

TP 01139

TP 01139

NOAA FORM 76-35 (3-76) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<h2>DESCRIPTIVE REPORT</h2>	
Map No. TP-01139	Edition No. 1
Job No. CM-8108	
Map Classification Class III-Final (This map edition will not	
Type of Survey be field edited Shoreline	
LOCALITY	
State Texas	
General Locality Houston Ship Channel	
Locality Highlands	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 1981 TO 1982 </div>	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Rockville, Maryland		SURVEY TP. <u>01139</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III (Final)</u> JOB <u>#CM-8108</u>	
OFFICER-IN-CHARGE Lawrence Fritz		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> 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: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Lambert Conformal Conic		4. GRID(S) STATE Texas ZONE South Central	
5. SCALE 1:10,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		B. Thornton	June 83
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		J. Taylor	Aug 83
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 CONTOURS BY SCALE: 1:10,000 CHECKED BY		J. McNamara NA NA	"
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smooth Drafted CONTOURS BY CHECKED BY SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		C. Heazel J. Schad NA NA NA NA	Sept 83 "
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		NA	"
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		NA	"
7. COMPILATION SECTION REVIEW BY		J. Schad	Sept 83
8. FINAL REVIEW BY		R. Kelly	Nov 83
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		NA	"
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		R. Kelly	Nov 83
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-01139

1. COMPILATION PHOTOGRAPHY

CAMERA(S)
Wild RC-10(B) Focal Length=152.74TYPES OF PHOTOGRAPHY
LEGEND

TIME REFERENCE

TIDE STAGE REFERENCE

- ☒ PREDICTED TIDES
☐ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

- ☒ COLOR
(P) PANCHROMATIC
(I) INFRARED

ZONE

Central

☒ STANDARD

MERIDIAN

90

☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
82 B(C) 9965-68	11/5/82	9:40	1:30,000	1.02 Ft. Above MLW
82 B(E) 9944-48	11/5/82	9:26	1:30,000	1.01 Ft. Above MLW

REMARKS

Compilation/bridging photographs based on predicted tide data.
Photographs are referenced to sub sta. Morgans Point.

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the shoreline is the photographs listed above in
Item 1.

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

N/A

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
None	None	TP-01142 TP-01143	None

REMARKS

HISTORY OF FIELD OPERATIONS

TP-01139

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.S. Tibbetts	Mar 1982
2. HORIZONTAL CONTROL	RECOVERED BY " " " "	" "
	ESTABLISHED BY P.W. Walbolt	Mar 1982
	PRE-MARKED OR IDENTIFIED BY P. W. Walbolt	Mar 1982
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 BY	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> 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		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
31E(C) 5936	Sheldon Southland Paper Mill Inc. stack 1968: Sub. Sta. A, B, & 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: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS None			
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 forms with computation printout: bound in the Field Project Book CM-3108, Huston Ship Channel.			

RECORD OF SURVEY USE

TP-01139

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Final Reveiwed Map	Sept. 83	Class III Map	12/7/83	11/10/83

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		12/7/83	Aids for charts

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 <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	

CAUTION

Only marine radio beacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Hydrographic Center Publication 117 (A&B).

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○ (Accurate location) ○ (Approximate location)

Wallsville Trinity Bayou

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

Trinity Bay

Round Pt.

Ash Pt.

Clan

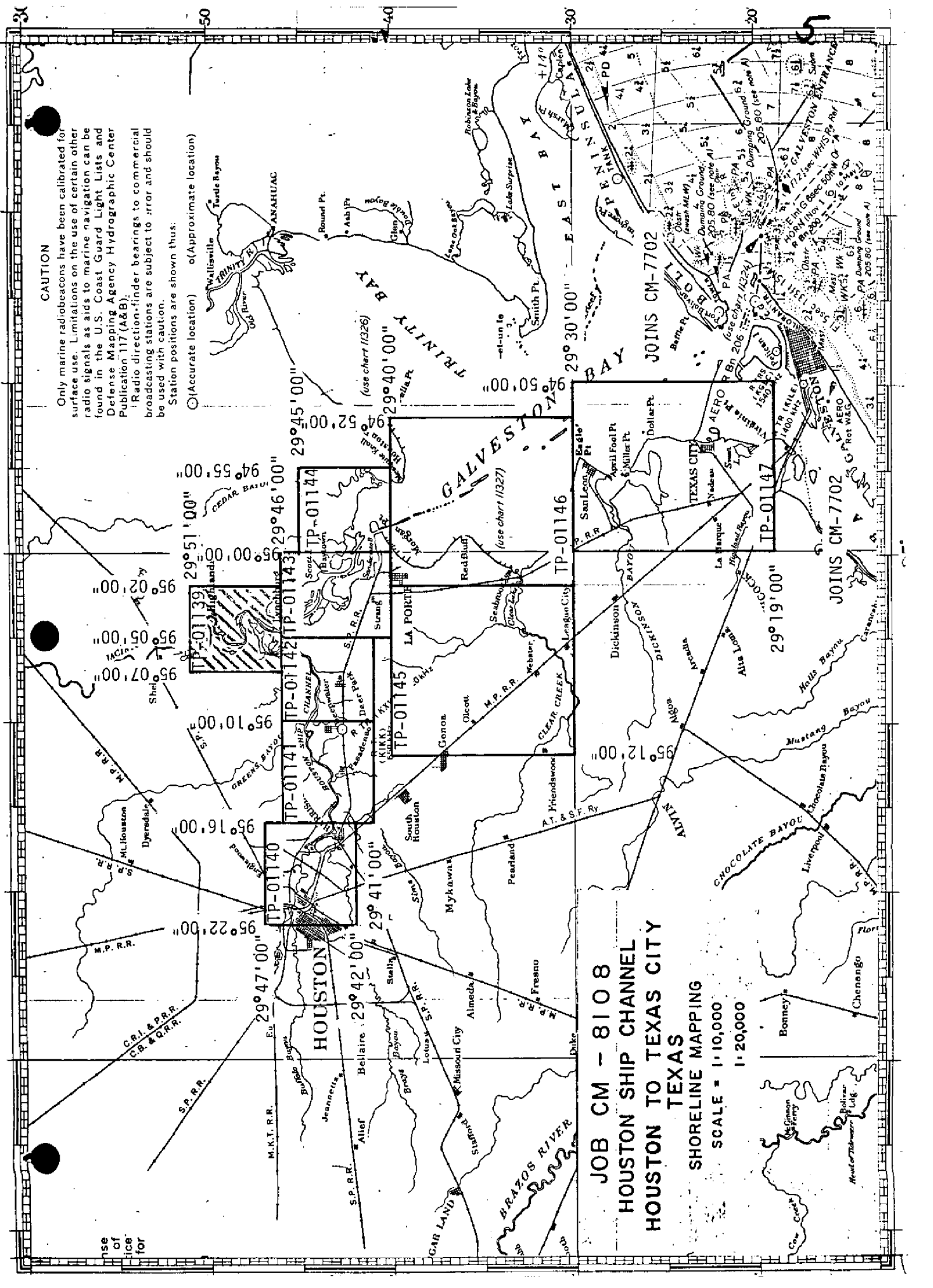
Trinity Bay

JOB CM - 8108 HOUSTON SHIP CHANNEL HOUSTON TO TEXAS CITY

SHORELINE MAPPING

SCALE = 1:10,000

1:20,000



SUMMARY

TP-01139

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 Quality Control Group, Rockville, Maryland.

FIELD INSPECTION

TP-01139

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.

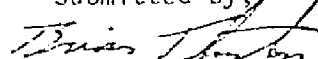
24. Supplemental Data

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

25. Photography

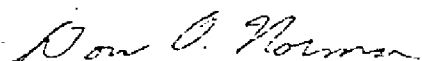
The coverage, overlap, and quality of the 1982B(C) and 1981E(C) photographs were adequate for the job.

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

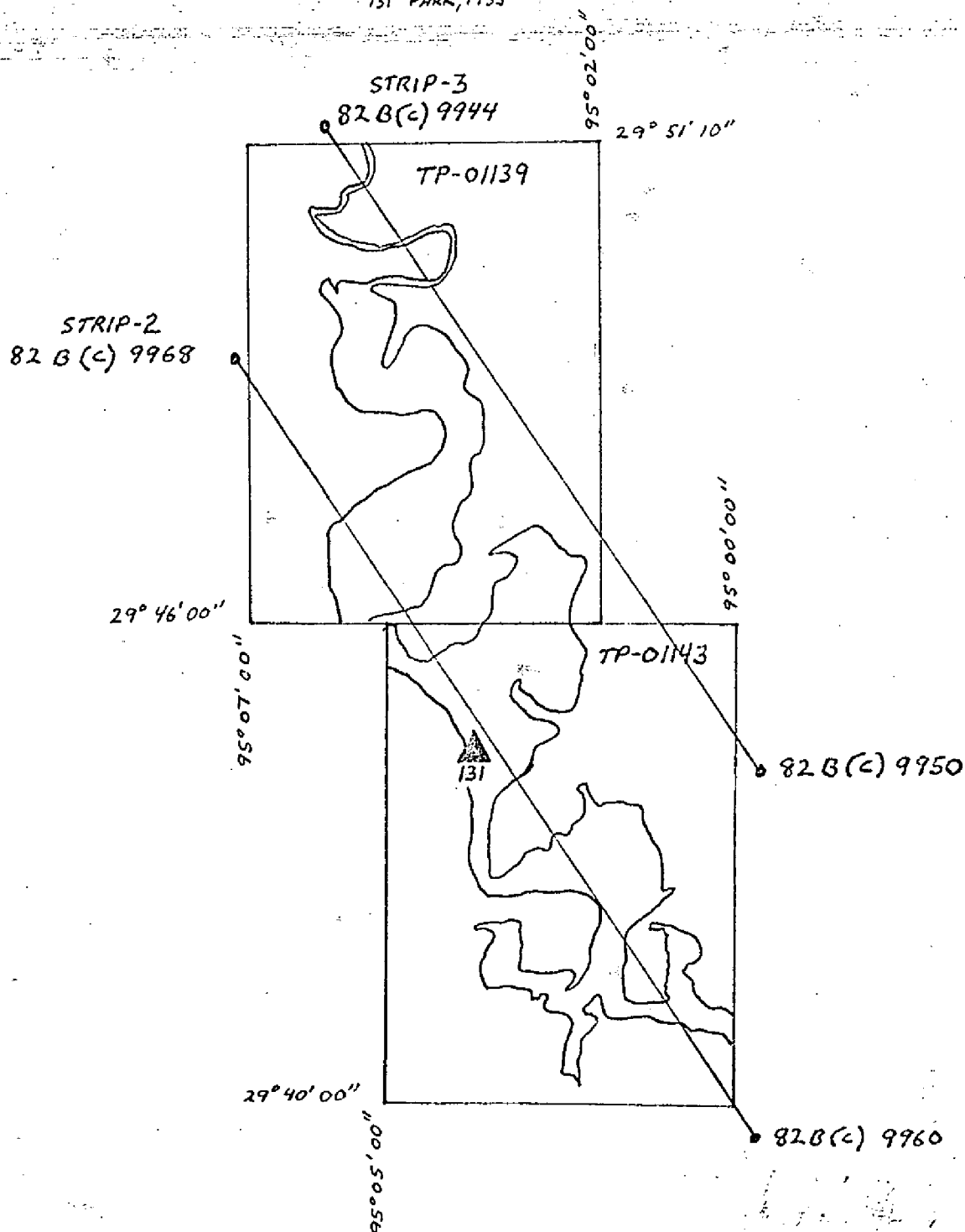
HOUSTON SHIP CHANNEL

TEXAS

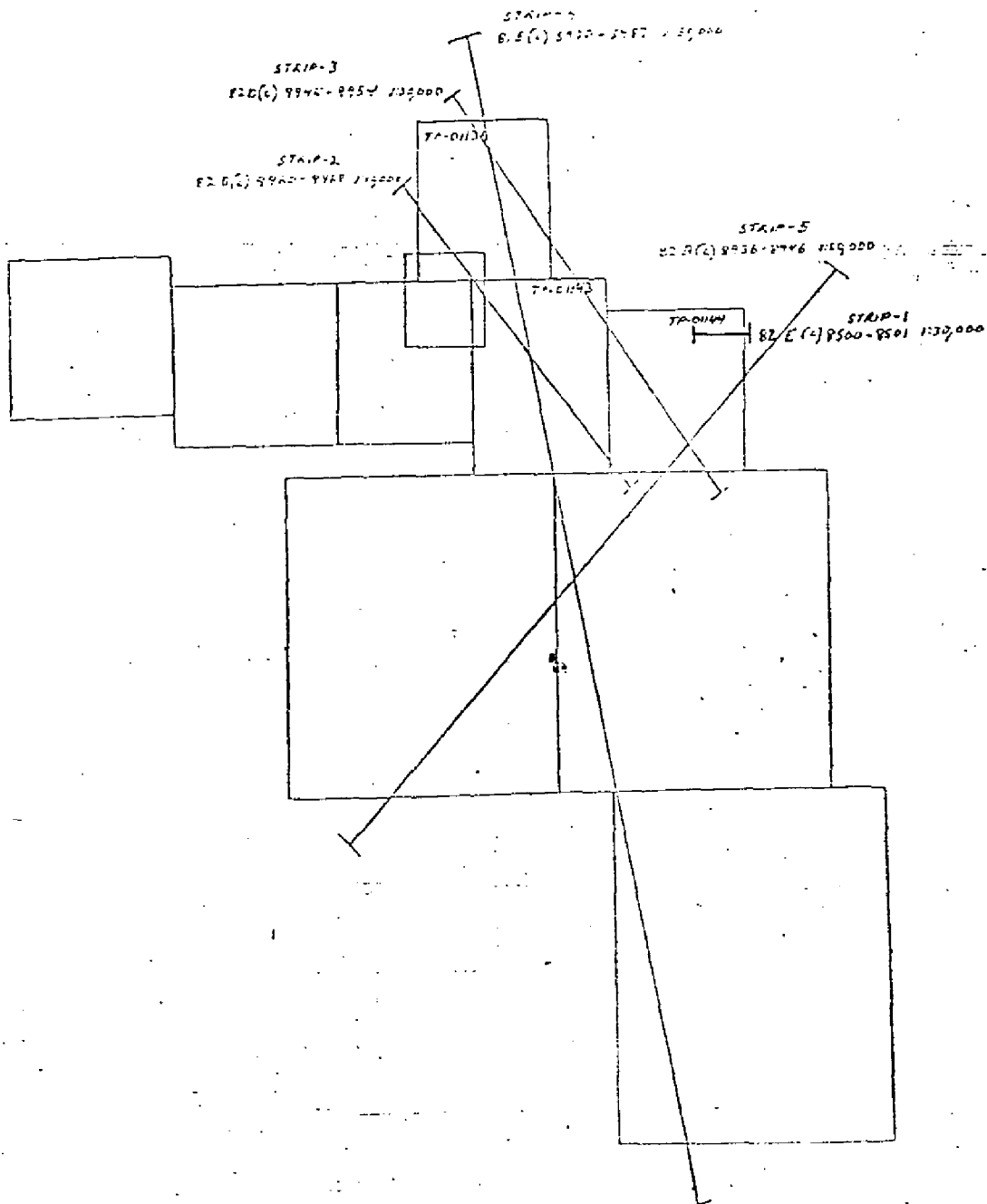
SHORELINE MAPPING

SCALE 1:10,000
BRIDGING PHOTOGRAPHY 82 B C
▲ TRIANGULATION

131 PARK, 1955



JOB CM-8108
HOUSTON SHIP CHANNEL
TEXAS
SHORELINE MAPPING
BRIDGING PHOTOGRAPHY



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	-1.0
" " " "	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	2.9	.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
<u>Strip #3 1:30,000 scale photography</u>			
△ 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

Compilation Report

TP-01139

31. Delineation

All detail was compiled from 1:30,000 scale color photographs using the Wild B-8 stereoplotter.

32. Control

Horizontal control furnished by the Aerotriangulation Unit was adequate in controlling the stereomodels. Vertical control used in leveling the stereomodels were taken from USGS quadrangles.

33. Supplemental Data - None34. Contours and Drainage

Contours were not applicable. Drainage was delineated from the 1:30,000 scale color photographs using the Wild B-8 stereoplotter.

35. Shoreline and Alongshore Details

The shoreline was classified and alongshore detail identified by office interpretation of the 1:30,00 scale color photographs. No field inspection was made prior to compilation.

36. Offshore Details

Numerous trees were located in the water using the 1:30,000 scale color photographs. These trees appear as both single standing, and in clusters.

37. Landmarks and Aids

One aid was located by aerotriangulation methods and confirmed during compilation. Two forms listing map features of possible landmark value will be bound with the Descriptive Report.

38. Control for Future Surveys - None39. Junctions

See NOAA Form 76-36B

40. through 45. Not Applicable

46. Comparison with Existing Maps

Comparison was made with U.S. Geological Survey quadrangle, Highlands, Texas, scale 1:24,000, 1967.

47. Comparison with Existing Charts

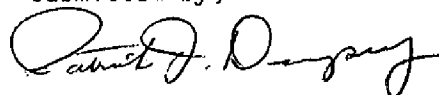
Comparison was made with National Ocean Survey charts;

11326 - 19th Edition, March 20, 1982, scale 1:80,000

11329 - 22nd Edition, July 18, 1981, scale 1:10,000

Chart 11326 covered north to latitude $29^{\circ}48'00''$. Chart 11329 covered north to latitude $29^{\circ}46'16''$. No previous chart exists north of these limits.

Submitted by,



For: Charles M. Heazel

Approved and Forwarded:



Chief, Coastal Mapping Unit

Oct. 14, 1983

20

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

TP-01139

Baytown

Bear Lake

Bird Lake

Burnet Bay

Channelview

Clear Lake

Diamond Island

George White Lake

Gilbert Landing

Grennel Slough

Heads Bend

Highlands

Hog Island

Lake Sandy

Lynchburg

Mantu

Missouri Pacific (RR)

Old River

San Jacinto River

Approved by:

Charles E. Harrington
Charles E. Harrington
Chief Geographer
Nautical Charting Division

Review Report TP-01139

Shoreline Survey

TP-01139

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 - None63. Comparison with Maps of Other Agencies

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

64. Comparison with Contemporary Hydrographic Surveys - None65. 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,

James Sched
for Robert B. Kelly

Approved and Forwarded:

Actg Gregory J. Fenn
Chief, Photogrammetric Section

Actg Robert W. Kelly
Chief, Photogrammetry Branch

Replaces C&GS Form 567.

NONFLOATING AIDS

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)
Coastal Mapping Unit
Rockville, MD

STATE

Texas

LOCALITY

Houston Ship Channel

DATE

10/13/83

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

OPR PROJECT NO.

JOB NUMBER

SURVEY NUMBER

DATUM

CM 8108 TP-01139

NA 1927

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

POSITION

LATITUDE LONGITUDE
° / ' " D.M. Meters ° / ' " D.P. Meters

Position
QualityCHARTS
AFFECTED

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

Houston Ship Channel.

-RGE W R
Light

- Range W Rear Light

29-46

04 64

95-05

14 25

82B(C)9966
11-5-82Aerotriangul-
ated

11329

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	<div>ORIGINATOR</div> <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<div>OFFICE ACTIVITY REPRESENTATIVE</div> <input type="checkbox"/> REVIEWER <input type="checkbox"/> 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 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	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.

MAP FEATURES OF POSSIBLE LANDMARK VALUE										RWR 10/81
MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETIC DATUM		ORIGINATING ACTIVITY		CHARTS AFFECTED			
TP-01139	CM-8108	Highlands, Texas	NA 1927		Coastal Mapping Unit Rockville, MD					
DESCRIPTION			PHOTO NO.	PLANE COOR. (FT)	GEOGRAPHIC POSITION		CHARTS AFFECTED			
			DATE/PHOTO	STATE ZONE	φ λ	φ λ				
Tank; (Highlands Municipal Water Tank, '51 GP Quad. 290951, Sta. #1183)			82B(C)9946 11-5-82	X= 3,249,874.25 Y= 741,628.31	φ 29-48-54.404 λ 95-03-28.289	New chart construction				
Tank; at Channelview Aerotriangulated position			82B(C)9967 11-5-82	X= 3,234,658.66 Y= 730,462.14	φ 29-47-08.96 λ 95-06-25.14	"				
Light Pole			82B(C)9947 11-5-82	X Y	φ 29-47-33.59 λ 95-03-59.45	"				
Tank; at Lynchburg			"	X Y	φ 29-47-37.43 λ 95-03-23.16	"				
Tank; at Highlands Sewage Disposal Facility			82B(C)9946 11-5-82	X Y	φ 29-48-41.15 λ 95-03-56.68	"				
Stack; at refinery			82B(C)9945 11-5-82	X Y	φ 29-49-07.24 λ 95-06-04.12	"				
Tower; Overhead Cables			"	X Y	φ 29-49-55.72 λ 95-05-41.50	"				
Tower; Overhead Cables			"	X Y	φ 29-49-59.81 λ 95-05-37.34	"				
Stack; at refinery			"	X Y	φ 29-49-53.24 λ 95-06-31.11	"				
Tower; Overhead Cables			82B(C)9944 11-5-82	X Y	φ 29-51-08.61 λ 95-05-23.80	"				
Tower; Overhead Cables			"	X Y	φ 29-51-08.47 λ 95-05-16.76	"				
Tower; Overhead Cables			82B(C)9966 11-5-82	X Y	φ 29-46-03.97 λ 95-04-48.22	11329 11326				
POSITIONS FURNISHED ARE ^{DIGITIZED} PHOTOGRAMMETRIC POSITIONS - MAP FEATURES HAVE NOT BEEN INSPECTED										
LISTED BY Charles Heazel			DATE 10/13/82		LISTING CHECKED BY James Schad		DATE 10/13/82			

MAP FEATURES OF POSSIBLE LANDMARK VALUE							RWR 10/81
MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETIC DATUM		ORIGINATING ACTIVITY		
TP-01139	CM-8108	Highlands, Texas	NA 1927		Coastal Mapping Unit Rockville, MD		
DESCRIPTION	PHOTO NO.	DATE/PHOTO	PLANE COOR. (FT)		GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	CHARTS AFFECTED	
			STATE	ZONE			
Tower; Powerline	82B(c)9966	11-5-82	X		φ 29-46-06.21 λ 95-04-33.94	11329 11326	
Tower; Powerline	"	"	X		φ 29-46-07.29 λ 95-04-22.08	"	
Tower; Powerline	"	"	X		φ 29-46-09.02 λ 95-04-16.49	"	
Tower; Powerline	"	"	X		φ 29-46-09.75 λ 95-04-10.65	"	
Tower; Powerline	"	"	X		φ 29-46-09.68 λ 95-04-02.21	"	
Tower; Powerline	"	"	X		φ 29-46-09.62 λ 95-03-53.81	"	
Tower; Powerline	"	"	X		φ 29-46-09.72 λ 95-03-45.38	"	
Tower; Powerline	"	"	X		φ 29-46-03.05 λ 95-03-40.71	"	
			X		φ λ		
			X		φ λ		
			X		φ λ		
			X		φ λ		
			X		φ λ		
			X		φ λ		

POSITIONS FURNISHED ARE PHOTOGRAMMETRIC POSITIONS - MAP FEATURES HAVE NOT BEEN INSPECTED			
LISTED BY	DATE	LISTING CHECKED BY	DATE
Charles Heazel	10/13/83	James Schiad	10/13/83

