

TP-00278

TP-00278

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey ... Shoreline

Job No. ... PH-7101 ... Map No. ... TP-00278

Classification No. ... Edition No. ... 1

Field Edited Map

LOCALITY

State ... South Carolina and Georgia

General Locality ... Charleston to Savannah

Locality ... Savannah Beach

19 70 TO 1974

REGISTRY IN ARCHIVES

DATE

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR
TO REGISTRATION

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 Coastal Mapping Division, Norfolk, VA OFFICER-IN-CHARGE Jeffrey G. Carlen, Cdr.		SURVEY TP. <u>00278</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final (F.E.)</u> JOB <u>PH. 7101</u>	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Norfolk, VA OFFICER-IN-CHARGE Jeffrey G. Carlen, Cdr.		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB <u>PH. _____</u> MAP CLASS <u>_____</u> SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation May, 1972 ✓ Compilation Sept., 1973 ✓		Sept., 1970 ✓	
II. DATUMS			
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN ✓		OTHER (Specify) _____	
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER ✓ <input checked="" type="checkbox"/> MEAN LOW-WATER ✓ <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify) _____	
3. MAP PROJECTION Polyconic		4. GRID(S) STATE <u>South Carolina</u> ZONE <u>South</u>	
5. SCALE 1:10,000		STATE _____ ZONE _____	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: <u>Analytic</u> LANDMARKS AND AIDS BY		R.B. Kelly	Dec. 1973
2. CONTROL AND BRIDGE POINTS METHOD: <u>Coradomat</u> PLOTTED BY		D. Phillips	Dec. 1973
3. STEREOSCOPIC INSTRUMENT COMPILATION PLANIMETRY BY		L.O. Neterer	Jan. 1974
INSTRUMENT: <u>Wild B-8</u> CHECKED BY		R.R. White	Jan. 1974
SCALE: <u>1:20,000</u> CONTOURS BY		NA	NA
4. MANUSCRIPT DELINEATION PLANIMETRY BY		C. Parker	Jan. 1974
METHOD: <u>Smooth ink drafting</u> CHECKED BY		R.R. White	Jan. 1974
SCALE: <u>1:10,000</u> CONTOURS BY		NA	NA
HYDRO SUPPORT DATA BY		NA	NA
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		R.R. White	Jan. 1974
6. APPLICATION OF FIELD EDIT DATA BY		R.R. White	Jul. 1974
7. COMPILATION SECTION REVIEW CHECKED BY		Frank Margiotta	Jul. 1974
8. FINAL REVIEW BY		Frank Margiotta	Aug. 1974
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		Billy H. Barnes	Dec. 1975
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		Billy H. Barnes	March 3, 1976
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		R.T. CATOK	JAN 1976

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00278
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" and "L"		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR X (P) PANCHROMATIC (I) INFRARED X		TIME REFERENCE	
TIDE STAGE REFERENCE SAVANNAH RIVER ENTRANCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE Eastern MERIDIAN 75th	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
70L(C)447A & 448A	11/7/70	10:12	1:40,000	2.0 ft. above MLW ✓	
70L(C)9923A & 9924A	11/5/70	10:29	1:40,000	6.0 ft. above MLW ✓	
* 71E(I)2344 & 2345	3/30/71	09:01	1:30,000	+ 0.2 ft. of MHW ✓	
* 71E(I)2258 & 2259	3/28/71	13:17	1:30,000	+ 0.2 ft. of MLW ✓	
* 71E(I)2336 - 2339	3/20/71	08:52	1:30,000	+ 0.2 ft. of MHW ✓	
* 71E(I)2250 - 2253	3/28/71	13:12	1:30,000	+ 0.2 ft. of MLW ✓	

REMARKS

*Tide controlled infrared photography. ✓

2. SOURCE OF MEAN HIGH-WATER LINE:

Tide controlled infrared photography. ✓

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

Tide controlled infrared photography. ✓

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 TP-00277 1:20,000	EAST TP-00279	SOUTH TP-00279	WEST TP-00277 1:20,000
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REMARKS

TP-00278

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J.K. Wilson	11/1970
2. HORIZONTAL CONTROL	RECOVERED BY R.E. Kesselring	11/1970
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY R.E. Kesselring	11/1970
3. VERTICAL CONTROL	RECOVERED BY NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY NA	
	LOCATED (Field Methods) BY NA	
	IDENTIFIED BY NA	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input type="checkbox"/> NO INVESTIGATION	NA
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY NA	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
Premarked			
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	South End (USE) 1932 R.M. 2		

3. PHOTO NUMBERS (Clarification of details)

NA

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

NA

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

None

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

1 - Form 152

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00278
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	LT(jg) R.D. Black	Jan-May 1974
2. HORIZONTAL CONTROL	RECOVERED BY LT(jg) R.D. Black	Jan-May
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY	
3. VERTICAL CONTROL	RECOVERED BY	
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LT(jg) R.D. Black	Jan-May
	LOCATED (Field Methods) BY LT(jg) R.D. Black	Jan-May
	IDENTIFIED BY LT(jg) R.D. Black	Jan-May
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY LT(jg) R.D. Black	Jan-May
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

71 E 2250R, 2251R, 2252R

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
71E2252R	TYBEE KNOLL CUT RANGE FRONT LIGHT		

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

7. SUPPLEMENTAL MAPS AND PLANS

None

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

4 forms NOAA 76-40; 3 forms C&GS 157; 6 forms C&GS 526.

NOAA FORM 76-36D
(3-72)

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

TP-00278
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Manuscript complete pending field edit	1/ /74	Class III Manuscript Superseded	2/4/74	1/24/73 Field edit
Field edit applied Compilation complete	7/ /74	Class I Superseded	9/10/74	
Final Review	12/ /75		1/30/76	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
	97174	7/31/74	Nonfloating Aids
	97174	7/31/74	Landmarks

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 7/31/74
 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 ⁷⁶⁻¹⁰ ~~502~~ 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: _____

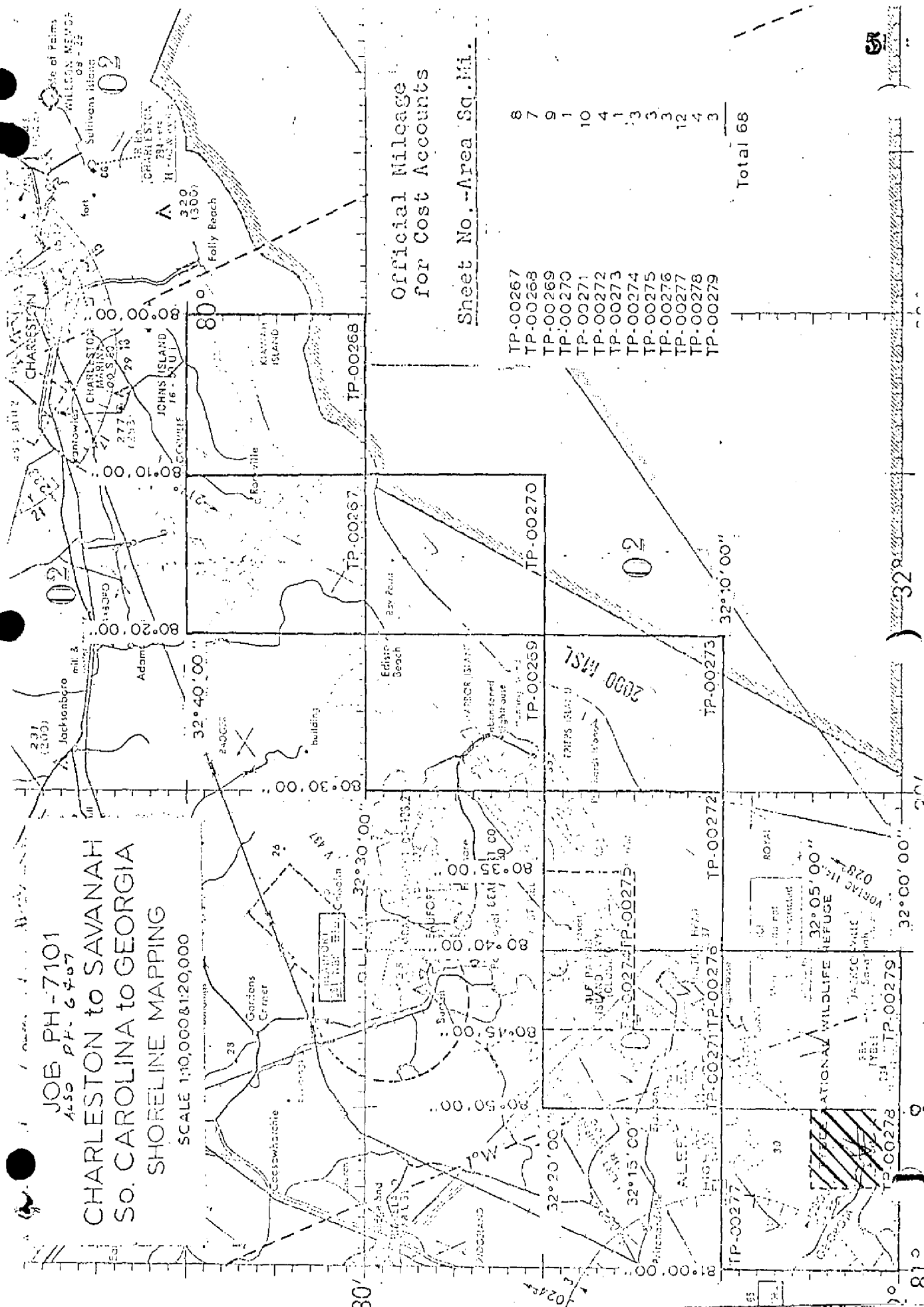
IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

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	

JOB PH-7101
ALSO PH-6407

CHARLESTON to SAVANNAH SO. CAROLINA to GEORGIA SHORELINE MAPPING

SCALE 1:10,000 & 1:20,000



Official Nilcage
for Cost Accounts

Sheet No. - Area Sq. Mi.

TP-00267	8
TP-00268	7
TP-00269	9
TP-00270	1
TP-00271	10
TP-00272	4
TP-00273	1
TP-00274	3
TP-00275	3
TP-00276	3
TP-00277	12
TP-00278	4
TP-00279	3

Total 68

51

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT TP-00278

This 1:10,000 scale shoreline manuscript is one of nine 1:20,000 scale and four 1:10,000 scale manuscripts that comprise Project PH-7101, Charleston, SC to Savannah, GA. This is one of several projects that make up SCOPE, the Southern Coastal Plains Expedition. This sheet lies entirely within the limits of the 1:20,000 scale sheet TP-00277. It is not a standard shoreline survey because compilation was limited to the ocean shoreline and only a limited amount of interior detail. Shoreline of bays, inlets, canals or rivers that may be within the geographic limits of this map were not delineated. This deviation from written instructions was brought about by verbal instructions telephoned from the Rockville office to the Chief, Coastal Mapping Section, AMC.

Field work prior to compilation consisted of taking a reference measurement to the mean high and mean low water lines and premarking horizontal control required for bridging.

Aerotriangulation was done in the Rockville office on the 1:40,000 scale color photography dated November, 1970. Pass points common to the 1:30,000 scale infrared tide coordinated photography were dropped for ordering ratios.

Compilation was done at the Atlantic Marine Center in January, 1974. The Wild B-8 Plotter, utilizing the 1:40,000 scale color bridging photography, was used to compile inshore planimetry and to drop shoreline pass points common to the 1:30,000 scale infrared tide controlled mean high and mean low water ratios. These ratios were then used to graphically compile the mean high and mean low water lines. The reference measurement referred to in paragraph 2 was used to verify the photo interpretation of those lines on the tide controlled photography.

Field edit was done in January and May, 1974.

Final review was done at the Atlantic Marine Center in December, 1975.

The original manuscript is a stabilene sheet 5 minutes in latitude by 5 minutes in longitude.

A stable base copy and a negative of the final reviewed manuscript were forwarded for record and registry.

Photogrammetric Plot Report
Charleston to Savannah
South Carolina and Georgia
Job PH - 710F

21. Area Covered

This report covers nine 1:20,000 sheets, TP-00267, TP-00268, TP-00269, TP-00270, TP-00271, TP-00272, TP-00273, TP-00277, TP-00279 and four 1:10,000 sheets, TP-00274, TP-00275, TP-00276, and TP-00278 from Kiawah River, South Carolina, to Tybee Island, Georgia.

22. Method

Eight strips 1:40,000 scale color photography were bridged by analytic aerotriangulation methods and adjusted to ground on South Carolina South State Plane coordinate system. Bridge points were used on 1:30,000 scale infrared photography for ratioing photographs to be used in compiling the Mean Low- and Mean High-Water Line. Ratio prints of infrared photography covering Mean Low- and Mean High-Water were ordered. (One each of cronapaque). Tie points were used to augment datum between strips. Data for plotting manuscripts for compilation were assembled for ruling and plotting by the Coradomat and Calcomp.

23. Adequacy of Control

The horizontal control provided was adequate except for Fusky (USE) 1932 sub stations A and C, which held in strip one and did not hold in strip two, because of poor image points. Also, Chan, 1933, substation A and C did not hold in strip four because of poor image points.

All other control held within the accuracy required by National Standards of Map Accuracy at 1:20,000 and 1:10,000 scale.

24. Supplemental Data

U.S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

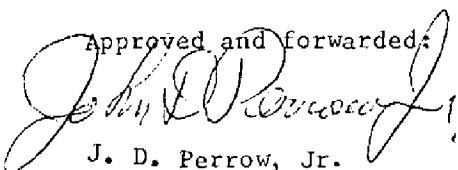
25. Photography

RC-8 color film positives were adequate as to coverage, overlay, and definition.

Submitted by,

Robert B. Kelly

Approved and forwarded:



J. D. Perrow, Jr.

Chief, Aerotriangulation Section

PH-7101
Charleston to Savannah

NOTE TO COMPILER

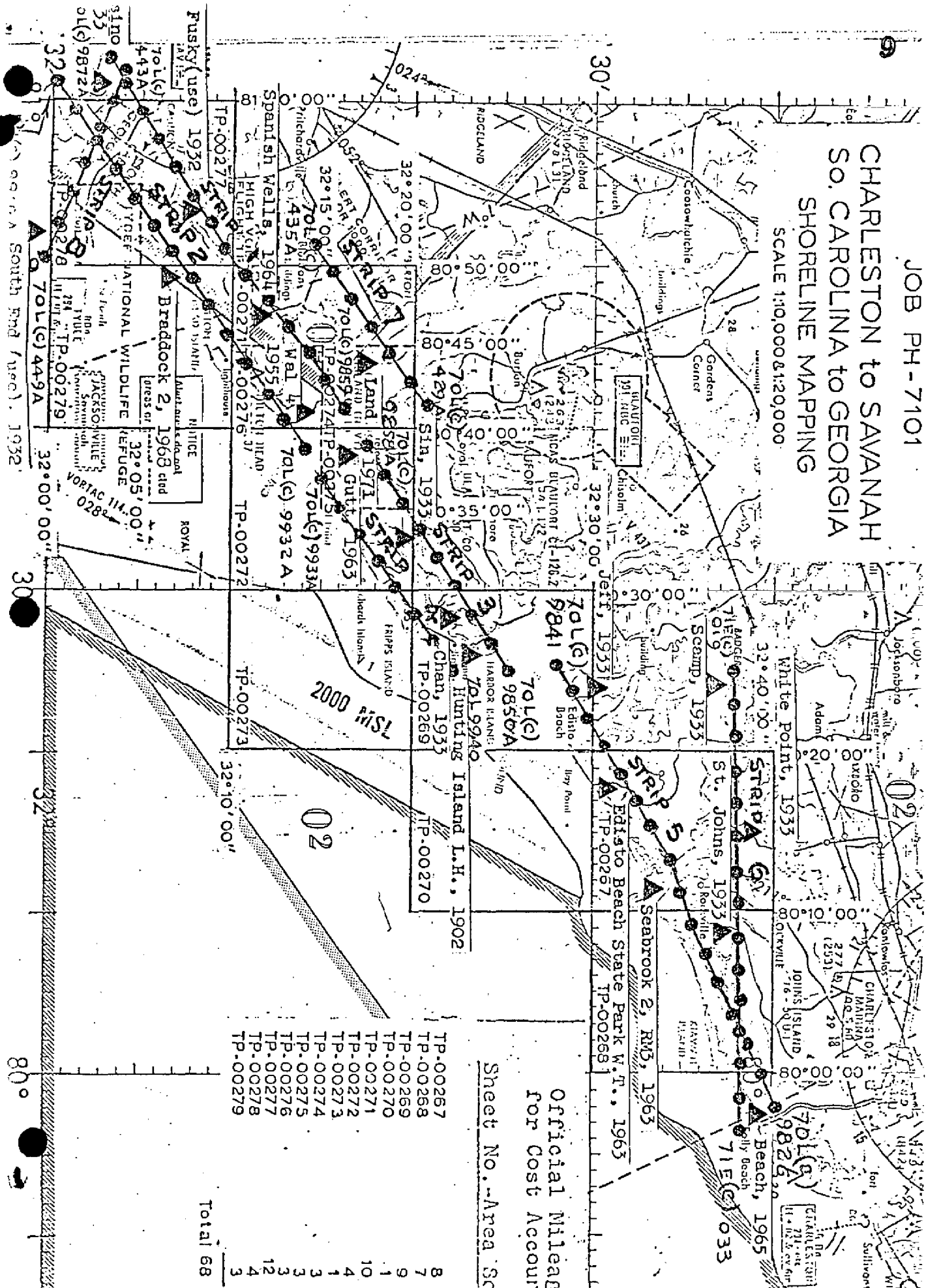
Foreshore Cross Section points listed below were omitted during bridging. Points should be dropped during compilation.

Section II	68-01
Section VII	69-01
Section VIII	69-02
Section IX	73-01
Section XIII	79-01

JOB PH-7101

CHARLESTON to SAVANNAH SO. CAROLINA to GEORGIA SHORELINE MAPPING

SCALE 1:10,000 & 1:20,000



Official Mileage
for Cost Account

Sheet No.-Area Sq

TP-00267	8
TP-00268	7
TP-00269	9
TP-00270	1
TP-00271	10
TP-00272	4
TP-00273	1
TP-00274	3
TP-00275	3
TP-00276	3
TP-00277	12
TP-00278	4
TP-00279	3

Total 68

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY		REMARKS
			COORDINATES IN FEET STATE <u>South Carolina</u> ZONE <u>South</u>	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE		
TP-00277 - TP-00278		PH-7101	N.A. 1927			
		SOURCE OF INFORMATION (Index)				
BLOODY POINT RANGE REAR LIGHT, 1964	Vol. III Pg. 431			ϕ 32° 03' 17.590"		
				λ 80° 50' 23.135"		
FORT PULASKI, 1963	Quad. 320- 803			ϕ 32° 01' 38.952"		
	STA 1044			λ 80° 53' 27.569"		
TYBEE LIGHTHOUSE, 1932	Quad. 320- 803			ϕ 32° 01' 19.301"		
	STA 1052			λ 80° 50' 44.985"		
SAVANNAH BEACH MUNI- CIPAL WATER TANK, 1934	Quad. 320- 803			ϕ 32° 00' 39.717"		
	STA 1058			λ 80° 50' 31.690"		
JONES ISLAND RANGE FRONT LIGHT, 1964	Vol. III Pg. 432			ϕ 32° 02' 30.954"		
				λ 80° 51' 10.695"		
JONES ISLAND RANGE REAR LIGHT, 1964	Vol. III Pg. 433			ϕ 32° 02' 39.669"		
				λ 80° 51' 40.736"		
COCKSPUR LIGHTHOUSE, 1902	Quad. 320- 803			ϕ 32° 01' 20.912"		
	STA 1055			λ 80° 52' 48.601"		
BLOOD, 1964	Bridge Form 164 Pg. 1			ϕ		
				λ		
				ϕ		
				λ		
				ϕ		
				λ		
COMPUTED BY F.R. Gustafson			COMPUTATION CHECKED BY L.B. Foltz			DATE 11/15/73
LISTED BY			LISTING CHECKED BY			DATE
HAND PLOTTING BY			HAND PLOTTING CHECKED BY			DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT

TP-00278

31. DELINEATION

Delineation was by the Wild B-8 stereoplotter.

Photography was adequate. This map was photo-reduced after application of field edit and then retraced on to map TP-00277.

32. CONTROL

See the attached "Photogrammetric Plot Report, dated: Dec., 1973.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

Alongshore details were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

The mean high water line and mean low water lines were delineated from the tide coordinated photographs.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

Copies of Form 76-40 for 8 non-floating aids to navigation and 3 landmarks were forwarded to the Rockville, MD office on July 24, 1974. These forms apply also to map TP-00277.

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

See the attached Form 76-36b, item #5 of the Descriptive Report, concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement required

46. COMPARISON WITH EXISTING MAPS

A comparison has been made with the following U.S. Geological Survey Quadrangles: FORT PULASKI, SC-GA, dated 1955; photo-revised 1971, scale 1:24,000. SAVANNAH BEACH, NORTH, SC-GA, dated 1955; photo-revised 1971, scale 1:24,000.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the following National Ocean Survey charts: 440, 38th edition, dated Aug. 4, 1973 scale 1:40,000. 1241, 10th edition, dated July 7, 1973 scale 1:80,000.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

Charles Parker
Charles Parker, Carto., Aid
Jan. 14, 1974

Approved for forwarding:

Albert C. Rauck, Jr.
A.C. Rauck, Jr.
Chief, Coastal Mapping Section, AMC

19 August 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7101 (Charleston, S. C. to Savannah, Ga.)

TP-00278

Atlantic Ocean

Bloody Point

Cockspur Island

Daufuskie Island

Fort Pulaski

Fort Pulaski National Monument

Fort Screven

Horseshoe Shoal

Lazaretto Creek

New River

Oyster Bed Island

Savannah Beach

Savannah River

South Channel

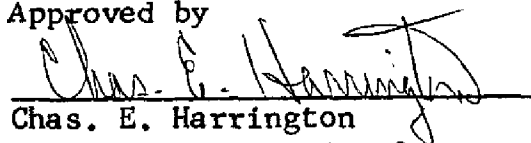
Turtle Island

Tybee Island

Tybee Knoll Spit

Tybee National Wildlife
Refuge

Approved by


Chas. E. Harrington
Staff Geographer-C51x2

PHOTOGRAMMETRIC OFFICE REVIEW

TP-00278

1. PROJECTION AND GRIDS RRW	2. TITLE RRW	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RRW	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS RRW
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT RRW	11. DETAIL POINTS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RRW	13. LOW-WATER LINE RRW	14. ROCKS, SHOALS, ETC. RRW	15. BRIDGES
16. AIDS TO NAVIGATION RRW	17. LANDMARKS RRW	18. OTHER ALONGSHORE PHYSICAL FEATURES RRW	19. OTHER ALONGSHORE CULTURAL FEATURES
PHYSICAL FEATURES			
20. WATER FEATURES	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES RRW
CULTURAL FEATURES			
27. ROADS RRW	28. BUILDINGS RRW	29. RAILROADS	30. OTHER CULTURAL FEATURES
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RRW	34. JUNCTIONS RRW		35. LEGIBILITY OF THE MANUSCRIPT RRW
36. DISCREPANCY OVERLAY RRW	37. DESCRIPTIVE REPORT RRW	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS RRW
40. REVIEWER Richard R. White 1/1974		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> A.C. Rauck, Jr.	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER Richard R. White 7/1974		SUPERVISOR <i>Albert C. Rauck, Jr.</i> A.C. Rauck, Jr.	
Reviewed by: F. Margiotta 8/28/74			
43. REMARKS Field edit applied from: Field edit ozalid TP-00278 and a copy. Also field photographs 71E(I)2250 thru 2252			

FORESHORE CROSS-SECTIONS

CHARLESTON, SOUTH CAROLINA TO SAVANNAH, GEORGIA

JOB PH-7101

Sixteen foreshore cross-sections were taken between Folly Island, South Carolina, and Tybee Island, Georgia, a linear distance of approximately seventy miles. Twelve sections were positioned from triangulation and/or traverse stations and two sections, II and XIII, were located from photo points with sun azimuths. Section IX was located from a triangulation station using a photo point for an azimuth and section VII was run parallel to a relatively long pier.

Vertical control for sections I thru VI, VIII and IX was taken from the tide staff at Edisto Beach, South Carolina. Section VII was based on a temporary tide staff installed at Harbor River Entrance, South Carolina, and a temporary tide staff placed at Skull Creek (North Entrance) provided the control for sections X and XI. The remaining sections were based on the tide staff at Savannah River Entrance, Georgia.

The procedure, in establishing the TTM's used to control the individual sections, was to take a level reading on a recoverable object for use as a TTM, record it as a foresight, and then send the rodman into the water where the rod was used as a combination tide staff/level rod. After observing the water level on the rod for a period sufficient to determine a mean reading, a level reading was taken. The water level reading was subtracted from the level reading and the result entered in the field book as a backsight. Immediately, the instrument was moved, a new water level reading determined and another level reading obtained. Again the two were subtracted and the result entered as a foresight. The rodman was then sent back to the TTM to close the loop. The entries in the field book show this procedure reversed. This was done to avoid confusion as there didn't appear to be any adequate method of showing the actual procedure. The remainder of the operation was straightforward leveling with an angle and distance to the mean high and low water lines thrown in.

Time differences for each section were calculated in advance to eliminate any datum correction; for example, if a minus time were indicated for a particular section, then the water level readings on the tide staff/level rod would be obtained first and the man on the controlling tide staff informed of the time of the readings. The tide staff man would then wait the calculated length of time for the section involved before reading the controlling tide staff. For plus times, the procedure was reversed. Information was exchanged between the controlling tide staffs and the individual sections via radio. At sections I and XII, no radio communications were available. For these two sections, the controlling tide staff was read and recorded at fifteen minute intervals and the height of the water at the time of the water level readings computed at a later time.

As no specific instructions were given to the contrary, cross-section shots were taken of the foreshore at twenty, thirty, and sometimes, fifty foot intervals, depending on the length of the section. Whether they are necessary, or even wanted, is not known, but as they only took about five to ten minutes extra for each section, they were included anyway.

One typical section and three atypical sections were plotted to give the compiler an idea of what was done and to show the method of location. These sections, the field book, pricking cards, sun azimuths, color contact photographs and charts showing the individual section locations are included with this report.



Richard E. Kesselring
Survey Tech.
May 3, 1971

FIELD EDIT REPORT

TP-00278

Savannah Beach, Georgia

PH-7101

May, 1974

51. METHODS

All field work was done in accordance with the AMC Manual, current Photo Instructions and Project Instructions OPR-436-WH-74, "Coasts of South Carolina and Georgia" dated November 16, 1973 addressed to Chief, Atlantic Hydrographic Party.

An inspection of all shoreline and alongshore features was made, and all deletions, additions, corrections, and verifications are either shown or indexed on the field edit ozalid. All field edit notes are in violet to indicate additions or changes, and in green to indicate deletions.

The positions of the Jones Island range lights, Tybee Lighthouse and Bloody Point Range Rear Light were verified by theodolite cuts. The positions of the daymarks next to Bloody Point Range Rear Light were determined by theodolite intersection. Tybee Knoll Cut Range Front Light was photo identified. Savannah River South Channel Light 5 was located by sextant intersection. The positions of Savannah River South Channel Light 3 and Lazaretto Creek Light 2 were verified by sextant cuts. The steel frame tower on Turtle Island was located by Photo Party 62 in 1973, and the position determined by this party has been entered on the NOAA form 76-40.

The "causeway ruins" (lat. $32^{\circ}03.0'$, Long. $80^{\circ}54.2'$) were searched for by boat on 12 April, 1974. Both shorelines were inspected. No sign of this reported feature was found. The water was extremely murky at the time of the search.

The positions of features along the eastern and northern shoreline of Savannah Beach were determined by photo inspection.

52. ADEQUACY OF COMPILATION

Compilation of shoreline and alongshore features was generally adequate, except as noted below. Compilation will be complete when field edit notes are applied.

Numerous areas of grass and/or oyster shells were missed during compilation. These areas are noted on the field edit ozalid. An area along the northern shoreline of Tybee Island (lat. $32^{\circ}01.2'$, long. $80^{\circ}51.7'$ to $80^{\circ}52.8'$) was compiled as sand, and should be compiled as grass, mud and oyster shells. The MHWL should be changed so that it follows the edge of this grass line, as noted on photo 28MAR71E2251R.

A few groins along the east shoreline of Savannah Beach were missed during compilation, and one was compiled which is not present. (lat. $32^{\circ}01.4'$, long. $80^{\circ}50.7'$). A bulkhead which exists along most of the east shoreline of Tybee Island was not compiled. All corrections are noted on the field edit ozalid.

54. RECOMMENDATIONS

None.

56. GEOGRAPHIC NAMES

No discrepancies were found while editing this sheet.

57. LANDMARKS AND NONFLOATING AIDS TO NAVIGATION

Three landmarks and ten nonfloating aids to navigation are recommended for charting. Two of the aids are daymarks on dolphins next to Bloody Point Range Rear Light. These are not listed in the Light List and are not numbered. They are possibly U.S. Corps of Engineers dredge markers. However, their prominence and permanence qualify them as legitimate aids to navigation.

58. FIELD EDITORS

Field edit was performed by LT. (j.g.) Richard D. Black and Mr. Michael F. Sutphin of Photo Party 61.

Respectfully Submitted,

Richard D. Black

Richard D. Black
LT. (j.g.) NOAA
Chief, Photo Party 61

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
NONFLOATING AIDS										FOR CHARTS									
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE		ORIGINATING ACTIVITY		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED							
TO BE CHARTED TO BE REVISED TO BE DELETED		Coastal Map. Div. Norfolk, VA		South Carolina		12/1975		<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> COMPILATION ACTIVITY <input checked="" type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)		Verif. 3/8/74		440 571 1240							
OPR PROJECT NO.		JOB NUMBER		SURVEY NUMBER		DATUM		POSITION		OFFICE		FIELD							
PH-7101		TP-00278		N.A. 1927		N.A. 1927		N.A. 1927		N.A. 1927		N.A. 1927							
CHARTING NAME		DESCRIPTION		LATITUDE		LONGITUDE		METHOD AND DATE OF LOCATION		CHARTS AFFECTED									
LIGHT		(Jones Island Range Front Light, 1964)		32 02 30.954		80 51 10.695		71E(I)2337		440 571 1240									
LIGHT		(Jones Island Range Rear Light, 1964)		32 02 39.669		80 51 40.736		71E(I)2337		440 571 1240									
LIGHT		(Bloody Point Range Rear Light, 1964)		32 03 17.590		80 50 23.135		No Photo coverage		440 571 1240									
LIGHT		Tybee Knoll Cut Range Front Light		32 01 59.3		80 53 55.0		P.1. 4/5/74		839-SC 440 1240									
LIGHT		Savannah River South Channel Light #3		32 01 37.9		80 51 11.5		71E(I)2337		440 1240									
LIGHT		Savannah River South Channel Light #5		32 01 14.1		80 51 302		Verif. 4/5/74		440 1240									
LIGHT		Lazaretto Creek Light #2		32 01 434.780		51 1435		F.3.c. 4/9/74		440 1240 1241									
LIGHT		Tybee (Rear Range) Light (Tybee Lighthouse, 1932) ht. = 147(152) ft.		32 01 254.80		51 1246		Verif. 4/5/74		440 1240 1241									
LIGHT				32 01 19.301		51 44.985		71E(I)2337		440 1240 1241									
LIGHT				32 01 594.580		51 1180.5		Triang. Rec. 3/8/74		440 1240 1241									

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	Richard D. Black
POSITIONS DETERMINED AND/OR VERIFIED	Richard D. Black
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	Richard R. White
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64)	
OFFICE	Billy H. Barnes
1. 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 P - Photogrammetric Vis - Visually 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-2-6-1 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	
**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION										LANDMARKS FOR CHARTS										ORIGINATING ACTIVITY																																																																																																																							
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED										REPORTING UNIT (If field Party, Ship or Office) Coastal Map. Div. Norfolk, VA										STATE South Carolina										LOCALITY Charleston, SC to Savannah, GA										DATE 12/1975										<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> COMPILATION ACTIVITY <input checked="" type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)																																																																																																			
OPR PROJECT NO.										JOB NUMBER										SURVEY NUMBER										DATUM										METHOD AND DATE OF LOCATION (See instructions on reverse side)										CHARTS AFFECTED																																																																																																			
CHARTING NAME										DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)										POSITION										FIELD																																																																																																																							
																				LATITUDE										LONGITUDE																																																																																																																							
																				° / ' " D.M. METERS										° / ' " D.P. METERS																																																																																																																							
TANK										Savannah Beach Municipal Water Tank, 1934 ht. = 153(160) ft.										32 00 39.717										31.690										71E(I)2336										Triang. Rec. 3/8/74										440 1240 1241																																																																																									
OLD TOWER										(Cockspur Lighthouse, 1902) Brick, Ht = 36(36) ft. (Abandoned)										32 01 20.912										48.601										71E(I)2337										Triang. Rec. 3/8/74										440 1240 1241																																																																																									
TOWER										Steel, Lt. = 63(65) ft.										32 01 42.529										58.254										F.3.a. 1973										440 1240																																																																																																			

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	Richard D. Black
POSITIONS DETERMINED AND/OR VERIFIED	Richard D. Black
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	Richard R. White
Blilly H. Barnes 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 P - Photogrammetric Vis - Visually 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	III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

REVIEW REPORT TO-00278

SHORELINE

December 1975

61. GENERAL STATEMENT:

See Summary, which is page six of this Descriptive Report.

A comparison print showing differences noted in paragraphs 62 through 65 is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with T-12620, scale 1:20,000, dated December 1965 and T-12811, scale 1:10,000, dated July, 1965. Significant differences are shown in blue on the comparison print. In the area covered, TP-00278 supersedes T-12620 and T-12811 for nautical chart construction purposes. T-12620 and T-12811 are the latest registered prior surveys of the area.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangles SAVANNAH BEACH NORTH, SC-GA and FORT PULASKI, SC-GA, both dated 1955 (Photorevised 1971) at a scale of 1:24,000. Significant differences are shown in brown on the comparison print.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a copy of H-9459 (AHP-10-5-74) smooth sheet dated 1974 at a 1:10,000 scale. The shoreline shown on the smooth sheet was taken from the Class I manuscript. Several errors and discrepancies on the Class I manuscript were found and resolved during final review. A copy of the final reviewed map was given to hydrographic pro-

cessing for application to the verified smooth sheet for H-9459. These and other differences are shown in purple on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS:

The area covered by this map is within the limits of NOS Chart 11512, scale 1:40,000, 40th edition, dated June 1975. There is an inlet between Oyster Bed Island and Turtle Island that has a ruins symbol shown across it. It could not be seen on the photography and the field editor stated it was not visible at an on-site inspection. This and other differences are shown in red on the comparison print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with Project Instructions, except as explained in Summary and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Reviewed by:

Billy H. Barnes

Billy H. Barnes
Cartographer
December, 1975

Approved for forwarding:

Joseph W. Vonasek

Joseph W. Vonasek
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

01'
TP-00278
1:10,000

21

y=65,000 Ft.

00'30"

COMPARISON PRINT

Blue = T-12620 & T-12811
Red = Chart 11512
Purple = H-9459

Savannah Beach

32°00'00"

51'

50'30"

80°50'00"

X=2,050,000 Ft.

NATIONAL OCEAN SURVEY

SHORELINE MANUSCRIPT

TP-00278

SOUTH CAROLINA AND GEORGIA

CHARLESTON TO SAVANNAH

SAVANNAH BEACH

SCALE 1:10,000

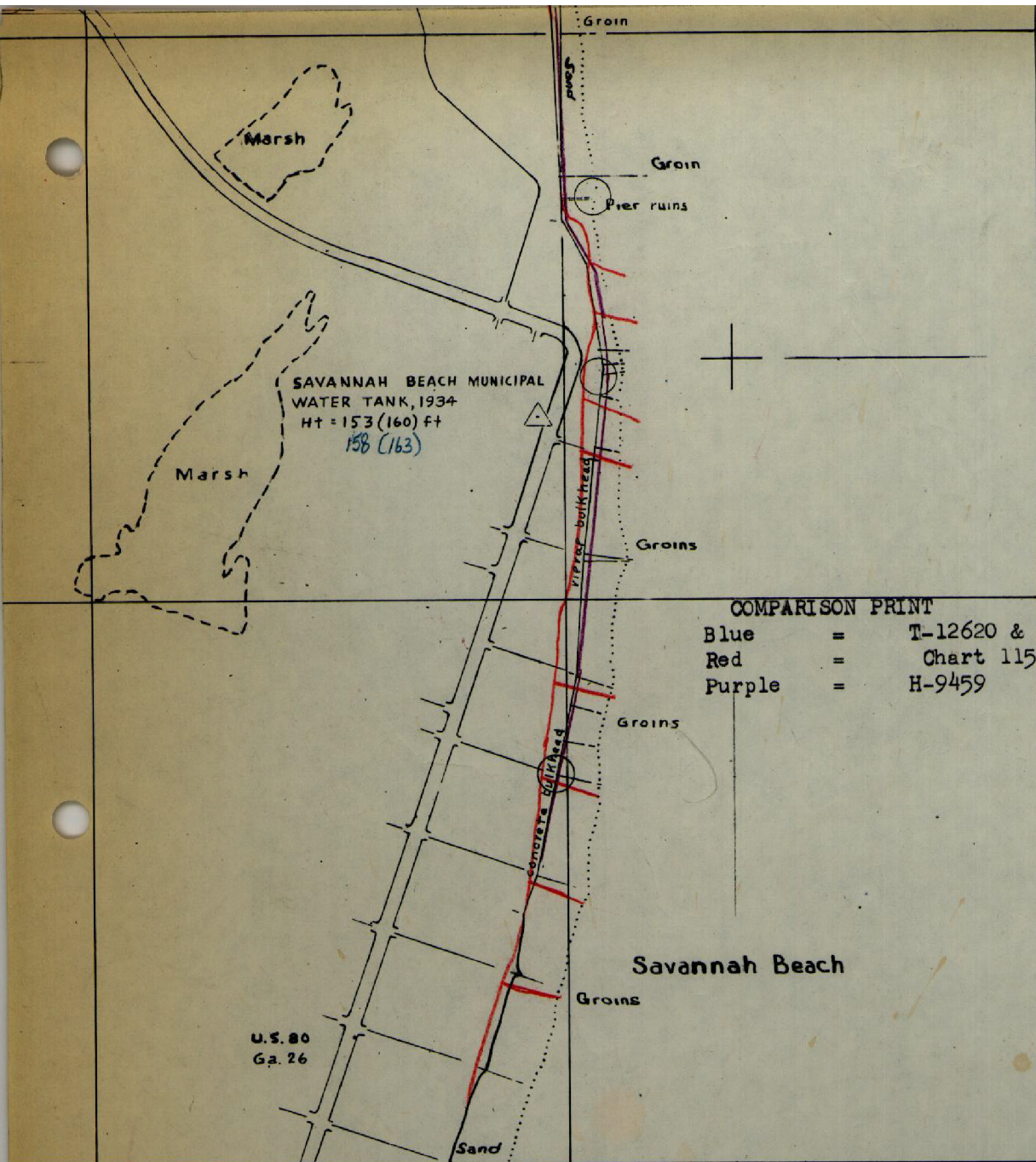
(1 inch = 833.33 ft.)

CONTROL DATA

Polysconic projection: 1827 North American Datum

5,000 foot grid based on South Carolina (Zone 2) plane coordinate system

Datum plane: Mean High Water



TP-00278
1:10,000

COMPARISON PRINT

Blue = T-12620 & T-12811
Red = Chart 11512
Purple = H-9459
Brown = USGS

23

Pile

Shoal

Marsh

Horseshoe

Oyster Bed Island

Tybee National Wildlife Refuge

Trail

Marsh

Sand

Sand

RUINS?

32° 03'

32° 03' 30"

80° 54' 30"

80° 54' 00"

80° 55' 00"

COMPARISON PRINT

Blue = T-12620 & T-12811
 Red = Chart 11512
 Purple = H-9459
 Brown = USGS

TP-00278

1:10,000 24

32° 02'

○ TYBEE KNOLL CUT
 RANGE FRONT LIGHT

○ Pile

Conc
 foundation

Cockspur

Fort Pulaski
 National Monument

Parking

FT. PULASKI, 1963

Moat

Road on DiKe

FORT
 PULASKI

Marsh

32° 01' 30"

Bridge

SOUTH

CHANNEL

obstruction

Marsh

Marsh

32° 01' 00"

ditch

road

ditch

Marsh

LAZARETTO

Savannah
 Beach

Bridge

80° 54' 10"

80° 53' 30"

80° 53' 00"

SAVANNAH

RIVER

TP-00278

1:10,000

25

foul

rock jetty submerged at high water

Jetty ruins

Sand

foul

Sand

Sand

COMPARISON PRINT

Blue = T-12620 & T-12811
Purple = H-9459
Brown = USGS

Tybee Knoll Spit

32° 01' 30"

OLD TOWER ht= 36 (36) ft
(COCKSPUR LIGHTHOUSE, 1902)

Shoreline on H-9459
from Class I manuscript,
Shoreline was corrected in
Final Review

SAVANNAH RIVER
SOUTH CHANNEL
LIGHT 5

CREEK

LAZARETTO CREEK
LIGHT 2

Oyster shells

Marsh

Marsh

in foreshore

Grass in water

ditches

32° 01' 00"

80° 52' 30"

80° 52' 00"

80° 51' 30"