T-12636 Thru T-12639

ORIGINAL

T-12636 Thru 12639

T-12636 Thru T-12639

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey: TIDE CONTROLLED SHORELINE

Field No. 20000-655 20000-876 Office No. T-12636 thru T-12639

LOCALITY

State: FLORIDA

General locality: EAST COAST

Locality: CAPE KENNEDY

19 64

CHIEF OF PARTY

V.Ralph Sobieralski, Tampa District Officer

LIBRARY & ARCHIVES

DATE SEP 23 1965

USCOMM-DC 5087

Paid appd by JHE to chts 1245 & 1246 9-8-65 / RKD
after review

1246 - No Corr 12/10/74 ALT

FORM C&GS-181a
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T - 12636, T-12637, T-12638, T-12639

PROJECT NO. (II):
20,000-855
20,000-856

FIELD OFFICE (II):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):
Tampa District Office

OFFICER-IN-CHARGE
V. Ralph Sobieralski

INSTRUCTIONS DATED (II) (III):

Field: March 6, 1964
Office: May 1, 1964

METHOD OF COMPILATION (III):
Kelsh plotter

MANUSCRIPT SCALE (III):
1:9,600

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:6,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):
N. A. 1927

VERTICAL DATUM (III): MHW
~~MEAN SEA LEVEL EXCEPT AS FOLLOWS~~
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

REFERENCE STATION (III):
PLAYALINDA, 1959

LAT.: 28°38'35".06838

LONG.: 80°37'26".68160

[x] ADJUSTED
[ ] UNADJUSTED

PLANE COORDINATES (IV):
y = 1,566,634.70 Ft. x = 620,581.21 Ft.

STATE
Florida

ZONE
East

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.
WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

2.

FORM C&GS-181b
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II): None	DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): March 15, 1964 Air photo compilation	
PROJECTION AND GRIDS RULED BY (IV): A. E. Rountree	DATE May 26, 1964
PROJECTION AND GRIDS CHECKED BY (IV): M. Williams	DATE May 26, 1964
CONTROL PLOTTED BY (III): I. I. Saperstein	DATE June 1, 1964
CONTROL CHECKED BY (III): I. I. Saperstein	DATE June 1, 1964
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): J. T. Gerlach (W.O.)	DATE
STEREOSCOPIC INSTRUMENT COMPILATION (III): PLANIMETRY R. J. Pate R.E.Smith, Jr. I.I. Saperstein	DATE June 1964
CONTOURS	DATE
MANUSCRIPTS DELINEATED BY (III): J. Honick	DATE June 1964
SCRIBING BY (III):	DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): M. M. Slavney	DATE June 1964
REMARKS:	

USCOMM-DC 16276B-P61

3

FORM C&GS-181c
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild Aviogon

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64W4340 thru 4347	Mar.15,1964	0837	1:30,000	3.4 (Observed) *
64W4354 thru 4359	"	0850	"	" " *

(Predicted) TIDE (III)

		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:	Miami Harbor Ent.		2.5	3.0
SUBORDINATE STATION:	Cape Canaveral	HW +1.0 LW 0.0	3.5	4.1
SUBORDINATE STATION:				

WASHINGTON OFFICE REVIEW BY (IV):		DATE:
PROOF EDIT BY (IV):		DATE:
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	RECOVERED:	IDENTIFIED: 10
NUMBER OF BM(S) SEARCHED FOR (II):	RECOVERED:	IDENTIFIED
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		

REMARKS:

A tide staff was established at Canaveral Harbor to provide sufficient datum control for the entire area.

This staff was tied to C&GS bench marks 1 & 2 by double run levels.

A tide observer recorded staff readings at the beginning and ending of each line photographed.

FIELD INSPECTION REPORT
T-12636 THRU T-12639

No field inspection report was submitted because no field inspection was done.

AEROTRIANGULATION REPORT

PH-20,000-855/856

Cape Kennedy, Florida

21. Area Covered

The bridging covers the Atlantic Coast shoreline of Cape Kennedy, Florida.

22. Method

Two strips were bridged on the Zeiss C-5 stereoplanigraph to provide control for graphic compilation of shoreline. Strip #1 consisted of photographs 64-WR4341-48 and Strip #2 of photographs 64-WR4352-61. Both strips were 1:30,000 scale infra-red photography.

23. Adequacy of Control

Control postions were adequate for bridge adjustment. However, three stations had to be re-identified in the field because the original sub stations could not be located in the models.

All points held within accuracy requirements except IPPER, 1963 sub station #2. No reason could be found for the discrepancy, but since all other points held it was considered inconsequential and dropped from the bridge.

24. Supplemental Data

Cape Canaveral Light House, 1934 was office identified as a check control station.

25. Photography

Photography was adequate as to coverage, overlap and definition.

26. Permanent Bridge Points

Ratio prints at a scale of 1:9600, have been submitted along with this bridge. On these prints have been identified the permanent pass points selected for the bridge.

Approved by:

John D. Perrow, Jr.

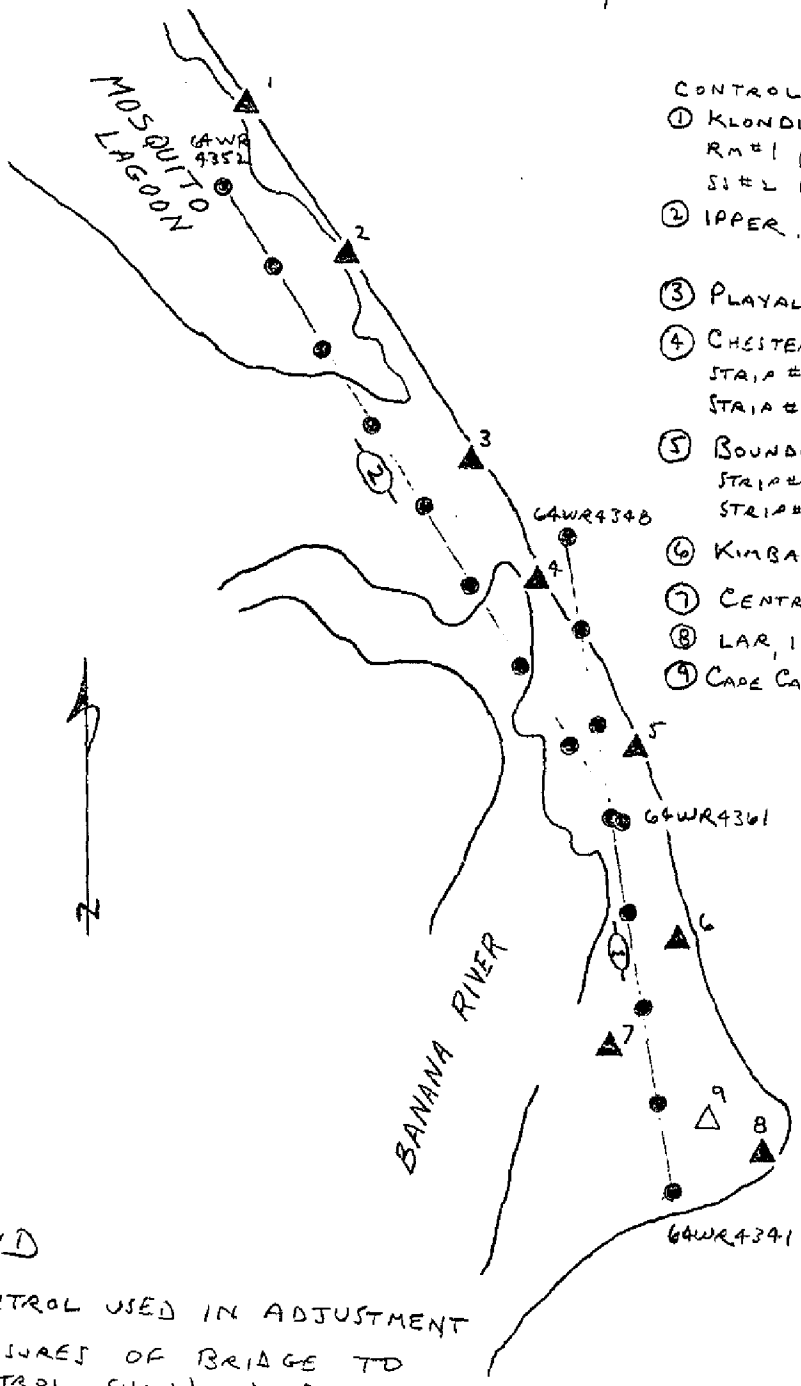
John D. Perrow, Jr.

Submitted by:

John T. Gerlach

John T. Gerlach

AEROTRIANGULATION SKETCH
CAPE KENNEDY, FLORIDA
CHARGE NO. 20,000-855/856
MAY, 1964



CONTROL

1. KLONDIKE, 1934 (-2.9, +3.6)
   RM#1 (-6.9, -3.9) SS#1 (0, 0)
   SS#2 (+8.1, -7.1)
2. IPPER, 1963 SS#1 (-.3 -1.5)
3. PLAYALINAA, 1959 SS (+1.4, +3.1)
4. CHESTER 2, 1964
   STRIP #1 RM#1 (+.9 +.9)
   STRIP #2 RM#1 (-1.8, -2.9) STA. (-5.3, -.6)
5. BOUNDRY, 1958
   STRIP#1 (+2.2, -.4) RM#1 (-3.1, -2.1)
   STRIP#2 (+3.5, +.1) RM#1 (+.5, +.3)
6. KIMBALL ECC, 1934 SS(+2.2, +1.8)
7. CENTRAL, 1950 SS (+.5, 0)
8. LAR, 1929 SS#1 (-.6, -.6) SS#2 (-2.7, +.7)
9. CAPE CANAVERAL L.H. 1934 (+.1, -2.0)

LEGEND

▲ CONTROL USED IN ADJUSTMENT
CLOSURES OF BRIDGE TO CONTROL SHOWN IN PARENTHESIS

△ CONTROL USED AS CHECK

FORM 168
4-23-541

20,000-855
Cape Kennedy, Fla.

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY
CONTROL RECORD

CAPE KENNEDY

MAP T-..... PROJECT NO. 20,000-855 SCALE MAP ..... SCALE FACTOR .....

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR X-COORDINATE / LONGITUDE OR Y-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
AREA, 1956	IBM		637,807.39							
			1,493,056.91							
KIMBALL Ecc. 1934	IBM		641,619.03	20	3714.4					
			1,523,203.00	48	3617.9					
(Target) SS	Comp.		641,553.13							
			1,523,188.85							
CENTRAL, 1950 956	IBM		635,735.66	20	1846.5					
			1,511,874.50	48	0021.1					
(Target) SS	Comp.		635,760.18							
			1,511,861.82							
BOUNDRY, 1958	IBM		637,807.39							
			1,539,369.09							
(Target) RM#1	Comp		637,877.64							
			1,539,366.35							
CHESTER 2, 1964	IBM		628,611.23							
			1,555,382.34							
(Target) RM#1	Comp	"	628,575.06							
			1,555,323.34							
PLAYAL INDA 1959	IBM	"	620,581.21	19	7034.9					
			1,566,634.70	49	7407.5					
(Target) SS	Comp	"	620,633.59							
			1,566,658.16							
LAR, 1929	IBM	"	651,971.06	20	7001.2					
			1,499,016.69	47	5938.7					

1 FT. = .3048006 METER

COMPUTED BY: [illegible] DATE 7 May 64 CHECKED BY: [illegible] DATE 7 May 64

COMM-DC-57

FORM [illegible] (4-23-54)

20,600-855

U.S. DEPARTMENT OF COMMERCE — COAST AND GEODETIC SURVEY

Cape Kennedy, Fl[illegible] DESCRIPTIVE REPORT [illegible] CONTROL RECORD

CAPE KENNEDY

MAP T- ..... PROJECT NO. [illegible] MAP ..... SCALE FACTOR .....

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR X-COORDINATE / LONGITUDE OR Y-COORDINATE	DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
LAR			651,511.59				
SS#1	comp		1,499,477.73				
			651,261.36				
SS#2	comp		1,499,543.24				
IPPER 1962 (Tower)	IBM		609,334.70	19 3464.2			
			1,583,895.96	50 2888.0			
(Target) RM#1	comp		609,305.42				
			1,583,810.10				
KLONDIKE 1934			597,088.34				
			1,601,097.75				
(Target) RM#1	comp		597,109.27				
			1,601,057.01				
(Differing Work) SS#1	comp		597,024.64				
			1,601,255.37				
SS#2	comp		597,483.52				
			1,600,840.[illegible]				
SS#3	comp		597,475.61				
			1,600,786.41				
Ipper SS#1	comp		609,358.89				
			1,584,020.43				
(Differing Work) SS#2	comp		609,471.60				
			1,583,817.30				

[illegible] DATE 7 May 64 CHECKED BY: [illegible] DATE 7 May 64

COMM-DC-5784

COMPILATION REPORT

T-12636 thru T-12639

31. DELINEATION

The Kelsh plotter was used. The Atlantic shoreline and a narrow (200 to 400 meters) strip inshore were mapped.

32. CONTROL

See Aerotriangulation Report, Item 21.

Two bridge points, 44321 and 57330, were not held in delineation.

Twenty one additional points, selected for permanence and low elevation, were located during compilation. These points, shown with 4.0 m.m. circles, will in combination with the bridge points, shown with 6.0 m.m. circles, provide approximately 3-inch spacing along the shoreline.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

No inspection was provided.

The shoreline was delineated from the infra red diapositives which were flown at mean high water. We believe the delineation will meet the standards of map accuracy.

It is noted that the ocean waves breaking on the beach gave considerable differences on successive photographs for the confluence of beach and water.

36. OFFSHORE DETAILS

None.

T-12636 thru T-12639

COMPILATION RECORD	COMPLETION DATE	REMARKS
Shoreline compiled	June 1964	

37. LANDMARKS AND AIDS

Cape Kennedy Lighthouse (Cape Canaveral L.H. 1934) is the only aid. No form 567 is believed necessary.

38. CONTROL FOR FUTURE SURVEYS

See paragraph 3 of Item 32.

39. JUNCTIONS

Junctions were made between these surveys. No contemporary surveys were available north and south of the project.

40. HORIZONTAL AND VERTICAL ACCURACY

See paragraph 2 of Item 35.

46. COMPARISON WITH EXISTING MAPS

None were furnished.

47. COMPARISON WITH NAUTICAL CHARTS

The Atlantic shoreline was compared with nautical chart 1245 (1:80,000 scale), 2nd edition of Dec. 18, 1961, revised Feb.4,1963. There is no appreciable difference between the chart shoreline and these surveys.

M. M. Slavney
M. M. Slavney
Cartographer (Photo)

APPROVED AND FORWARDED 15 JUN 1964
V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

48. GEOGRAPHIC NAME LIST

The following approved geographic names were furnished by the Geographic Names Section. However, only those names with an asterisk were used, because the details named by the remainder were not delineated.

T-12636 (Shoreline)

Bald Pate Creek
*East Max Hoeck Creek
*Eddy Creek
Eddy Point
*Gallinipper Basin
*Gallinipper Point
Max Hoeck Creek
Max Hoeck Back Creek
Mosquito Lagoon
*Playalinda Beach

T-12637 (Shoreline)

Banana River
Bluebill Creek
Broadaxe Creek
Broadaxe Point
Broadaxe Ridge
*Canaveral Peninsula
Chester Shoal
Cochran Cove
Devils Elbow
East Conrad Creek
East Pepper Creek
*False Cape
Gator Hole
Gulorandson Creek
Jack Davis Cut
Jack Davis Island
Merritt Island < Pepper Flats
Pepper Hammock
Pintail Creek
Tea Hammock
*Titusville Beach
West Conrad Creek
West Pepper Creek

48. GEOGRAPHIC NAME LIST (CONTINUED)

T-12638 (Shoreline)

Banana River
*Canaveral Peninsula
*DeSoto Beach
DeSoto Beach State Game Refuge
Harrison Creek
Harrison Island
Penny Hammock
White Point

T-12639 (Shoreline)

Banana River
Cactus Point
*Canaveral Bight
*Canaveral Peninsula
*Cape Kennedy
*Cape Kennedy Lighthouse
DeSoto Beach State Game Refuge
Duck Pond
Home Point
*John F. Kennedy Space Flight Center
Middle Point
Peterson Point
Quarterman Cove

FORM 182 (3-61)

PHOTOGRAMMETRIC OFFICE REVIEW

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

T- 12636 thru T-12639

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
I.I.S.	M.M.S. (2a. Classification label: Administratively Restricted)	MMS	MMS

CONTROL STATIONS	5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY: MMS		6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS): X	
	7. PHOTO HYDRO STATIONS: IIS	8. BENCH MARKS: X	9. PLOTTING OF SEXTANT FIXES: X	10. PHOTOGRAMMETRIC PLOT REPORT: W.O. JDP
	11. DETAIL POINTS: MMS			
ALONGSHORE AREAS (Nautical Chart Data)	12. SHORELINE: MMS	13. LOW-WATER LINE: X	14. ROCKS, SHOALS, ETC.: X	15. BRIDGES: X
	16. AIDS TO NAVIGATION: X	17. LANDMARKS: X	18. OTHER ALONGSHORE PHYSICAL FEATURES: MMS	
	19. OTHER ALONGSHORE CULTURAL FEATURES: X			
PHYSICAL FEATURES	20. WATER FEATURES: X		21. NATURAL GROUND COVER: MMS	
	22. PLANETABLE CONTOURS: X		23. STEREOSCOPIC INSTRUMENT CONTOURS: X	
	24. CONTOURS IN GENERAL: X		25. SPOT ELEVATIONS: X	
	26. OTHER PHYSICAL FEATURES: X			
CULTURAL FEATURES	27. ROADS: MMS	28. BUILDINGS: X	29. RAILROADS: MMS	
	30. OTHER CULTURAL FEATURES: MMS			
BOUNDARIES	31. BOUNDARY LINES: X		32. PUBLIC LAND LINES: X	
MISCEL-LANEOUS	33. GEOGRAPHIC NAMES: MMS		34. JUNCTIONS: MMS	
	35. LEGIBILITY OF THE MANUSCRIPT: MMS	36. DISCREPANCY OVERLAY: X	37. DESCRIPTIVE REPORT: MMS	
	38. FIELD INSPECTION PHOTOGRAPHS: X		39. FORMS: X	
	SIGNATURE OF REVIEWER: M. M. Slavney		SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT: M. M. Slavney	

. FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT - Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.

SIGNATURE OF COMPILER	SIGNATURE OF SUPERVISOR

USE REVERSE SIDE FOR REMARKS

USCOMM-DC 25353-P61

Review Report

Shoreline Maps

T-12636 thru T-12639

November 1964

61. General Statement

AFMTC and NASA requested shoreline surveys for beach erosion studies of the Cape Kennedy area. The project also includes the furnishing of a few strips of color aerial photographs to NASA for determining whether or not color photographs will be helpful for measuring depth changes.

62. Comparison with Registered Topographic Surveys

T-4358	1:10,000	1928
T-4441a&b	1:20,000	1929
T-4442a&b	1:20,000	1929
T-9168	1:20,000	1949
T-9171	1:20,000	1949
T-9174	1:20,000	1949

There are shoreline changes due to the difference in time interval. These map manuscripts are to supersede the above listed surveys of common area for nautical charting.

63. Comparison with Maps of Other Agencies

Walson	1:24,000	1949
False Cape	1:24,000	1949
Cape Canaveral	1:24,000	1951

There is relatively good agrument considering the difference in survey dates.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

1245	1:80,000	December 1961 revised to February 1963

See item 47

65. Comparison with Nautical Charts

1255	1:80,000	1956

There is no chart coverage of the above manuscripts except for a portion of T-10534. See item 47 for this comparison.

66. Accuracy of Results and Future Surveys

These surveys were constructed according to project instructions and are within the required accuracy for nautical charting.

Reviewed by:

L. C. Lande

L. C. Lande

Approved by:

Chief, Photogrammetric Branch

Chief, Nautical Chart Division

for M. E. Matto

Chief, Photogrammetry Division