TP-00449

Original

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey ..Coastal Boundary.....

Job No. ...PH-7119..... *Map No.* TP-00449.....

Classification No. Final
Field Edited Map

Edition No. .1.....

LOCALITY

TP-00449

[redacted]

NOAA FORM 76-36A (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY
- [X] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

SURVEY TP. 00449
MAP EDITION NO. (1)
MAP CLASS
JOB PH-7119

PHOTOGRAMMETRIC OFFICE
Rockville

OFFICER-IN-CHARGE
Commander James Collins

LAST PRECEEDING MAP EDITION
TYPE OF SURVEY
- [ ] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

JOB PH-
MAP CLASS
SURVEY DATES:
19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000 December 9, 1975 Supplement 1, November 4, 1974 Supplement III, October 24, 1974 *NOTE: Office and field edit instructions* (1975) incorporate applicable prior operational instructions	Aerial photography 9/2/69 Supplement 1, 1/28/70 Supplement II, 3/26/70 Supplement III, 8/10/72 Field Edit (PH-7000 General Instructions for Florida Coastal Zone Mappin 1973

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [X] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Traverse Mercator

4. GRID(S): STATE: Florida; ZONE: East zone

5. SCALE: 1:10,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	V. McNeel	8/72
METHOD: Analytic	LANDMARKS AND AIDS BY	Inapplicable	
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	D. Phillips	8/72
METHOD: Coradi	CHECKED BY	Inapplicable	
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	Inapplicable	
	CHECKED BY		
INSTRUMENT:	CONTOURS BY	Inapplicable	
SCALE:	CHECKED BY		
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J. Keating	5/75
	CHECKED BY		
METHOD: Graphic	CONTOURS BY	Inapplicable	
	CHECKED BY		
	HYDRO SUPPORT DATA BY	Inapplicable	
SCALE: 1:10,000	CHECKED BY		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J. Battley	3/75
6. APPLICATION OF FIELD EDIT DATA	BY	S. Solbeck	5/75
	CHECKED BY	C. Lewis	9/75
7. COMPILATION SECTION REVIEW	BY	J. Battley	12/75
8. FINAL REVIEW	BY	D. Brant	3/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	D. Brant	7/76
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R.T. CATDR	9/76

NOAA FORM 76-36A SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

TP-00449

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8
E&K 6" focal length

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

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR R
(P) PANCHROMATIC
(I) INFRARED B&W

TIME REFERENCE
ZONE: Eastern — ☒ STANDARD
MERIDIAN: 75th — ☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
73L(C) 2911-2913R	3/18/73	0945	1:20,000	The stage of tide is inapplicable for color photography.
72K6428R-6429R	2/15/72	1004	1:20,000	Refer to NOAA Form 76-36B1 for stage of tide data.
72K6346R-6347R	2/14/72	1344	1:20,000	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the MHWL is the tide-coordinated, black-and-white infrared photography listed under item 1, except for the areas that changed since the photography was taken. The shoreline along Key Largo between latitudes 25°13' and 25°14' and at latitude 25°14.5 were located by planetable on field photograph 73L 2912R.

Where the line was obscured by vegetation, the apparent shoreline was mapped.

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

The source of the mean low water line is the tide-coordinated, black-and-white infrared photography listed under item 1, except for the MLWL located by planetable. Refer to item 2.

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
Inapplicable					

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-00446	Atlantic Ocean	Atlantic Ocean	TP-00448

REMARKS

Final junctions were made in the Coastal Mapping Section.

NOAA FORM 76-36B(1)
(7-75)

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

TIDE – COORDINATED PHOTOGRAPHY

TP –00449

LOCATION AND PHOTOGRAPHY	TIDE STATIONS *(In operation at time of photography)*	STAGE OF TIDE	MEAN RANGE
			at tide station
72K 6346-6347	Ocean Reef	+0.03 MLW	2.33
72K6428-6429	" "	-0.00 MHW	

REMARKS:

NOAA FORM 76-36C
(3-72)

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

HISTORY OF FIELD OPERATIONS TP-00449

I. [XX] FIELD INSPECTION OPERATION * Feb. Mar 1972 [XX] FIELD EDIT OPERATION April 1975

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R.R. Wagner	
2. HORIZONTAL CONTROL	RECOVERED BY	R.R. Wagner	4/75
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY	Inapplicable	
3. VERTICAL CONTROL	RECOVERED BY	R.R. Wagner	4/75
	ESTABLISHED BY	Inapplicable	
	XXXXXXXXXXX IDENTIFIED BY	R.R. Wagner	4/75
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	R.R. Wagner	4/75
	LOCATED *(Field Methods)* BY	R.R. Wagner	4/75
	IDENTIFIED BY	Inapplicable	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION: [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [XX] NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	R.R. Wagner	4/75
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	Inapplicable	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to Field Reports	73L2912R	G 275, H 275

3. PHOTO NUMBERS *(Clarification of details)*

73L2912R, 72K6346

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

There are no landmarks on this map. Nonfloating aid were located or recovered by field methods.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [ ] REPORT [XX] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [XX] NONE

7. SUPPLEMENTAL MAPS AND PLANS

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

Pages from sketch book

* Refer to field reports bound with this Descriptive Report.

NOAA FORM 76-36C
(3-72)

* U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36D
(3-72)

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

RECORD OF SURVEY USE

TP-00449

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
NO MAP COPIES WERE FURNISHED TO MARINE CHARTS PRIOR TO FINAL REVIEW.				
			9/9/76	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
		11/17/75	Two (2) NOAA Forms 76-40 submitted to
			Marine Chart Division as final report.

2. XXX REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 11/17/75
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)*

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY / MAP CLASS
SECOND EDITION	TP - _____ (2)	PH - _____	☐ REVISED ☐ RESURVEY ☐ 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	

☆U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6

SUMMARY
for
TP-00444 thru TP-00454

Coastal Zone Map TP-00449 is one of eleven (11), 1:10,000 scale (shoreline type) maps in Job PH-7119. These maps will not be published. Interior detail is limited to a narrow zone of planimetry usually back to and including the first road.

A layout of Job PH-7119 (revised since the aerotriangulation operation) will show the location of the individual maps. A copy of this layout is included in this Descriptive Report.

The maps are intended for planning purposes for the State of Florida and for the construction and maintenance of NOS nautical charts.

The area is covered by aerial photography taken in 1972 and 1973 on color and black-and-white infrared film. The infrared film was tide coordinated.

The field operations consisted of the following:

1. Premarking of horizontal control for aerotriangulation.
2. Establishment of tidal datums.
3. Field Edit.

Horizontal control was extended by analytical aerotriangulation method using the STK stereocomparator.

The shoreline and alongshore details were compiled from tide-coordinated, black-and-white infrared photography using a B-8 stereoplotter and/or graphic methods. The rectified color photography was used as an aid in interpreting cultural features and compiling the limits of vegetation. The interior details were compiled from a stereoscopic examination of the color photography without field edit.

All line work is scribed, approved symbols are shown in the marginal data of the map.

A registration copy of each map is prepared. The registration copy shows additional offshore details such as shoal and

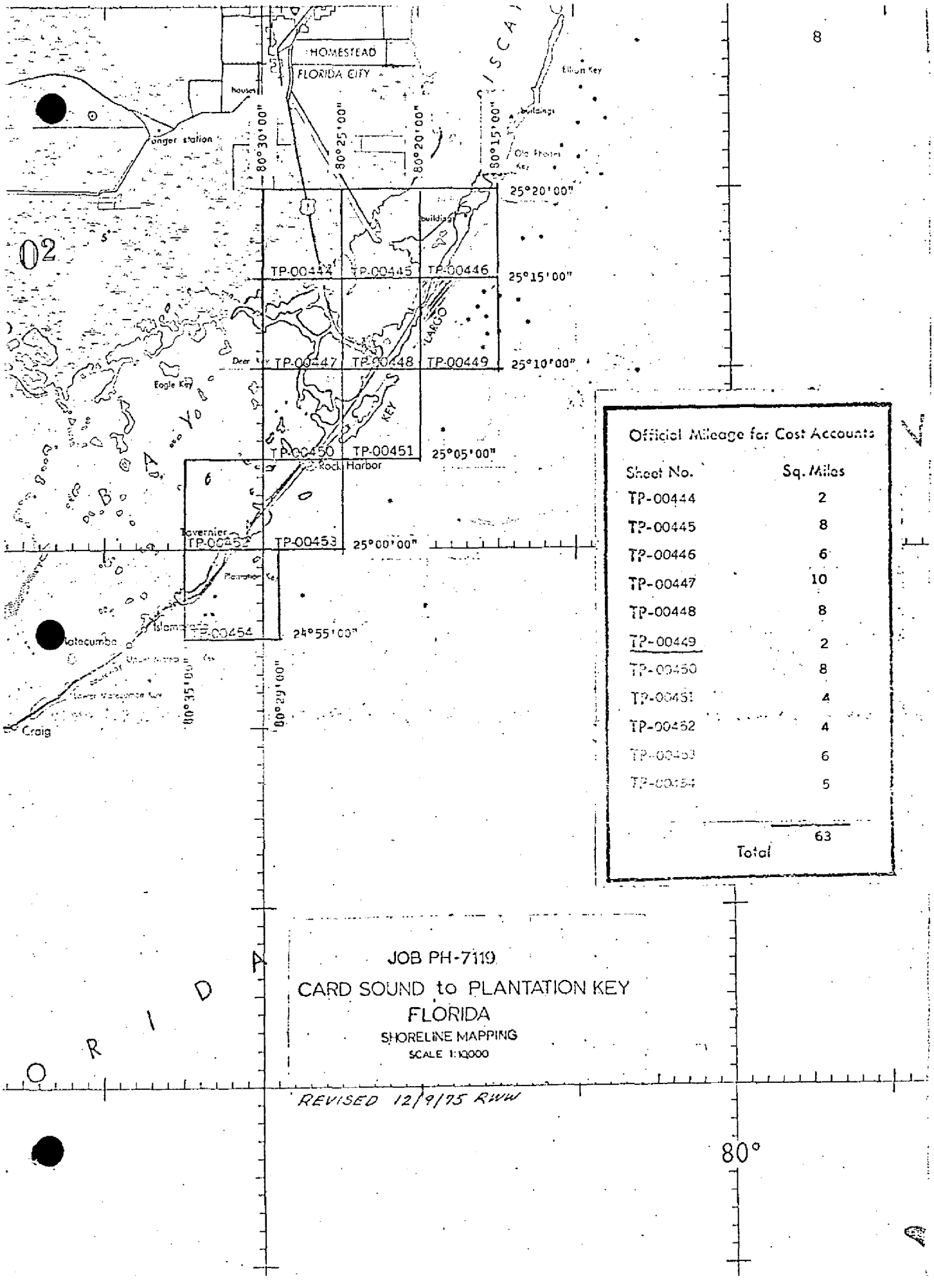
shallow lines used by the Marine Chart Division but not required on the Coastal Zone Maps. This copy of the map is labeled "Registration Copy" in the title block.

The following items will be registered in the NOS Archives:

1. A stable base copy of the Registration Copy.
2. The Descriptive Report.

The negative of the Registration Copy is filed in the Reproduction Division.

Field records such as field edit sheets, discrepancy prints, field edit photographs, and other field records are filed in the National Archives.



Official Mileage for Cost Accounts	
Sheet No.	Sq. Miles
TP-00444	2
TP-00445	8
TP-00446	6
TP-00447	10
TP-00448	8
TP-00449	2
TP-00450	8
TP-00451	4
TP-00452	4
TP-00453	6
TP-00454	5
Total	63

JOB PH-7119

CARD SOUND to PLANTATION KEY

FLORIDA

SHORELINE MAPPING

SCALE 1:10000

REVISED 12/9/75 RWW

FIELD REPORT

JOB PH-7119

This report is on work done in accordance with Instructions-field-Job PH-7119; Horizontal Control for Aerotriangulation and Field Support for Aerial Photography; Coastal Boundary Mapping, Card Sound to Plantation Key, Florida. The field work was done during the period 20 July - 7 September 1971.

1. PREMARKING OF CONTROL

One control station, IRVING 1971, was established on Soldier Key. Eighteen stations were paneled for 1:30,000 scale photography. The deviations from the job diagram and target specifications were recommended in the field by Mr. Saperstein, Photogrammetrist and authorized by the Chief, Surveys Planning Branch. The locations of the paneled stations are shown on the chart section accompanying this report.

2. BRIDGING PHOTOGRAPHY

Flight lines are shown on the accompanying chart. Bridging photography was accomplished on March 8, 1971 for lines 30-4, 30-5, and 30-6 under Job PH-7113. Line 30-6 was redesignated 30-1 for Job PH-7119. Line 20-1 was photographed on Aug. 4 and all other lines on Aug. 11 - the only suitable day in the period 4-26 August. This photography was unacceptable and will be rescheduled for February 1972.

3. TIDE-COORDINATED PHOTOGRAPHY

Locations of the tide staffs are shown on the accompanying chart. Lines 30-4 and 30-5 carried over from Job PH-7113 were completed. Lines 20-2 and 30-3 (Outside) were also completed. Clouds throughout the period prevented completing all lines and the job except for 30-4 and 30-5 will be rescheduled for February 1972. The times are summarized below in case the pictures will be used to supplement the future February work.

Recordings entered in the tide volumes, Form 277, were at 5 minute intervals during photography and at 15 minute intervals near photography. Tolerances of ±0.3 ft. for MHW and ±0.1 ft. for MLW were observed. Wet staff readings - crest, mean, and trough - were recorded while photography was in progress. Eastern Standard Time was used.

Line 30-4. Flown for MHW on March 2, 1971 at 1319-1326 when both MIAMI BISCAYNE BAY and CUTLER were in range. The north and

was flown for MLW at 1325-1335 on August 6 when the MIAMI BISCAYNE BAY staff read 2.3 and 2.2. The south end was flown for MLW at 1425-1435 on August 6 when the CUTLER staff read 2.75 and 2.69.

Line 30-5. MHW North half flown at 805-815 on August 7 when CUTLER staff read 4.5 to 4.7. South half flown at 1220-1235 on August 7 when the TURKEY POINT staff read 3.15 to 3.05. MTW

mile NNE of the Molasses Reef light. The shoal was photographed at about 0900 on August 10 when the TAVERNIER HAWK CHANNEL staff was in MHW range. It was flown at 1206 on August 16 when the staff read 2.31. This shoal was also photographed in color and false color, but the times were not obtained from the photographer.

5. FORESHORE PROFILES

Four planetable beach profiles were run within the limits of the job by Mr. Dale Fuller during the photography period. A brief report accompanies the profile sheet.

6. FIELD RECORDS

All CSI cards, recovery notes, profiles and the original field records for IRVING 1971 were forwarded to C3413 on 1 March 1972. Form 277, Tides Volumes for the MIAMI BISCAYNE BAY, TURKEY POINT, and CUTLER Tide staffs were also forwarded on 1 March. The 277's for the other staffs will be forwarded with the report for the February 1972 photography.

Submitted 29 February 1972

John C. Veselenak

John C. Veselenak
Chief, Photo Party 65

FIELD REPORT

JOB PH-7119

This report is on work done in accordance with Instructions-Field-Job PH-7119; Horizontal Control for Aerotriangulation and Field Support for Aerial Photography; Coastal Boundary Mapping, Card Sound to Plantation Key, Florida, dated January 31, 1972. The field work was done during the period 7-23 February 1972.

1. PREMARKING OF CONTROL

Four stations were paneled for 1:30,000 scale photography. The locations are shown on the chart section accompanying this report.

2. AEROTRIANGULATION PHOTOGRAPHY

Flight lines are shown on the chart. Color photography was accomplished on February 19, 1972 between the approximate times of 1045 and 1230 hours. The skies were exceptionally clear for this area and the ground winds was from the northwest at 20-25 knots all morning. These lines were also flown on February 14, but the photography was unacceptable because of a bad film emulsion.

3. TIDE-COORDINATED PHOTOGRAPHY

Locations of the tide staffs are shown on the chart. The job was completed; photography taken on the 12, 14, 15, 16, and 20, of February. Lines 20-2 and 30-3 were also photographed and portions of the other lines were also partially photographed during August 1971.

Recordings entered in the tide volumes, Form 277, were at 5 minute intervals during photography and at 15 minute intervals near photography. An exception to this is the readings for the MANATEE CREEK and BARNES SOUND staff where the tide varies only a few hundredths of a foot per day. Tolerances of ±0.30 foot for MHW, ±0.20 foot for MWL, and ±0.10 foot for MLW were observed. Wet staff readings - crest, mean, and trough - were recorded while photography was in progress. Eastern Standard Time was used.

Line 20-1. MHW Completed at 1050 on February 14 when the RAGGED KEYS staff read 3.38-3.26. MLW Completed at 1500 on February 14 when the staff read 1.80.

Line 20-2. MHW Flown at 1035-1052 on 16 February when the OCEAN REEF staff read 4.75-4.61. This line was also flown at 1006 on February 15, but the pilot recommended it be re-scheduled. MLW Flown at 1338-1350 on February 14 when the staff read 2.31-2.32.

Line 30-1. This line is controlled by three staffs, the MANATEE CREEK staff has a MWL datum and the EAST ARSENICKER and CARD SOUND staffs have mean high and mean low datums. MHW The line was flown at 1120-1142 on 14 February. At this time the EAST ARSENICKER staff read 3.95-3.86 and the MANATEE CREEK staff read 3.54-3.57(MWL). The line was flown again at 1445 on 14 February when the CARD SOUND staff read 3.8 and the MANATEE CREEK staff read 3.60. MLW Was flown at 945-1000 on 20 February when the CARD SOUND staff read 3.2 and the EAST ARSENICKER staff read 2.78-2.81.

Line 30-2. MHW It was completed at 1250 on February 14 when

mouth of the northern cut (MANGROVE POINT) was observed and its value recorded at 5 minute intervals from 1135 to 1300 hours. The latter staff values are listed in the EAST ARSENICKER Form 277.

5. FORESHORE PROFILES

Four planetable beach profiles were run within the limits of the job during the photography period of August 1971. The few small beaches found for the profiles were of coral, and since erosion is not considered a problem, these profiles were not rerun.

6. MONITORING OF TEMPORARY TIDE STAFFS IN THE JOB AREA

On February 15 verbal instructions were received from the Chief, Tidal Datum Planes: Temporary staffs were to be put in at 11 selected locations and observed every 12, 15, or 30 minutes through one high and one low water. All 11 need not be observed simultaneously and the actual location could be varied slightly. Four were observed on the 16th., two on the 17th., 1 on the 20th., and four on the 21st. The chart accompanying this report shows the exact location of each staff.

7. FIELD RECORDS

All CSI cards, Form 277's and a copy of the records from the 11 tide staffs were sent to C3413 on 13 March 1972. The original field records for the 11 staffs were forwarded to C3311 on 23 February 1972. Profiles and recovery notes were sent to C3413 on 1 March 1972 with the report for work done on this job in August 1971.

Submitted 14 March 1972

John C. Veselenak

John C. Veselenak
Chief, Photo Party 65

Photogrammetric Plot Report
Hillsboro Inlet to Card Sound, Florida
Job PH-7113
and
Card Sound to Plantation Key, Florida
Job PH-7119

21. Area Covered

This report covers an area on the east coast of Florida immediately south of Hillsboro Inlet to the southwestern end of Plantation Key. Job PH-7113 and Job PH-7119 are combined in this one report because the southern portion of Job PH-7113 is included in the block adjustment of Job PH-7119.

Job PH-7113 consists of twenty (20) 1:10,000 scale sheets: TP-00416 through TP-00420, and TP-00422 through TP-00436.

Job PH-7119 consists of twelve (12) 1:10,000 scale sheets: TP-00444 through TP-00455.

Subsequent to the initial bridging in this area, three small areas were re-bridged using new photography. The reports are attached:

(1) Port Everglades, Florida
(2) Miami to Mangrove Point, Florida
(3) Hollywood to Miami Beach, Florida

22. Method

Eleven (11) strips of photography were bridged using aerotriangulation methods. Tie points were made between strip No. 1 of PH-7113 and strip No. 2 of the Jupiter Inlet to Hillsboro Inlet, Florida report to the north of this area.

Due to the placement of control in relation to flight lines and due to large areas of water coverage, two block adjustments were made. Strip No. 2, No. 3, and No. 4 comprised one block. Strip No. 7, No. 9, No. 10, and No. 11 comprised the other block. Attached is a sketch showing the location of the strips and the blocks.

Image points were located to rectify photographs for orthophoto, nautical, and small craft charts. All points were drilled by the PUG method. Closure to control has been noted on the read-outs. A sketch is attached which shows the control used in the strip and block adjustments. All points were plotted on the Florida East Zone Plane Coordinate System using the Coradomat Plotter or the Calcomp Plotter.

Ratio points were located on twenty-eight (28) strips of infrared contact prints. Additional ratio points were located on contact prints which have a large portion of water coverage so that they could be individually enlarged to scale. A sketch showing the location of the infrared photographs is attached.

23. Adequacy of Control

The control was adequate. Horizontal control was pre-marked on strip No. 1, No. 2, No. 3, No. 4, No. 5, and No. 6. Because of the placement of flight lines in relation to control, it was necessary to extend Strip No. 5 one model past its terminal control station in order to have an area of common coverage with strip No. 6. Tie points were located in this area and tie point 544801 was used as a terminal control point for strip No. 6.

Most of the horizontal control for Strip No. 7, No. 8, No. 9, No. 10, and No. 11 was pre-marked for color photography which was flown on August 4, 1971, and August 11, 1971. This photography was not used for bridging. The positions of the pre-marked control stations were transferred, using PUG methods, to color infrared photography which was flown on March 5, 1973, and March 18, 1973.

The following control station positions were transferred from photographs 71L(C)8370 through 71L(C)8382:

Irving 1971
Mangrove (USE) 1930 Sub Point A
Sands Cut RM2, 1849-1947 Sub station

The following control station positions were transferred from a roll of color photography which was not indexed (Spot No.100-691A) LC-20:

Rubi, 1930-1948 Reset
Man, 1930
Angelfish Key RM3, 1853
Narrow Point, 1854
Long Sound 1961
Snipe Pt., 1934, substation
Knowlson, 1935, substation
Hull Key, 1852
Rock Harbor 2, 1961
Lower Sound Point, 1853 substation
Sub Station, Key Largo Cable Visions Inc., Taller Mast, 1961
Largo, 1962
Low 2, RM2, 1934
Planter 2, RM4

3

The following control station positions were transferred from photographs 72L(C)8691R thru 72L(C)8698R:

Tavernier 1935
Snake 1934 Sub. Sta.

Turkey Pt. 2, RM2 was transferred from photograph 71E(C)9595.

Cape Florida Old Tower Finial Sub Station A was transferred from photograph 71E(C)9201.

Lower Sound Point 1853 sbu. station was not used in the adjustment because the field party advised that it was questionable and should be used with caution. Sub. station Key Largo Visions, Inc., Taller Mast, 1961, could not be used because one of its azimuth stations (Key Largo Cable Visions, Inc. Shorter Mast) appears to have a bad published position. To date, this has not been resolved by the Geodesy Division. Turkey Point 2, RM2 was a very poor point to transfer, and, therefore, it was not used as control in the block adjustment in that area.

Part-way through the compilation phase of this project, it was determined that the published control positions in the area of this report were in error approximately - 4 feet in X and -10 ft. in Y. Therefore, Strip No. 1, No. 2, No. 3, No.4, No. 5, No. 6, and No. 8 are adjusted to the old published control positions. This area includes T-sheets TP-00416 through TP-00420 and TP-00422 through TP-00432.

Strip No. 7, No. 9, No. 10, and No. 11 are adjusted to new preliminary control positions which were furnished by Geodesy on May 29, 1974. Geodesy Division stated this preliminary control will be within one (1) foot of the final adjustment. They also said to base non-main scheme stations on the nearest main scheme stations. This was approved by the Coastal Mapping Division.

Since stations established in 1971 and later have positions which were determined by a different adjustment than stations which were established before 1971, it was necessary that the corrections for non-main scheme stations of 1971 and later be based on the new preliminary control of the nearest main scheme stations of 1971 and later. In like manner, pre-1971 non-main scheme stations are based on the amount of change of the nearest pre-1971 main scheme station.

The compiler was advised to make a graphic adjustment on TP-00430 so it will junction well with TP-00433. Also, TP-00432 should be graphically adjusted so it will junction well with TP-00433, TP-00434, and TP-00435.

A listing of closures to control is included on an attached sheet of control stations. The station with the largest residual is Narrow Point 1854, with 1.808 feet in X and 1.267 feet in Y.

24. Supplemental Data

USGS Topographic Quadrangles and NOS Nautical Charts were used to obtain vertical control for bridging.

25. Photography

The following RC-8 color photography was used for bridging:

1:20,000 scale

Strip No. 4 71E(C)9201-9215
Strip No. 8 73L(C)2871-2884R
Strip No. 9 73L(C)2893-2924R

1:30,000 scale

Strip No. 1 71E(C)9120-9135
Strip No. 2 71E(C)9562-9574
Strip No. 3 71E(C)9576-9586
Strip No. 5 71E(C)9536-9545
Strip No. 6 71E(C)9588-9602

1:40,000 scale

Strip No. 7 73L(C)2935-2945R
Strip No. 10 73L(C)2952-2968R
Strip No. 11 73L(C)2785-2797R

The quality and definition of the photography was adequate.

Respectfully submitted,

Victor McNeel

Approved and forwarded:

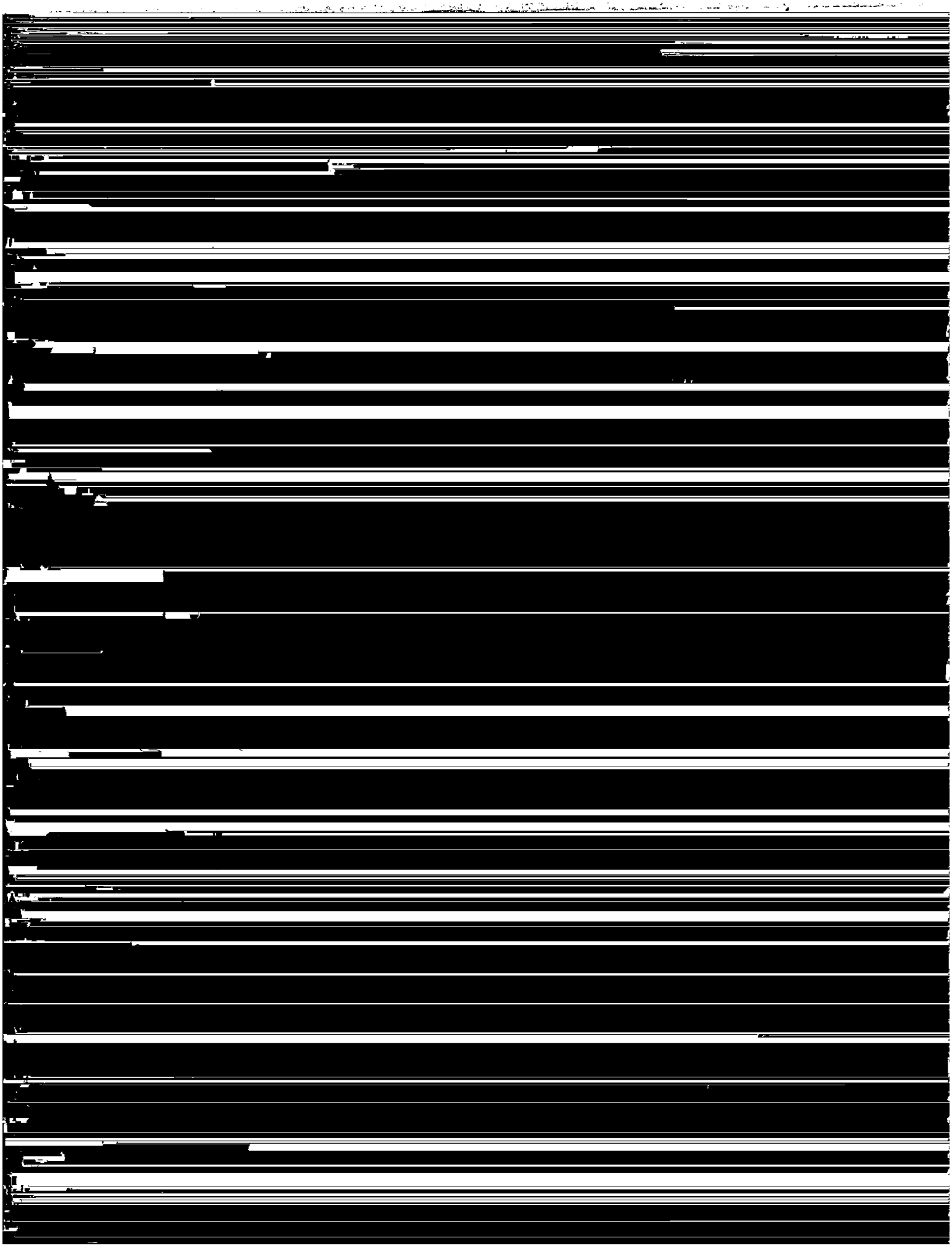
John D. Perrow, Jr.
Chief, Aerotriangulation Section

CONTROL STATIONS

			residuals feet	feet
1.	(027100)	Turtle 1929	-0.706	-0.115
2.	(023102)	Pompano, 1928, subpoint B	1.488	-0.229
3.	(029100)	South Jetty, 1938	-1.134	0.176
4.	(034101)	Halland, 1928	0.317	-0.007
5.	(567101)	Causeway, 1934	0.027	-0.012
6.	(562101)	Point View, 1934	0.000	-0.181
7.	(207100)	Base, 1934	0.112	0.142
8.	(204100)	Key Biscayne North Base, 1849	-0.158	0.033
9.	(201101)	Cape Florida Old Tower Finial, subpoint A	-0.156	0.002
10.	(538102)	Pan American, 1935, Target 2	0.000	0.000
11.	(534101)	Naco 1934, subpoint A	0.000	0.000
12.	(544801)	Tie point from strip #5 used as control for strip#6	-0.157	0.025
13.	(591100)	Black Point 3	0.351	-0.066
14.	(595101)	Turkey Point No. 2, 1930, RM No. 2	-0.229	0.073
15.	(940100) (602100)	Narrow Point 1854	-1.808	1.267
16.	(944100)	Man 1930.	0.222	-0.009
17.	(960100)	Long Sound, 1961	-0.168	-0.075
18.	(936101)	Snipe Point, 1934, sub-station	-0.215	-0.201
19.	(878101)	Irving, 1971, substation	0.687	-0.080
20.	(875102)	Mangrove (USE), 1930, subpoint B	-0.826	0.125
21.	(872101)	Sands Cut RM 2, 1849-1947 substation	0.296	-0.049
22.	(901100)	Rubi, 1930-1947, reset	-0.192	-0.134
23.	(905101)	Angelfish Key RM 3, 1853	-0.303	-0.242
24.	(914101)	Knowlson, 1935 substation	0.153	-0.155
25.	(919100)	Hull Key, 1852	-0.053	0.103
26.	(922100)	Rock Harbor 2, 1961	0.364	-0.284
27.	(022101)	Lower Sound Point, 1853 substation **		
28.	(923101)	Sub Station Key Largo Cable Visions Inc., Taller Mast, 1961 **		
29.	(924100)	Largo, 1962	-0.210	0.103

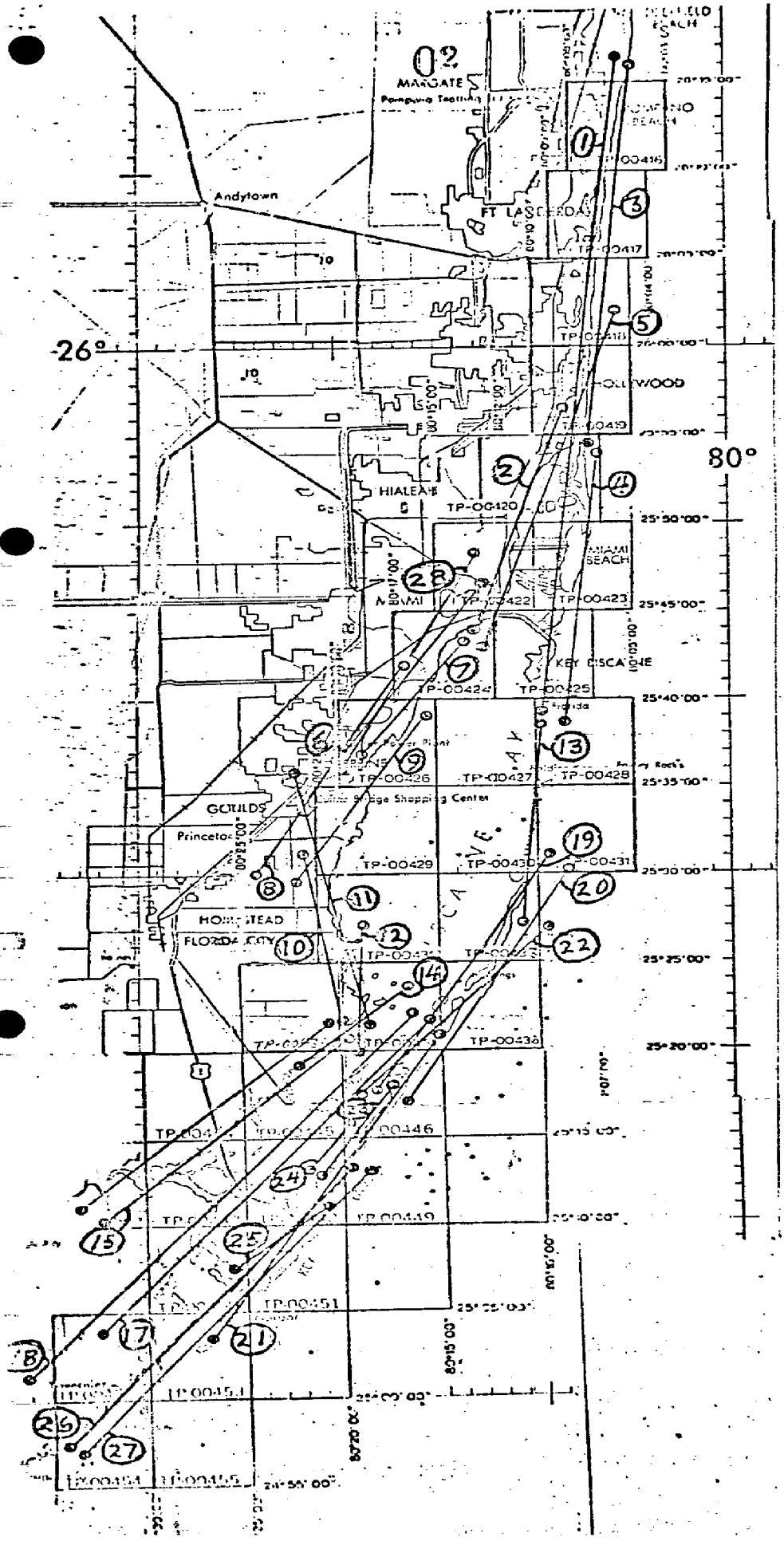
30.	(967101)	Low 2, RM 2, 1934	0.042	0.215
31.	(692100)	Tavernier, 1935	0.308	-1.325
32.	(793101)	Planter 2, RM 4	-1.476	1.087
33.	(695101)	Snake, 1934, subpoint	0.128	0.174

** means not used in adjustments



INFRA-RED CONTACT PRINTS

1. 71K 5632R - 5660R MLW
2. 71K 5662R - 5672R MLW
3. 71K 5750R - 5766R MHW
4. 71K 5795R - 5806R MHW
5. 71K 5815R - 5829R MHW
6. 71L 8501R - 8509R MLW
7. 71L 8512R - 8520R MLW
8. 71L 8571R - 8580R MHW
9. 71L 8523R - 8530R MLW
10. 71L 8783R - 8791R MHW
11. 71L 8584R - 8593R MHW
12. 71L 8532R - 8537R MLW
13. 71L 9067R - 9080R MLW
14. 71L 8337R - 8341R MHW
15. 72K 6287R - 6298R MHW
16. 72K 6572R - 6584R MLW
17. 72K 6546R - 6563R MLW
18. 72K 6311R - 6330R MHW
19. 71L 8544R - 8559R MLW
20. 71L 8648R - 8662R MLW
21. 72K 6480R - 6499R MHW
22. 71L 8697R - 8705R MHW
23. 72K 6344R - 6350R MLW
24. 72K 6253R - 6255R MLW
25. 72K 6420R - 6423R MHW
26. 72K 6501R - 6515R MHW
27. 72K 6368R - 6382R MLW
28. 71K 5847R - 5856R MHW



JOB PH-7113
AND
JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

INFRA-RED CONTACT
PRINTS RATIOED FOR
COMPILATION

FLORIDA– NOAA Coastal Boundary Mapping Program

Horizontal Control

Map TP– 00449

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
BEACON NO 31, 1934	Book 424, P. 16, 31, Book 425 P. 25, G.P.- Fla. Vol. 1, P. 371, R.C. Fla. E Zone, P. 371
POINT ELIZABETH 2, 1934	Book 424, P. 15, 31 G.P. - Fla. Vol. 1, P. 360, P.C. Fla. E Zone, P. 90

FLORIDA – NOAA Coastal Boundary Mapping Program

Vertical Control – Geodetic

Map TP – 00449

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
G 275		C&GS disk stamped G 275 1966; 107 ft. SW of power pole 244, 21.5 ft. NW of center line of road, set in a rounded rock flush with the ground.
H 275		C&GS disk stamped H 275 1966; 15.7 ft. SE of road, 84 ft. SW of speed limit sign, 1 ft. NE of witness sign, set in top of rounded rock 0.5 ft. below ground.

Compilation Report
TP-00449
March 10, 1975
PH-7119

31. Delineation

The tidal datum lines on this map were compiled by graphic methods using tide-coordinated, black-and-white infrared photography. This photography was controlled by common planimetric features compiled from the rectified prints and map points determined by aerotriangulation.

The rectified color photography was used as an aid for interpreting culture features and compiling shallow and shoal areas for Nautical Charts.

Interior features were compiled from the rectified prints of the color photography. The compilation is limited to a fringe 800 to 1000 feet inshore from the shoreline or back to the first main road.

32. Horizontal Control

See Photogrammetric Plot Report, page 3.

33. Supplemental Data - None.

34. Contours and Drainage

Contours are inapplicable. Drainage was compiled from the rectified prints of the color photography.

35. Shoreline and Alongshore Features

The photography was adequate for compilation of the tidal datum lines. However, where the construction was extensive the field editor is requested to verify or locate these lines.

36. Offshore Detail

Chart 11451 (141-SC) indicates numerous rocks awash surrounding "Basin Hill Shoals." This was beyond photo coverage and would have to be located by field methods. One pile near triangulation station Beacon No. 31, 1934 was shown by plotting station Beacon (near Beacon No. 31) 1934, whose description stated it was a pile structure. Field verification will be required.

37. Landmarks and Aids

One light was plotted (Lt. 31 BH) from its 1934 position and must be field verified. Seven new daybeacons are to be located during field edit. No landmarks were indicated on the published charts for this map.

38. Control for Future Surveys - None.

39. Junctions

Refer to NOAA Form 76-36B for junctions.

40. Horizontal and Vertical Accuracy

This map complies with the accuracy requirements for the Florida Coastal Zone Mapping Program as outlined by Project Instructions, PH-7000.

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

USGS Quad, Garden Cove, Florida, 1:24,000 1947 photorevised 1969.

47. Comparison with Existing Nautical Charts

Comparison was made with:

1249, 12th Edition, Apr. 28, 1973;
849, 6th Edition, Aug. 19, 1972
11451 (formerly 141SC) 12th Edition, Sept. 7, 1974

Respectfully submitted,

J. W. Keating, Jr.

J. W. Keating, Jr.
Cartographer

Approved by:

Jeter P. Battley Jr

J.P. Battley, Jr.
Chief, Coastal Mapping Section

Field Edit Report, Map TP-00449, Job PH 7119

51. METHODS

The shoreline at the Atlantic Ocean was inspected from a small boat while cruising just off shore. Three areas along the Atlantic Ocean have been filled and these areas were planetable in on photograph 73L2912R. Notes regarding apparent and fast shoreline, pier and other shoreline features were made on the rectified photographs and discrepancy print and field edit sheet.

There are no landmarks for this manuscript.

There is no tide gage on this manuscript.

Two benchmarks were identified.

Seven private aids "Basin Hill Channel" and Government aid Key Largo Daybeacon 29 were located. Basin Hills Light 31 BH was recovered. There is no Basin Hill Channel Daybeacon 1 as stated in the Light List and there is a Daybeacon 11 which is not in the Light List.

A wooden pile was located near Light 31 BH and the position falls on the plotted triangulation position "BEACON NEAR BEACON No 31 1934", however it is hard to believe it is the same object located in 1934.

The off shore rocks at Basin Hill Shoal were not located at this time. Mr. Brewer stated that the rocks will be located at a later date.

Field edit notes will be found on the discrepancy print, field edit sheet and the photographs.

52. ADEQUACY of COMPILATION

Adequate after application of field edit.

53. MAP ACCURACY

No test required.

54. RECOMMENDATION

None.

55. EXAMINATION of PROOF COPY

Not required.

Submitted 1/19/72

[redacted]

Review Report
TP-00449

July 1976

61. General

The map manuscript for Coastal Zone Map TP-00448 was inspected as a Class III map (compilation, discrepancy print, and report) and reviewed as a Class I map by the Quality Control Group. The review consisted of an examination of the map manuscript, the field edit and its application, the reproduction negatives, and the Descriptive Report.

The proof copy of this map was edited by the Quality Control Group before making final copies. This edit ~~comparised~~ Comprised of a thorough inspection of map details to verify the accuracy of reproduction with reference to the map manuscript and the quality of reproduction. In addition, the proof copy was examined by the following sections:

Coastal Mapping - map details
Staff Geographer - geographic names
Coastal Surveys - horizontal and vertical control

There were no planetable beach profiles available for compilation or final review.

62. Cartographic Comparison

Comparison was made with the following USGS quadrangle map:

Garden Cove, Florida, 1974, photorevised 1969,
1:24,000 scale.

Comparison was made with the following nautical charts:

11463 (formerly C&GS 849), 7th Edition, dated August 3, 1974,
1:40,000 scale.

11451 (formerly 141-SC) 12th Edition, dated Sept. 7, 1974,
1:80,000 scale.

The shoreline changes along the Atlantic Shoreline of Key Largo between Coastal Boundary Map TP-00449, the chart and quadrangle are due to construction of new facilities. The Field Edit Report and data record (NOAA Form 76-36B) accounts for the method of location.

The rocks along Basin Hill Shoals shown on chart 11451 are not shown on TP-00449.

Refer to the Field Edit Report for explanation.

63. thru 65. Inapplicable.

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00448 complies with the Instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by:

Donald M. Brant

Approved and Forwarded:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

27 Jan. 1975

GEOGRAPHIC NAMES

PH-7119 (Card Sound to Plantation Key, Florida)

TP-00449

Atlantic Ocean

Basin Hills

Basin Hill Shoals

~~Hawk Channel~~

John Pennekamp Coral Reef State Park

Key Largo

Point Elizabeth

Approved by:

Chas. E. Harrington

Chas. E. Harrington
Staff Geographer-C51x2

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

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

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [ ] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [x] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [x] TO BE CHARTED
- [ ] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
Rockville, MD	FLORIDA	KEY LARGO, BASIN HILLS	3/20/75

The following objects HAVE [ ] HAVE NOT [X] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
	PH-7119	TP-00449	N.A. 1927

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE // D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE // D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
LIGHT 31 BH	HAWK CHANNEL BASIN HILLS	25 13	05.27 162.16	80 17	59.06 1653.24		Triang. Rec. 4/3/75	11451 (141SC)
DYBN 2	BASIN HILLS (Privately maintained)	25 13	20.73 637.86	80 19	19.62 549.19		P-L-8-3 4/2/75	"
DYBN 3	"	25 13	20.05 616.94	80 19	19.84 555.35		"	"
DYBN 5		25 13	21.02 646.78	80 19	24.77 693.35		"	"
DYBN 7		25 13	22.01 677.24	80 19	29.87 836.10		"	"
DYBN 9		25 13	22.95 706.17	80 19	34.83 974.94		"	"
DYBN 10		25 13	24.56 755.71	80 19	39.68 1110.69		"	"
DYBN 11		25 13	23.88 734.78	80 19	39.65 1109.84		"	"
DYBN 29	KEY LARGO	25 14	16.30 501.55	80 17	1.38 38.62		"	"
	There is no Basin Hill DYBN 1 as in Light List, and there is a DYBN 11. The DYBN names are taken from printer on daybeacons.							

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD		☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	R. Wagner	FIELD ACTIVITY REPRESENTATIVE
	P. Dempsey	OFFICE 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

I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - 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

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

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

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.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-665-073/1030 Region 6

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

NR LANDMARKS FOR CHARTS

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)

TE	LOCALITY	DATE
ORIDA	Point Elizabeth Basin Hill Channel	5/75

d from seaward to determine their value as landmarks.

ER 9

DATUM: N.A. 1927

tion. rentheses)	POSITION LATITUDE ° ′	LATITUDE // D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE // D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
	25 13		80 19				11451 (141SC)

33

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD		☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	R. Wagner	FIELD ACTIVITY REPRESENTATIVE
	P. Dempsey	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

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(Consult Photogrammetric Instructions No. 64.

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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

I. NEW POSITION DETERMINED OR VERIFIED
Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - 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

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

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

II. TRIANGULATION STATION RECOVERED
When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.
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8-12-75

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EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-665-073/1030 Region 6

NATIONAL ARCHIVES DATA
TP-00449

1 Discrepancy print (paper copy)
1 Field edit sheet (stable base copy)
2 NOAA Forms 76-40 (Nonfloating aid or landmarks for charts)
1 NOAA Form 76-36C (History Field Operations)
1 Page sextant fixes

Photography:

73-L-2912R (filed with TP-00448)