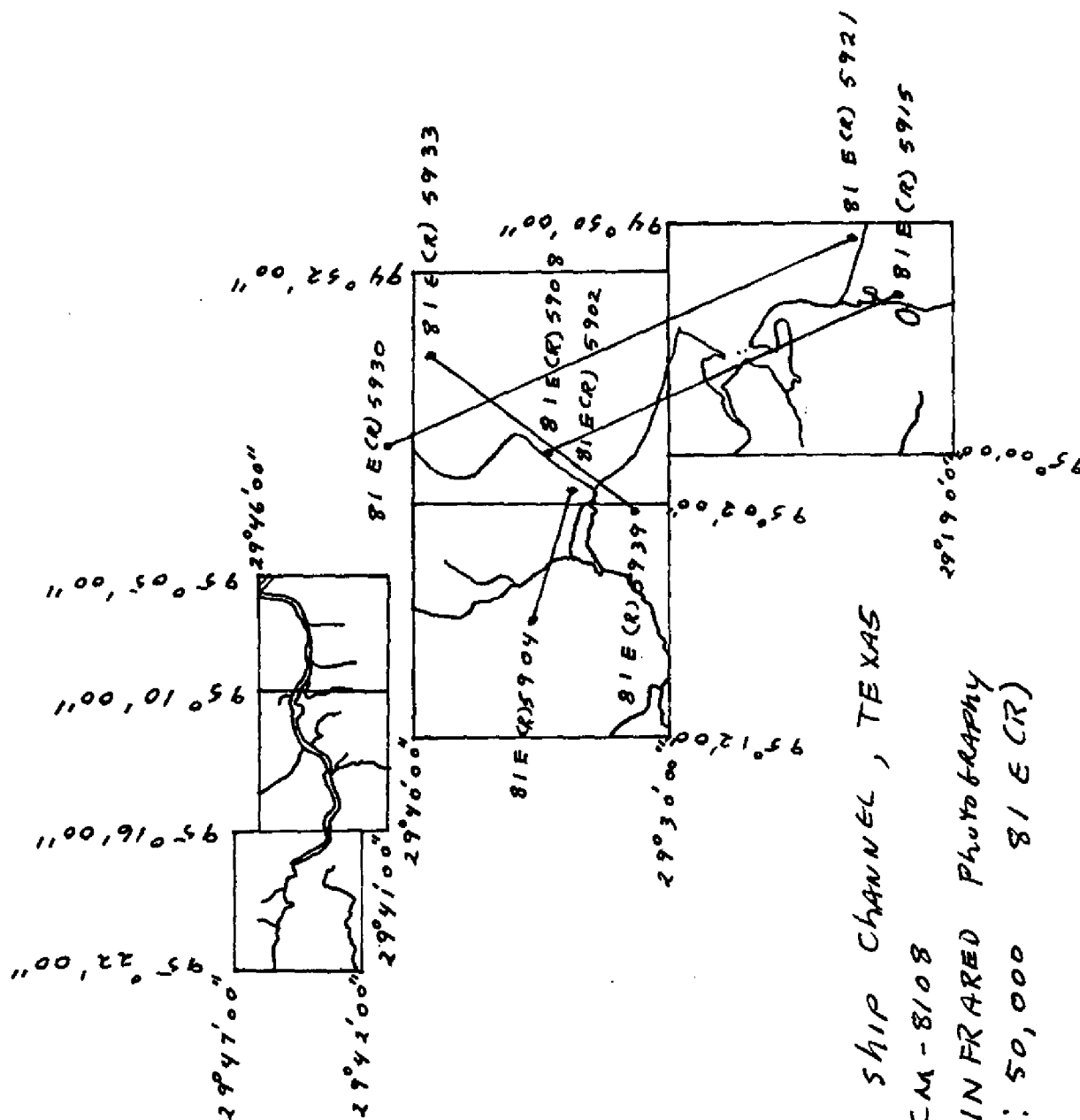
HOUSTON SHIP CHANNEL, TEXAS

CW-8108

BRIDGING PHOTOGRAPHY

$$81 E(c), 82 B(c), + 82 F(c)$$

1:30,000 & 1:50,000



HOUSTON SHIP CHANNEL, TEXAS

CM-8108

MALLW INFRARED PHOTOGRAPHY

1:50,000 81 E (R)

Houston Ship Channel, Texas

CM-8108

January 1984

Ratio values for 1:50,000 scale bridging photography:

81 E(C)	5970-5987	X 2.531
82 B(C)	8936-8946	X 2.492
81 E(C)	5962-5969	X 2.538
81 E(C)	5948-5950	X 2.530

Ratio values for 1:30,000 scale bridging photography:

82 E(C)	8484-8496	X 3.1005
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Ratio values for 1:50,000 scale MLLW black-and-white infrared photography:

81 E(R)	5902-5904	X 2.526
81 E(R)	5909-5915	X 2.526
81 E(R)	5921-5930	X 2.532
81 E(R)	5933-5939	X 2.528

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO. TP-01143	JOB NO. CM-8108	GEODETTIC DATUM 1927 North American		ORIGINATING ACTIVITY Compilation		REMARKS
		SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	COORDINATES IN FEET STATE ZONE	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	
San Jacinto Battlefield Monument 1963	Quad 290951 Sta 1325	965140	x= 3243498.26	φ 29° 44' 58.683"	Recovered in 1982	
			y= 717591.04	λ 95 04 49.774		
Park 1955	Quad 290951 Sta 1144	983100	x= 3246039.72	φ 29 44 30.964		
			y= 714874.99	λ 95 04 21.992		
Peggy Lake Houston Lighting and Power Co Tank 1955	Quad 290951 Sta 1323	132	x= 3250887.93	φ 29 43 34.898		
			y= 709371.98	λ 95 03 29.128		
			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		
			x=	φ		
			y=	λ		
COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE	
LISTED BY		DATE	LISTING CHECKED BY		DATE	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE	

COMPILATION REPORT
Job CM-8108
TP-01143

31. Delineation

Delineation was accomplished using the Wild B-8 stereoplotter and is based on office interpretation of the bridged natural color photographs. Ratio photographs were used as an aid in interpreting and verifying the compilation of the manuscript.

32. Control

Horizontal control was furnished by the Aerotriangulation Unit and was adequate in controlling the stereomodels.

Vertical control used in leveling the stereomodels was taken from USGS quadrangles.

33. Supplemental Data - None

34. Contours and Drainage

Contours are not applicable to this manuscript. Drainage was delineated from stereomodels set on the Wild B-8 by office interpretation of the bridging photographs.

35. Shoreline and Alongshore Details

All shoreline and alongshore detail was compiled using the Wild B-8 stereoplotter. No Mean Lower Low Water was compiled and no field edit will be performed on this manuscript.

36. Offshore Detail

Numerous trees were identified in Scott Bay, San Jacinto River, Santa Anna Bayon and Upper San Jacinto. Numerous offshore obstructions such as; piles, dolphins, towers, boat houses, wrecks and ruins were identified.

37. Landmarks and Aids

Two landmarks and forty nonfloating aids were located by Aerotriangulation Unit and verified by Compilation Unit. Eleven landmarks, seven nonfloating aids and thirteen possible landmark features were identified in the Compilation Unit.

38. Control for Future Surveys - None

39. Junctions

See NOAA form 76-36B of the Descriptive Report.

40. Horizontal and Vertical Accuracy

This map meets the National Standards of Map Accuracy and the requirements specified in the project instructions.

41. through 45. - Not Applicable

46. Comparison with Existing Maps

Comparison was made with the following 1:24,000 scale U.S. Geological Survey quadrangles:

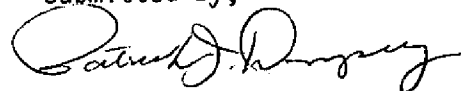
Highlands, Texas, 1967
La Porta, Texas, 1967

47. Comparison with Existing Charts

Comparison was made with National Ocean Service Charts:

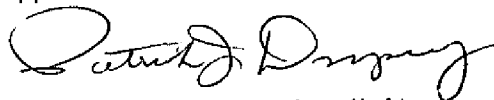
11328, 14th Edition, August 1981, 1:10,000 scale
11329, 22nd Edition, July 18, 1981, 1:10,000 scale
11326, 19th Edition, March 20, 1982, 1:80,000 scale

Submitted by,



For: Charles M. Heazel

Approved and Forwarded:



Chief, Coastal Mapping Unit

Oct. 14, 1983

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GEOGRAPHIC NAMES
FINAL NAME SHEET
CM-8108 (ALEXANDER ISLAND, TEXAS)

TP-01143

✓ Alexander Island	✓ La Porte
✓ Barbours Cut	✓ Lower San Jacinto Bay
✓ Barnes Island	✓ Lynchburg Landing
✓ Baytown	✓ Missouri Pacific (RR)
✓ Baytown Tunnel (tunnel)	✓ Mitchell Bay
✓ Black Duck Bay	✓ Port Terminal (RR)
✓ Blackwell Peninsula	✓ San Jacinto River
✓ Brinson Point	✓ Santa Anna Bayou
✓ Brownwood	✓ Scott Bay
✓ Burnet Bay	✓ Southern Pacific (RR)
✓ Crystal Bay	✓ Spilmans Island
✓ Goat Islands	✓ Upper San Jacinto Bay

Approved by:

Charles E. Harrington

Charles E. Harrington
Chief Geographer
Nautical Charting Division

REVIEW REPORT
SHORELINE SURVEY

TP-01143

61. GENERAL STATEMENT

A final review was performed for this shoreline map. No major discrepancies were encountered. Refer to the summary bound with this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS - None.63. COMPARISON WITH MAPS OF OTHER AGENCIES

Refer to the Compilation Report, paragraph 46, bound with this Descriptive Report.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS - None.65. COMPARISON WITH NAUTICAL CHARTS

Refer to the Compilation Report, paragraph 47, bound with this Descriptive Report.

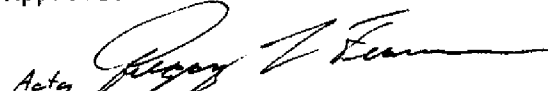
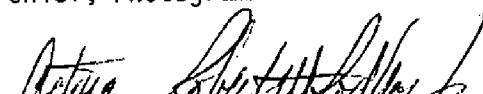
66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Submitted by:

Edward Allen
Cartographer

Approved and Forwarded:


Chief, Photogrammetric Section
Chief, Photogrammetry Branch

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				NONFLOATING AIDS FOR CHARTS				ORIGINATING ACTIVITY			
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED		ORIGINATING ACTIVITY			
TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED		Rockville Md.		Texas		Galveston Bay		Nov. 1984				☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ PHOTO FIELD PARTY ☒ COMPILATION ACTIVITY ☐ FINAL REVIEWER ☐ QUALITY CONTROL & REVIEW GRP. ☐ COAST PILOT BRANCH (See reverse for responsible personnel)			
The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.		JOB NUMBER		SURVEY NUMBER		DATUM		POSITION		OFFICE		CHARTS AFFECTED			
OPR PROJECT NO.		CM-8108		TP-01143		NA 1927		LATITUDE		LONGITUDE		POSITION			
CHARTING NAME		DESCRIPTION		LATITUDE		LONGITUDE		D.M. Meters		D.P. Meters		QUALITY			
		(Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)		° /		° /		D.M. Meters		D.P. Meters		QUALITY			
		Houston Ship Channel													
-LIGHT		-RANGE C FRONT LIGHT		29 42	11.88	95 00	18.85			82 B(C) 9962	11/5/82	Manually Digitized	11326 11328		
-LIGHT		-RANGE C REAR LIGHT		29 42	15.94	95 00	24.35			82 B(C) 9962	11/5/82	Manually Digitized	11326 11328		
-LIGHT		-RANGE E FRONT LIGHT Same structure as RANGE H REAR LIGHT		29 42	11.64	95 01	13.91			82 B(C) 9963	11/5/82	Aerotriangulated	11326 11328		
-LIGHT		-RANGE E REAR LIGHT		29 42	13.09	95 01	22.62			82 B(C) 9963	11/5/82	Aerotriangulated	11326 11328		
-LT 99				29 41	53.02	95 00	03.65			82 B(C) 9962	11/5/82	Aerotriangulated	11326 11328		
-LT 103				29 42	14.74	95 01	09.10			82 B(C) 9963	11/5/82	Aerotriangulated	11326 11328		
-DYBN 6		San Jacinto Bay Barge Channel		29 42	14.52	95 01	38.03			82 B(C) 9963	11/5/82	Manually Digitized	11326 11328		
-DYBN 18		San Jacinto Bay Barge Channel		29 42	29.84	95 02	34.63			82 B(C) 9963	11/5/82	Manually Digitized	11326 11328		
-DYBN 20		San Jacinto Bay Barge Channel		29 42	32.32	95 02	44.25			82 B(C) 9963	11/5/82	Manually Digitized	11326 11328		

RESPONSIBLE PERSONNEL		ORIGINATOR	
TYPE OF ACTION	NAME	PHOTO FIELD PARTY	HYDROGRAPHIC PARTY
OBJECTS INSPECTED FROM SEAWARD		☐	☐
POSITIONS DETERMINED AND/OR VERIFIED		☐	☐
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐	☐
INSTRUCTIONS FOR ENTRIES UNDER METHOD AND DATE OF LOCATION (Consult Photogrammetric Instructions No. 64)		FIELD ACTIVITY REPRESENTATIVE	
OFFICE		OFFICE ACTIVITY REPRESENTATIVE	
I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75		REVIEWER QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	
FIELD		FIELD (Cont'd)	
NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Visually 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.		B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate (or identify) the object. EXAMPLE: P-8-V 8-12-75 74(C)2982 II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

NOAA FORM 76-40 (6-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION										ORIGINATING ACTIVITY	
NONFLOATING AIDS										FOR CHARTS											
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE															
Rockville Md.		Texas		Galveston Bay		Nov. 1984															
TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED		HAVE ☐ HAVE NOT ☒		SURVEY NUMBER		JOB NUMBER		TP-01143		CM-8108		NA 1927		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED			
The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.		OPR PROJECT NO.		DATUM		LATITUDE		LONGITUDE		OFFICE		POSITION Quality									
DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE		LONGITUDE		OFFICE		POSITION Quality													
Houston Ship Channel		° /		° /																	
San Jacinto Bay Barge Channel		34.84		95 02		53.57				82 B(c) 9963		11/5/82		Manually Digitized		11326 11328					
-RANGE G FRONT LIGHT		29 42				52.50		95 01		12.22		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE G REAR LIGHT		29 43				00.98		95 01		12.06		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE H FRONT LIGHT		29 44				19.32		95 01		14.07		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE H REAR LIGHT Same structure as RANGE E FRONT LIGHT		29 42				11.64		95 01		13.91		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE J FRONT LIGHT		29 43				53.67		95 01		51.29		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE J REAR LIGHT		29 43				57.13		95 01		56.17		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE K FRONT LIGHT		29 43				53.62		95 03		00.25		11/5/82		Aerotriang- ulated		11326 11328					
-RANGE K REAR LIGHT Same structure as RANGE R REAR LIGHT		29 43				54.68		95 03		12.11		11/5/82		Aerotriang- ulated		11326 11328					

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	ORIGINATOR ☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE
REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field Identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

NOAA FORM 76-40 (8-74)				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				ORIGINATING ACTIVITY			
NONFLOATING AIDS				FOR CHARTS							
Replaces C&GS Form 567.		REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE			
☐ TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED		Rockville Md.		Texas		Galveston Bay		Nov. 1984			
The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.		SURVEY NUMBER		DATUM							
OPR PROJECT NO.		JOB NUMBER		TP-01143		NA 1927					
CM-8108		DESCRIPTION		LATITUDE		LONGITUDE		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED	
CHARTING NAME		Houston Ship Channel		LATITUDE		LONGITUDE		OFFICE		Position Quality	
				° / ' " D.M. Meters		° / ' " D.P. Meters					
-LIGHT	-RANGE L FRONT LIGHT	29 43	45.50	95 01	29.47			82 B(C) 9963 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	- RANGE L REAR LIGHT	29 43	44.11	95 01	08.77			82 B(C) 9963 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE M FRONT LIGHT	29 44	09.13	95 03	26.44			82 B(C) 9964 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE M REAR LIGHT Same structure as RANGE T REAR LIGHT	29 44	12.35	95 03	35.83			82 B(C) 9964 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE N FRONT LIGHT	29 43	44.23	95 02	16.39			82 B(C) 9964 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE N REAR LIGHT	29 43	40.66	95 02	05.99			82 B(C) 9964 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE O FRONT LIGHT Same structure as RANGE T FRONT LIGHT	29 44	25.99	95 03	40.58			82 B(C) 9965 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE O REAR LIGHT	29 44	31.70	95 03	48.98			82 B(C) 9965 11/5/82	Aerotriang- ulated	11326 11328	
-LIGHT	-RANGE P FRONT LIGHT	29 43	47.94	95 02	46.02			82 B(C) 9964 11/5/82	Aerotriang- ulated	11326 11328	

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD II. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field Identified 6 - Theodolite 7 - Planetable 8 - Sextant	III. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75
A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

NOAA FORM 76-40 (8-74)										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
NONFLOATING AIDS										FOR CHARTS									
Replaces C&GS Form 567.		REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE		ORIGINATING ACTIVITY									
☐ TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED		Rockville Md.		Texas		Galveston Bay		Nov. 1984		☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ PHOTO FIELD PARTY ☒ COMPILATION ACTIVITY ☐ FINAL REVIEWER ☐ QUALITY CONTROL & REVIEW GRP. ☐ COAST PILOT BRANCH (See reverse for responsible personnel)									
The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.		JOB NUMBER		SURVEY NUMBER		DATUM		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED							
OPR PROJECT NO.		CM-8108		TP-01143		NA 1927		LATITUDE ° / ' " D.M. Meters		LONGITUDE ° / ' " D.P. Meters		OFFICE							
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)		LATITUDE ° / ' " D.M. Meters		LONGITUDE ° / ' " D.P. Meters		POSITION Quality		OFFICE		CHARTS AFFECTED							
			Houston Ship Channel																
-LIGHT			-RANGE P REAR LIGHT	29 43	43.56	95 02	39.44			82 B(c) 9964	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE Q FRONT LIGHT	29 45	06.39	95 04	03.69			82 B(c) 9965	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE Q REAR LIGHT	29 45	15.18	95 04	10.24			82 B(c) 9965	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE R FRONT LIGHT	29 44	00.96	95 03	16.77			82 B(c) 9964	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE R REAR LIGHT Same structure as RANGE K REAR LIGHT	29 43	54.68	95 03	12.11			82 B(c) 9964	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE S FRONT LIGHT Same structure as RANGE X FRONT LIGHT	29 45	19.04	95 03	56.28			82 B(c) 9965	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE S REAR LIGHT	29 45	24.19	95 03	58.01			82 B(c) 9965	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE T FRONT LIGHT Same Structure as RANGE O FRONT LIGHT	29 44	25.99	95 03	40.58			82 B(c) 9965	11/5/82	Aerotriang- ulated	11326 11328						
-LIGHT			-RANGE T REAR LIGHT Same structure as RANGE M REAR LIGHT	29 44	12.35	95 03	35.83			82 B(c) 9964	11/5/82	Aerotriang- ulated	11326 11328						

RESPONSIBLE PERSONNEL		ORIGINATOR
TYPE OF ACTION	NAME	
OBJECTS INSPECTED FROM SEAWARD		☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED		FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		OFFICE ACTIVITY REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
FIELD (Cont'd) I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75 II. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.		
B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982 III. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 IV. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.		

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
NONFLOATING AIDS										FOR CHARTS									
REPORTING UNIT (If field Party, Ship or Office)		STATE		LOCALITY		DATE		ORIGINATING ACTIVITY		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED							
☐ TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED		Rockville Md.		Texas		Galveston Bay		Nov. 1984		☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☒ PHOTO FIELD PARTY ☒ COMPILATION ACTIVITY ☐ FINAL REVIEWER ☐ QUALITY CONTROL & REVIEW GRP. ☐ COAST PILOT BRANCH (See reverse for responsible personnel)									
The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.		JOB NUMBER		SURVEY NUMBER		DATUM		POSITION		OFFICE									
OPR PROJECT NO.		CM-8108		TP-01143		NA 1927		LATITUDE		LONGITUDE									
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)		LATITUDE ° / ' " D.M. Meters		LONGITUDE ° / ' " D.P. Meters		POSITION Quality		OFFICE		CHARTS AFFECTED							
-LT 122			Houston Ship Channel	29 44	41.04	95 03	39.56	82 B(C) 9965 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 45	40.69	95 04	21.16	82 B(C) 9966 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 45	46.00	95 04	26.01	82 B(C) 9966 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 44	56.10	95 03	43.44	82 B(C) 9965 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 44	50.82	95 03	38.78	82 B(C) 9965 11/5/82	Aerotriang- ulated			11326 11328							
-LT A			CIWA PIPELINE LIGHT A	29 45	38.16	95 04	36.91	82 B(C) 9966 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 45	56.16	95 04	59.18	82 B(C) 9966 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 45	19.04	95 03	56.28	82 B(C) 9965 11/5/82	Aerotriang- ulated			11326 11328							
-LIGHT				29 45	15.06	95 03	49.46	82 B(C) 9965 11/5/82	Aerotriang- ulated			11326 11328							

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64, FIELD (Cont'd))	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD II. POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field P - Photogrammetric L - Located V - Visually V - Verified 1 - Triangulation 5 - Field identified 2 - Traverse 6 - Theodolite 3 - Intersection 7 - Planetable 4 - Resection 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	III. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-V's.' and date. EXAMPLE: V-V's. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

NONFLOATING AIDS FOR CHARTS

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ORIGINATING ACTIVITY

- ☐ HYDROGRAPHIC PARTY
☐ GEODETIC PARTY
☐ PHOTO FIELD PARTY
☒ COMPILATION ACTIVITY
☐ FINAL REVIEWER
☐ QUALITY CONTROL & REVIEW GRP.
☐ COAST PILOT BRANCH
 (See reverse for responsible personnel)

REPORTING UNIT
(Field Party, Ship or Office)

Rockville Md.

STATE

Texas

LOCALITY

Galveston Bay

DATE

Nov. 1984

The following objects HAVE ☐ HAVE NOT ☒ been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.

JOB NUMBER

CM-8108

SURVEY NUMBER

TP-01143

DATUM

NA 1927

POSITION

LATITUDE

° / ' " D.M. Meters

LONGITUDE

° / ' " D.P. Meters

DESCRIPTION

(Record reason for deletion of landmark or aid to navigation.
 Show triangulation station names, where applicable, in parentheses.)

Houston Ship Channel

CHARTING
NAME

-IT 126

-IT 113

METHOD AND DATE OF LOCATION
(See instructions on reverse side)Position
Quality

OFFICE

Manually
DigitizedAerotriang-
ulated82 B(c) 9965
11/5/8282 B(c) 9963
11/5/8211326
1132811326
11328CHARTS
AFFECTED

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	ORIGINATOR ☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE ☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64,	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field Identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION										ORIGINATING ACTIVITY																																																																					
☐ TO BE CHARTED ☒ TO BE REVISED ☐ TO BE DELETED										REPORTING UNIT (Field Party, Ship or Office) Rockville Md.										LOCALITY Galveston Bay										DATE Nov. 1984																																																											
STATE Texas										SURVEY NUMBER TP-01143										DATUM NA 1927										METHOD AND DATE OF LOCATION (See instructions on reverse side)										CHARTS AFFECTED																																																	
JOB NUMBER CM-8108										DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station name, where applicable, in parentheses)										POSITION LATITUDE ° / ' " D.M. Meters										LONGITUDE ° / ' " D.P. Meters										OFFICE										Position Quality																																							
TOWER																				29 41										36.02										95 01										21.93										82 B(C) 9962 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 41										35.25										95 01										22.11										82 B(C) 9962 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 41										38.12										95 01										35.89										82 B(C) 9962 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 41										36.95										95 01										35.28										82 B(C) 9962 11/5/82										Manually Digitized										11326 11328									
TANK																				29 41										58.48										95 02										08.41										82 B(C) 9963 11/5/82										Manually Digitized										11326 11328									
RADIO MAST																				29 42										07.37										95 02										54.88										82 B(C) 9963 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 43										50.36										95 01										30.70										82 B(C) 9963 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 43										51.38										95 01										33.97										82 B(C) 9963 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 43										40.25										95 01										40.29										82 B(C) 9963 11/5/82										Manually Digitized										11326 11328									
TOWER																				29 43										41.19										95 01										43.62										82 B(C) 9963 11/5/82										Manually Digitized										11326 11328									

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE
☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64.)	
OFFICE	FIELD (Cont'd)
I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	B. Photogrammetric field positions** require entry of method of location or verification, date of field work, and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75
A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	ORIGINATOR ☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	OFFICE ACTIVITY REPRESENTATIVE ☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Visually 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

RWR
10/81.

MAP FEATURES OF POSSIBLE LANDMARK VALUE

MAP NO. TP-01143	JOB NO. CM-8108	GEOGRAPHIC AREA Galveston Bay	GEODETTIC DATUM 1927 North American	ORIGINATING ACTIVITY Compilation	CHARTS AFFECTED
DESCRIPTION	PHOTO NO. DATE/PHOTO	PLANE COOR. (FT) STATE ZONE	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE		
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 24.61" λ 95° 02' 33.05"		11326 11328
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 24.12" λ 95° 02' 41.17"		11326 11328
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 23.66" λ 95° 02' 49.24"		11326 11328
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 23.20" λ 95° 02' 57.56"		11326 11328
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 22.82" λ 95° 03' 05.65"		11326 11328
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 30.98" λ 95° 03' 28.56"		11326 11328
Tower	82 B(c) 9964 11/5/82	X Y	φ 29° 43' 58.60" λ 95° 01' 30.66"		11326 11328
Tower	82 B(c) 9965 11/5/82	X Y	φ 29° 45' 28.52" λ 95° 03' 06.88"		11326 11328
Tower	82 B(c) 9965 11/5/82	X Y	φ 29° 45' 36.40" λ 95° 03' 22.07"		11326 11328
Tower	82 B(c) 9965 11/5/82	X Y	φ 29° 45' 42.95" λ 95° 03' 26.73"		11326 11328
Tower	82 B(c) 9965 11/5/82	X Y	φ 29° 45' 49.66" λ 95° 03' 31.33"		11326 11328
Tower	82 B(c) 9965 11/5/82	X Y	φ 29° 45' 56.34" λ 95° 03' 36.11"		11326 11328

POSITIONS FURNISHED ARE PHOTOGRAMMETRIC POSITIONS - MAP FEATURES HAVE NOT BEEN INSPECTED

LISTED BY	DATE	LISTING CHECKED BY	DATE
<i>W. J. ...</i>	10-18-83	<i>W. J. ...</i>	10/20/83

MAP FEATURES OF POSSIBLE LANDMARK VALUE

 RWR
10/81.

MAP NO. TP-01143	JOB NO. CM-8108	GEOGRAPHIC AREA Galveston Bay	GEODETIC DATUM 1927 North American	PLANE COOR. (FT) STATE <u>Texas</u> ZONE <u>South Central</u>	PHOTO NO. DATE/PHOTO 82 B(c) 9963 11/5/82	DESCRIPTION	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	ORIGINATING ACTIVITY Compilation	CHARTS AFFECTED
				X			φ 29° 44' 00.52"		11326
				Y			λ 95° 01' 21.29"		11328
				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		
				X			φ		
				Y			λ		
				X			φ		
				Y			λ		
				X			φ		
				Y			λ		
				X			φ		
				Y			λ		
				X			φ		
				Y			λ		
				X			φ		
				Y			λ		

POSITIONS FURNISHED ARE PHOTOGRAMMETRIC POSITIONS - MAP FEATURES HAVE NOT BEEN INSPECTED

LISTED BY	DATE	LISTING CHECKED BY	DATE
<i>[Signature]</i>	10/11/83	<i>[Signature]</i>	10/24/83

