

TP 01140

TP 01140

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 Edit	
Map No. TP-01140	Edition No. I
Job No. CM-8108	
Map Classification III	
Type of Survey Shoreline	
LOCALITY	
State Texas	
General Locality Houston	
Locality Houston To Harrisburg	
1982 TO 19	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY ☒ ORIGINAL ☐ RESURVEY ☐ REVISED		SURVEY TP-01140 MAP EDITION NO. (I) MAP CLASS III JOB PH-CM-8108	
DESCRIPTIVE REPORT - DATA RECORD					
PHOTOGRAMMETRIC OFFICE Rockville, Md.		LAST PRECEDING MAP EDITION TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED			
OFFICER-IN-CHARGE Ronald Brewer		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 1:10,000			STATE ZONE		
III. HISTORY OF OFFICE OPERATIONS					
OPERATIONS		NAME		DATE	
1. AEROTRIANGULATION BY METHOD: <u>Analytic</u> LANDMARKS AND AIDS BY		R. Johanson R. Johanson		1/84 1/84	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: <u>Calcomp</u> CHECKED BY		J. Schad N/A		9/84	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY		R. Johanson J. Schad		10/84 10/84	
INSTRUMENT: <u>Wild B-8</u> CONTOURS BY SCALE: <u>1:10,000</u> CHECKED BY		N/A N/A			
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY		R. Johanson J. Schad		10/84 10/84	
METHOD: <u>Smooth Drafted</u> CONTOURS BY CHECKED BY		N/A N/A			
SCALE: <u>1:10,000</u> HYDRO SUPPORT DATA BY CHECKED BY		N/A N/A			
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		N/A			
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		N/A N/A			
7. COMPILATION SECTION REVIEW BY		J. Schad		12/84	
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-01140

1. COMPILATION PHOTOGRAPHY

CAMERA(S) F/L=(152,71 Wild RC-8E		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				MERIDIAN	
				Central	
				90 th	

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
82 E(C) 8485-89	2/16/82	1245	1:30,000	1.02 ft.

REMARKS

Based on predicted tide reference Station Galveston, Sub Sta. Morgan Point

2. SOURCE OF MEAN HIGH-WATER LINE:

The Photographs listed above.

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
N/A	/ATP-01141	N/A	N/A

REMARKS

HISTORY OF FIELD OPERATIONS

TP-01140

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	3/82	
	ESTABLISHED BY N/A	"	
	RECOVERED BY R.S. Tibbetts	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		
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
82E(C) 8734	Fire, 1942 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: ☐ REPORT ☒ NONE		6. 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) one Field Book CM-8108 Houston Ship Channel Projection Report CSI Cards			

RECORD OF SURVEY USE

TP-01140

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Final Reviewed Map	May 1985	Class III	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
1 Page	NOAA form 76-40	May 1985	Landmarks
3 Pages	FLM's	May 1985	Possible Landmark Features

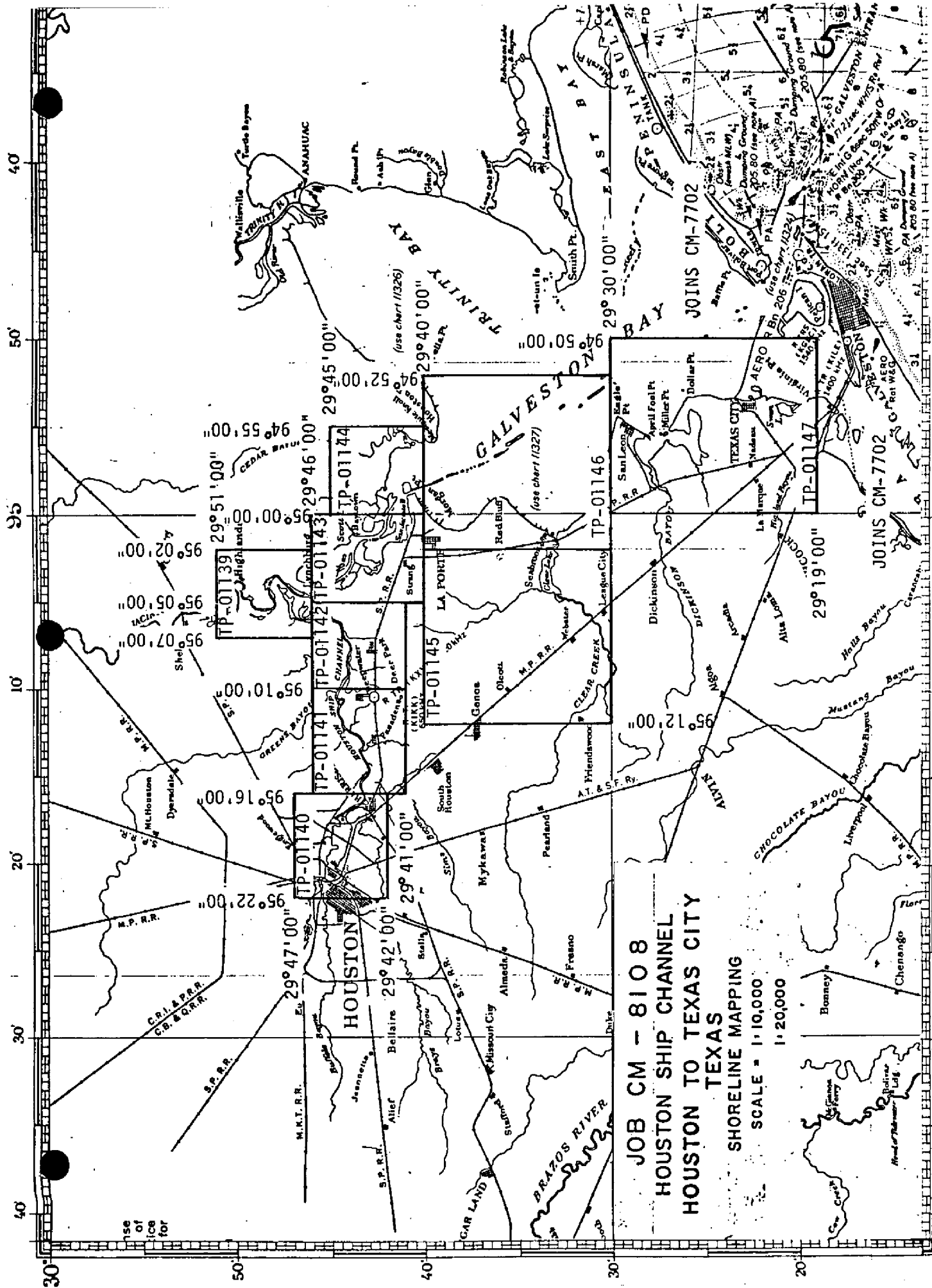
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

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



SUMMARY

TP- 01140

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-01140

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.

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

Rick Johanson

Approved and Forwarded:

Don O. Norman

Don O. Norman
Chief, Aerotriangulation Unit

Houston Ship Channel, Texas

CM-8101

Fit to Control
X and Y in Feet

9

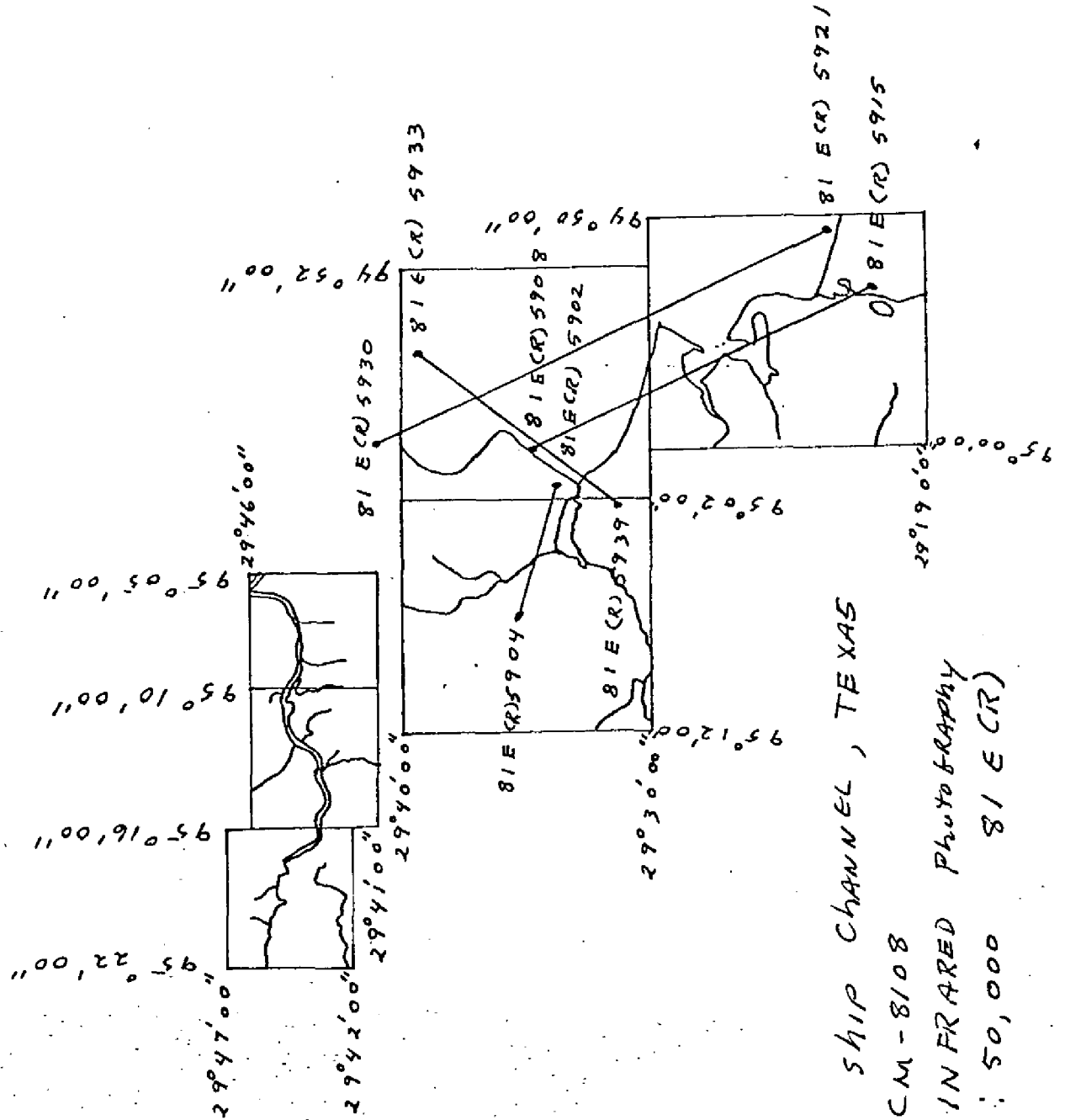
	<u>Name</u>		<u>Point No.</u>	<u>X</u>	<u>Y</u>
	<u>Strip 1</u>				
△	65 Rice, 1942				
△		Sub Pt A	484101	1.1	-2.1
		Sub Pt B	484102	-0.8	1.9
	50 Fire, 1942				
△		Sub Pt A	489101	0.3	3.6
△		Sub Pt B	489102	-0.4	-0.6
		Sub Pt C	489103	-0.7	1.1
	2 Galena Park Water Tank 2 1968		490108	4.7	5.0
	117 Houston Ethyle Gas Corp Water Tower, 1952				
△		Sub Pt A	492101	1.3	0.5
△		Sub Pt B	492102	-0.2	-1.0
	121A 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

<u>Name</u>		<u>Point No.</u>	<u>X</u>	<u>Y</u>
△	Tie from Strip 4	963802	-0.2	-1.1
△	" " " "	964801	-1.1	-0.1
△	" " " "	964802	0.4	-2.1
△	" " " "	965801	-1.8	2.1
△	" " " "	965802	1.8	2.1
△	" " " "	966801	0.7	-1.1
△	" " " "	966802	2.6	-1.1
△	" " " "	967801	-2.2	-3.1
△	" " " "	967802	-1.6	-3.1
△	" " " "	968801	-1.7	0.1
△	" " " "	968802	-4.2	-3.1
△	" " " "	969801	-2.5	-1.1
△	Tie from Strip 4	969802	-1.0	1.1
<u>Strip 7</u>				
△	Tie from Strip 6	498801	0.1	1.1
△	" " " "	498802	0.2	-1.1
△	" " " "	498803	0.3	-1.1
△	" " " "	498804	-0.6	0.1
△	" " " "	498805	0.2	0.1
△	Tie from Strip 6	498806	-0.2	0.1

NAME	POINT NO.	X	Y
<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	2.2
△ 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

CM-8108

M L L W 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
-------------------	----------

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

COMPILATION REPORT
Job CM-8108
TP-01140

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 stereomodel 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 Detail

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.

36. Offshore Detail

An obstruction was located in the Buffalo Bayou waterway.

37. Landmarks and Aids to Navigation

One landmark were located by aerotriangulation methods and verified during compilation. Two additional landmarks and thirty-three possible landmarks were located during compilation by the Coastal Mapping Unit.

No aids to navigation were located.

38. Control for Future Surveys - None

39. Junctions

See attached form 76-36B, item 5 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

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

Park Place, Texas, 1967
Settegast, Texas, 1967

47. Comparison with Nautical Charts

A comparison was made with National Ocean Service.
Chart; 11329, 23rd Edition, December 25, 1982, scale 1:10,000

Items to be applied to Nautical Charts immediately. - None

Items to be carried forward. - None

Submitted by,

Rick Johanson
Rick Johanson

Approved and Forwarded:

David J. Dwyer

Chief, Coastal Mapping Unit

JAN 28 1985

GEOGRAPHIC NAMES

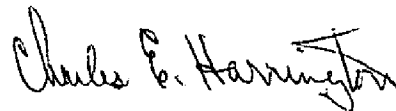
FINAL NAME SHEET

CM-8108 (Houston Ship Channel, Texas)

TP-01140

Brady Island
Brays Bayou
Buffalo Bayou
Club Bayou
Galveston Houston and Henderson (RY)
Harrisburg
Harrisburg Bend
Houston
Houston Belt and Terminal (RR)
Port Terminal (RR)
Southern Pacific (RR)
Turkey Bend
Turkey Bend Cutoff
Whiteoak Bayou

Approved by:



Charles E. Harrington
Chief Geographer
Nautical Charting Division

REVIEW REPORT
SHORELINE SURVEY

TP-01140

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

RESPONSIBLE PERSONNEL

NAME

TYPE OF ACTION

ORIGINATOR

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

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.

10/83

MAP FEATURES OF POSSIBLE LANDMARK VALUE

MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETTIC DATUM	ORIGINATING ACTIVITY	POSITION QUALITY
TP-01140	CM-8108	Galveston Bay	NA 1927	Compilation	
CHARTING NAME	DESCRIPTION	PHOTO NO. Date of Photo	PLANE COOR. (FT) STATE ZONE	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	POSITION QUALITY
TOWER		82 E(C) 8489 2/16/82	X Y	φ 29° 43' 35.96" λ 95 16 51.51	Manually Digitized
TOWER		82 E(C) 8489 2/16/82	X Y	φ 29 43 41.26 λ 95 16 55.49	Manually Digitized
TOWER		82 E(C) 8488 2/16/82	X Y	φ 29 43 17.60 λ 95 17 08.23	Manually Digitized
TOWER		82 E(C) 8488 2/16/82	X Y	φ 29 43 23.75 λ 95 17 10.52	Manually Digitized
TOWER		82 E(C) 8488 2/16/82	X Y	φ 29 45 14.27 λ 95 18 07.10	Manually Digitized
TOWER		82 E(C) 8488 2/16/82	X Y	φ 29 45 10.47 λ 95 18 09.86	Manually Digitized
TOWER		82 E(C) 8487 2/16/82	X Y	φ 29 45 42.22 λ 95 20 00.69	Manually Digitized
TOWER		82 E(C) 8487 2/16/82	X Y	φ 29 45 39.24 λ 95 20 01.36	Manually Digitized
TOWER		82 E(C) 8487 2/16/82	X Y	φ 29 45 42.71 λ 95 20 23.12	Manually Digitized
TOWER		82 E(C) 8487 2/16/82	X Y	φ 29 45 38.77 λ 95 20 22.45	Manually Digitized
TOWER		82 E(C) 8486 2/16/82	X Y	φ 29 45 36.90 λ 95 20 49.03	Manually Digitized
TOWER		82 E(C) 8486 2/16/82	X Y	φ 29 45 40.31 λ 95 20 47.64	Manually Digitized

NOTE: The objects have not been inspected from seaward to determine their value as landmarks.

LISTED BY	DATE	LISTING CHECKED BY	DATE
R.D. Johnson	11/5/84	Edward D. Johnson	11/6/84

10/83

MAP FEATURES OF POSSIBLE LANDMARK VALUE

MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETIC DATUM	ORIGINATING ACTIVITY	POSITION QUALITY
TP-01140	CM-8108	Galveston Bay	NA 1927	Compilation	
CHARTING NAME	DESCRIPTION	PHOTO NO.	PLANE COOR. (FT)	GEOGRAPHIC POSITION	
		Date of Photo	STATE	ϕ LATITUDE λ LONGITUDE	
STACK		82 E(C) 8486 2/16/82	X Y	ϕ 29° 45' 57.07" λ 95 21 03.80	Manually Digitized
TOWER		82 E(C) 8486 2/16/82	X Y	ϕ 29 45 46.57 λ 95 21 12.90	Manually Digitized
CHIMNEY		82 E(C) 8486 2/16/82	X Y	ϕ 29 46 01.01 λ 95 21 12.94	Manually Digitized
CHIMNEY		82 E(C) 8486 2/16/82	X Y	ϕ 29 46 01.07 λ 95 21 13.25	Manually Digitized
CHIMNEY		82 E(C) 8486 2/16/82	X Y	ϕ 29 46 08.90 λ 95 21 26.11	Manually Digitized
TANK		82 E(C) 8489 2/16/82	X Y	ϕ 29 43 10.51 λ 95 16 08.34	Manually Digitized
TANK	HOUSTON GULF ATLANTIC WATER TANK 1968	82 E(C) 8489 2/16/82	X Y	ϕ 29 43 47.927 λ 95 16 42.934	Geodetic Station
TOWER		82 E(C) 8486 2/16/82	X Y	ϕ 29 45 59.60 λ 95 20 51.85	Manually Digitized
TOWER		82 E(C) 8486 2/16/82	X Y	ϕ 29 45 55.65 λ 95 20 52.21	Manually Digitized
STACK		82 E(C) 8489 2/16/82	X Y	ϕ 29 43 18.63 λ 95 16 02.19	Manually Digitized
CHIMNEY		82 E(C) 8489 2/16/82	X Y	ϕ 29 44 29.83 λ 95 17 00.67	Manually Digitized
TANK		82 E(C) 8489 2/16/82	X Y	ϕ 29 45 04.21 λ 95 16 47.26	Manually Digitized

NOTE: The objects have not been inspected from seaward to determine their value as landmarks.

LISTED BY <i>R. O. Johnson</i>	DATE 11/5/84	LISTING CHECKED BY <i>Edward D. Dowd</i>	DATE 11/6/84
-----------------------------------	-----------------	---	-----------------

MAP FEATURES OF POSSIBLE LANDMARK VALUE

MAP NO.		JOB NO.	GEOGRAPHIC AREA		GEODETIC DATUM		ORIGINATING ACTIVITY	
TP-01140		CM-8108	Galveston Bay		NA 1927		Compilation	
CHARTING NAME	DESCRIPTION	PHOTO NO. Date of Photo		PLANE COOR. (FT) STATE ZONE		GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE		POSITION QUALITY
TANK		82 E(C) 8488 2/16/82		X Y		φ 29° 45' 20.69" λ 95 18 05.87		Manually Digitized
STACK		82 E(C) 8488 2/16/82		X Y		φ 29 45 06.31 λ 95 18 30.21		Manually Digitized
TANK		82 E(C) 8487 2/16/82		X Y		φ 29 45 34.32 λ 95 19 18.76		Manually Digitized
TOWER		82 E(C) 8487 2/16/82		X Y		φ 29 45 36.01 λ 95 20 04.87		Manually Digitized
TOWER		82 E(C) 8487 2/16/82		X Y		φ 29 45 35.52 λ 95 20 05.26		Manually Digitized
STACK		82 E(C) 8487 2/16/82		X Y		φ 29 45 32.83 λ 95 20 07.52		Manually Digitized
STACK		82 E(C) 8487 2/16/82		X Y		φ 29 45 31.85 λ 95 20 08.37		Manually Digitized
TOWER		82 E(C) 8486 2/16/82		X Y		φ 29 45 46.97 λ 95 20 45.10		Manually Digitized
TOWER		82 E(C) 8487 2-16-82		X Y		φ 29 45 25.746 λ 95 20 18.274		Manually Digitized
				X Y		φ λ		
				X Y		φ λ		
				X Y		φ λ		
				X Y		φ λ		

NOTE: The objects have not been inspected from seaward to determine their value as landmarks.

LISTED BY	DATE	LISTING CHECKED BY	DATE
R.O. Anderson	11/5/84	Edward D. Anderson	11/6/84

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]