

TP-00508 ORIGINAL

TP-00508

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. ... CM-7305 ... Map No. ... TP-00508

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

Field Edited Map

LOCALITY

State ... North Carolina

General Locality ... Cape Hatteras ... Cape Lookout

Locality ... Hatteras Inlet

1974 TO 1975

REGISTRY IN ARCHIVES

DATE

TYPE OF SURVEY

SURVEY TP. 00508

DESCRIPTIVE REPORT - DATA RECORD

☒ ORIGINALMAP EDITION NO. (1)☐ RESURVEYMAP CLASS Final Review (FE)☐ REVISEDJOB PH. CM-7305

PHOTOGRAMMETRIC OFFICE

LAST PRECEDING MAP EDITION

Coastal Mapping Division, Norfolk, VA

TYPE OF SURVEY

JOB PH. _____

OFFICER-IN-CHARGE

☐ ORIGINAL

MAP CLASS _____

Jeffrey G. Carlen, CDR

☐ RESURVEY

SURVEY DATES:

☐ REVISED

19 ____ TO 19 ____

I. INSTRUCTIONS DATED

1. OFFICE

2. FIELD

Aerotriangulation Sep. 3, 1974

Jan. 10, 1974

Compilation Nov. 6, 1974

Mar. 5, 1975

II. DATUMS

1. HORIZONTAL:

☒ 1927 NORTH AMERICAN

OTHER (Specify)

2. VERTICAL:

☒ MEAN HIGH-WATER
☒ MEAN LOW-WATER
☐ MEAN LOWER LOW-WATER
☐ MEAN SEA LEVEL

OTHER (Specify)

3. MAP PROJECTION

~~Polyconic~~*Lambert Conformal*

4. GRID(S)

STATE
North Carolina

ZONE

5. SCALE

1:20,000

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	M. McGinley	Oct, 1974
METHOD: <i>Analytic</i>	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	R. Robertson	Oct, 1974
METHOD: <i>Calcomp</i>	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT	PLANIMETRY BY	L. O. Neterer	Feb, 1975
COMPILATION	CHECKED BY	G. Vanderhaven	Feb, 1975
INSTRUMENT: <i>Wild B-8</i>	CONTOURS BY	NA	
SCALE: <i>1:15,000</i>	CHECKED BY	NA	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	C. Parker	Feb, 1975
	CHECKED BY	A.L. Shands	Feb, 1975
METHOD: <i>Smooth drafted</i>	CONTOURS BY	NA	
	CHECKED BY	NA	
SCALE: <i>1:20,000</i>	HYDRO SUPPORT DATA BY	NA	
	CHECKED BY	NA	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	A.L. Shands	Feb, 1975
	BY	D. Butler	Apr, 1975
6. APPLICATION OF FIELD EDIT DATA	CHECKED BY	F. Margiotta	May, 1975
	BY	F. Margiotta	May, 1975
7. COMPILATION SECTION REVIEW	BY	A. L. Shands	Oct, 1976
8. FINAL REVIEW	BY	A. L. Shands	Jan., 1977
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY		
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	<i>R. T. CATDR</i>	<i>MAR, 1977</i>

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

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" & RC-10 "C"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR X (P) PANCHROMATIC (I) INFRARED X		ZONE	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Eastern	
				MERIDIAN	
				75th	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
74E(C) (1)4431 - 4436	Apr 1,74	13:29	1:30,000	1.7 ft. above MLW	
* 74C(C) (1)8818 - 8820	Apr 1,74	14:20	1:60,000	+0.2 ft. of MHW	
* 74C(C) (1)8884 - 8887	Apr 3,74	10:15	1:60,000	+0.2 ft. of MLW	

REMARKS *Tide coordinated photographs

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was compiled graphically from the above listed tide coordinated photographs taken at MHW.

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

The mean low water line was compiled graphically from the above listed tide coordinated photographs taken at MLW.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No survey	TP-00507	No survey	TP-00510

REMARKS

TP-00508
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Tibbetts	Aug, 1974
2. HORIZONTAL CONTROL	RECOVERED BY R. Tibbetts	Aug, 1974
	ESTABLISHED BY R. Tibbetts	Aug, 1974
	PRE-MARKED OR IDENTIFIED BY R. Tibbetts	Aug, 1974
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 None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
74E(C)(1)4435	MP 54.5 NPS, 1962		
74E(C)(1)4432	FERRY, 1974		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

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)

- 2 Form 152 Control Station Identification
- 1 Form 526 Recovery Note
- 1 Form 738 Traverse Computation

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTP-00508
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.S. Tibbetts	April, 1975
2. HORIZONTAL CONTROL	RECOVERED BY R.S. Tibbetts ESTABLISHED BY None PRE-MARKED OR IDENTIFIED BY R.E. Kesselring	April, 1975 April, 1975
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 R.S. Kesselring LOCATED (Field Methods) BY None IDENTIFIED BY R.S. Kesselring	April, 1975 April, 1975
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY R.S. Kesselring	April, 1975
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

N. A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

74C(C)(1) 8885

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
74C(C)(1)8884	HATTERAS INLET STATION RADIO BEACON		
74C(C)(1)8885	TANK		

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 Field Edit Ozalid

2 Form 526a Recovery Note

1 Field Edit Report

2 Form 152 Control Station Identification

6 Form 76-40 Nonfloating Aids and Landmarks

NOAA FORM 76-36D
(3-72)TP-00508
RECORD OF SURVEY USEU. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit	Feb, 1975	Class III manuscript	Mar 7, 1975	Feb 24, 75
Field edit applied compilation complete	Apr, 1975	Class I Manuscript	May 12, 1975	
Final Review	Oct., 1976		Feb. 8, 1977	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		May 15, 75	Landmark for Charts
1		May 15, 75	Aids for Charts
1		May 15, 75	Landmarks for deletion
1		May 15, 75	Aid for Deletion

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: May 15, 19753. ☐ 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 76-40 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	

35°20'00"

35°15'00"

35°10'00"

TP-00509

TP-00507

TP-00508

35°05'00"

TP-00510

35°00'00"

75°40'00"

TP-00511

TP-00512

34°50'00"

34°48'00"

75°05'00"

TP-00513

34°40'00"

34°38'00"

TP-00514

JOBS JOB CM-7210
NORTH CAROLINA
SHORELINE MAPPING
SCALE 1:50,000

Official Mileage for Cost Accounts

Sheet No. Sq. Miles

TP-00507	8
TP-00508	4
TP-00509	4
TP-00510	6
TP-00511	3
TP-00512	6
TP-00513	4
TP-00514	6

Total 41

JOB CM-7305

CAPE HATTERAS TO CAPE LOOKOUT

NORTH CAROLINA

SHORELINE MAPPING

SCALE 1:50,000

RESTRICTED
R-5306A

SEANQUARTER NATIONAL
WILDLIFE REFUGE

02

76°10'00"

76°

76°25'00"

76°15'00"

75°00'00"

CANYON ZONE

76°

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORTS

TP-00507 thru TP-00514

Project 7305 is the most northerly of several projects which make up the Southern Coastal Plains Expedition (SCOPE). It consists of eight (8) 1:20,000 scale manuscripts covering the outer coastline from Cape Hatteras south to a position just north of Cape Lookout. The original instructions dated November 6, 1974 Item 5.01 called for the compilation of "standard shoreline maps". None of the manuscripts in this project can be considered "standard shoreline maps" because in each case only the outer shoreline which borders the Atlantic Ocean was delineated.

To facilitate bridging and the setting of stereo models on the Wild B-8 stereo-plotter it was necessary to fly photography at 1:15,000, 1:20,000 and 1:30,000 scales because most of the area consists of a very narrow coastal band. In addition, 1:60,000 scale tide coordinated ^{stereod} photography was flown at mean high and mean low water from which the mean high and mean low water lines were graphically delineated. (See Item 31 of the Compilation Report). All photography was taken with the RC-8 and RC-10 cameras using color infrared film.

Field work prior to compilation consisted of pre-marking and recovery of horizontal control for bridging and the observation and recording of tide data.

Bridging was done in the Rockville office using the Wild STK-1 in October, 1974. Ratio prints of the 1:60,000 scale tide coordinated photography were ordered at that time.

Compilation was done at the Atlantic Marine Center in April, 1975. Models of the bridging photography were set on the Wild B-8 stereo-plotter from which details above the MHWL were compiled and points common to the tide coordinated ratios were dropped. The MHWL and MLWL were delineated graphically using the tide coordinated ratios supplied for that purpose.

Field edit was accomplished during February through April, 1975.

Final review was done in October, 1976 at the Atlantic Marine Center.

The original stabilene base manuscripts, each 10 minutes in latitude and 10 minutes in longitude, were forwarded to the Rockville office for reproduction of registration copies.

No field inspection report was submitted.

PHOTOGRAMMETRIC PLOT REPORT
Job CM-7305
Cape Hatteras to Cape Lookout
North Carolina
October 1974

21. Area Covered

This project covers the shoreline from Cape Lookout to just north of Cape Hatteras. Included are eight T-sheets (TP-00507 thru TP-00514). All sheets are 1:20,000 scale.

22. Method

Five strips of color IR photography with varying scales were bridged on the Wild STK-1 in order to obtain pass point positions and exact scale ratios to be used during compilation.

Strip 1 (1:15,000 scale) was adjusted on four field-identified triangulation stations with one additional triangulation station and two tie points as checks. Strip 2 (1:20,000 scale) was adjusted on five field-identified triangulation stations with three additional triangulation stations and six tie points as checks. Strip 3 (1:30,000 scale) was adjusted on three field-identified triangulation stations with one additional triangulation station and four tie points as checks. Strip 4 (1:30,000) was adjusted on four field-identified triangulation stations and one tie point with five additional triangulation stations and nine tie points as checks. Strip 5 (1:15,000 scale) was adjusted on three field identified triangulation stations and one tie point with seven additional triangulation stations and five tie points as checks. All adjustments were performed on the IBM 6600. All sheets were ruled and plotted on the Coradomat.

1:20,000 scale ratios were ordered.

23. Adequacy of Control

The horizontal control utilized in the adjustments held within National Map Accuracy.

24. Supplemental Data

Vertical control for bridging only was obtained from local USGS quads.

25. Photography

Photography was adequate as to overlap, definition, and coverage.

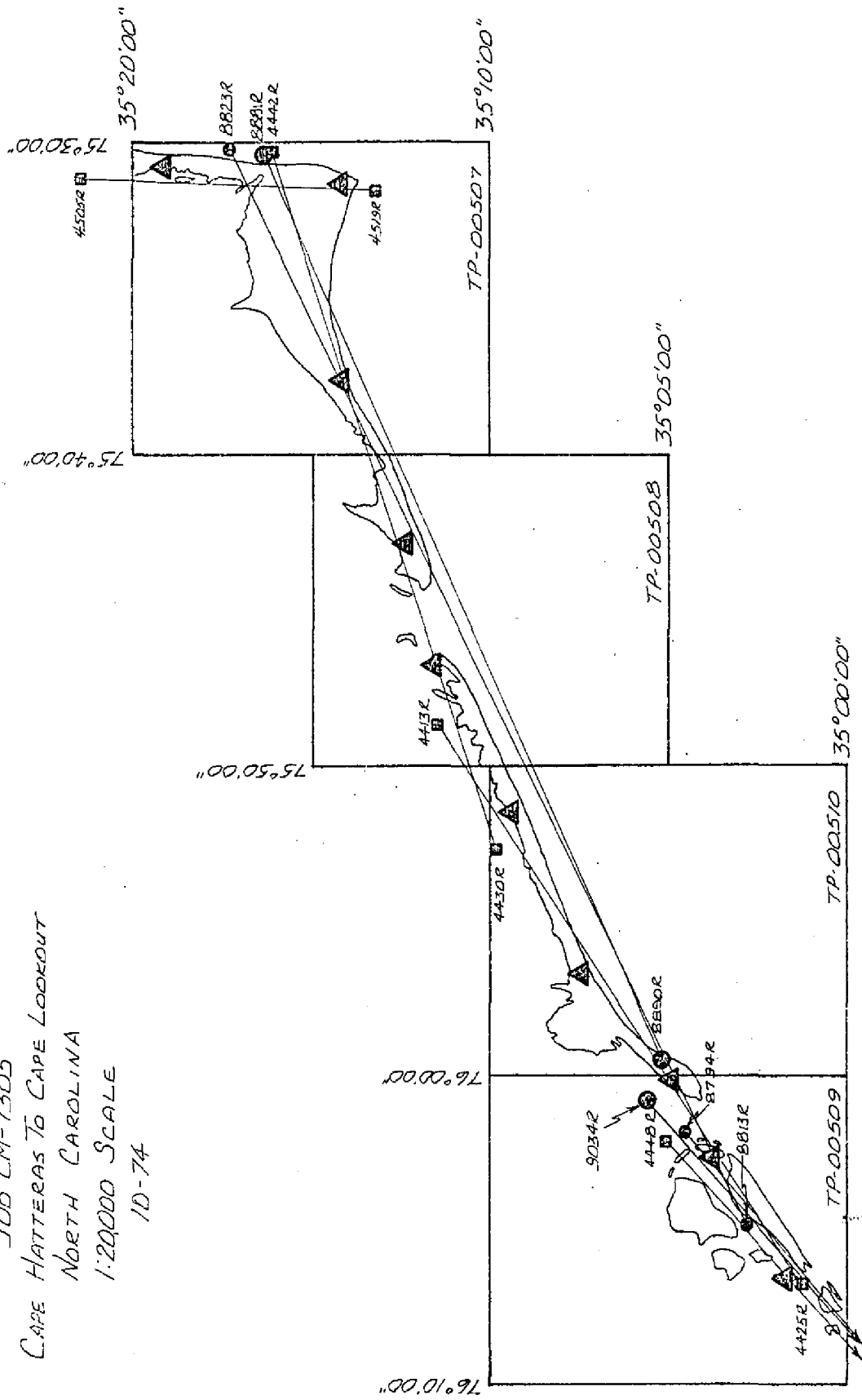
Approved by:
John D. Perrow, Jr.
John D. Perrow, Jr.
Chief, Aerotriangulation Section

Submitted by:
Michael L. McGinley
Michael L. McGinley

Note to Compiler

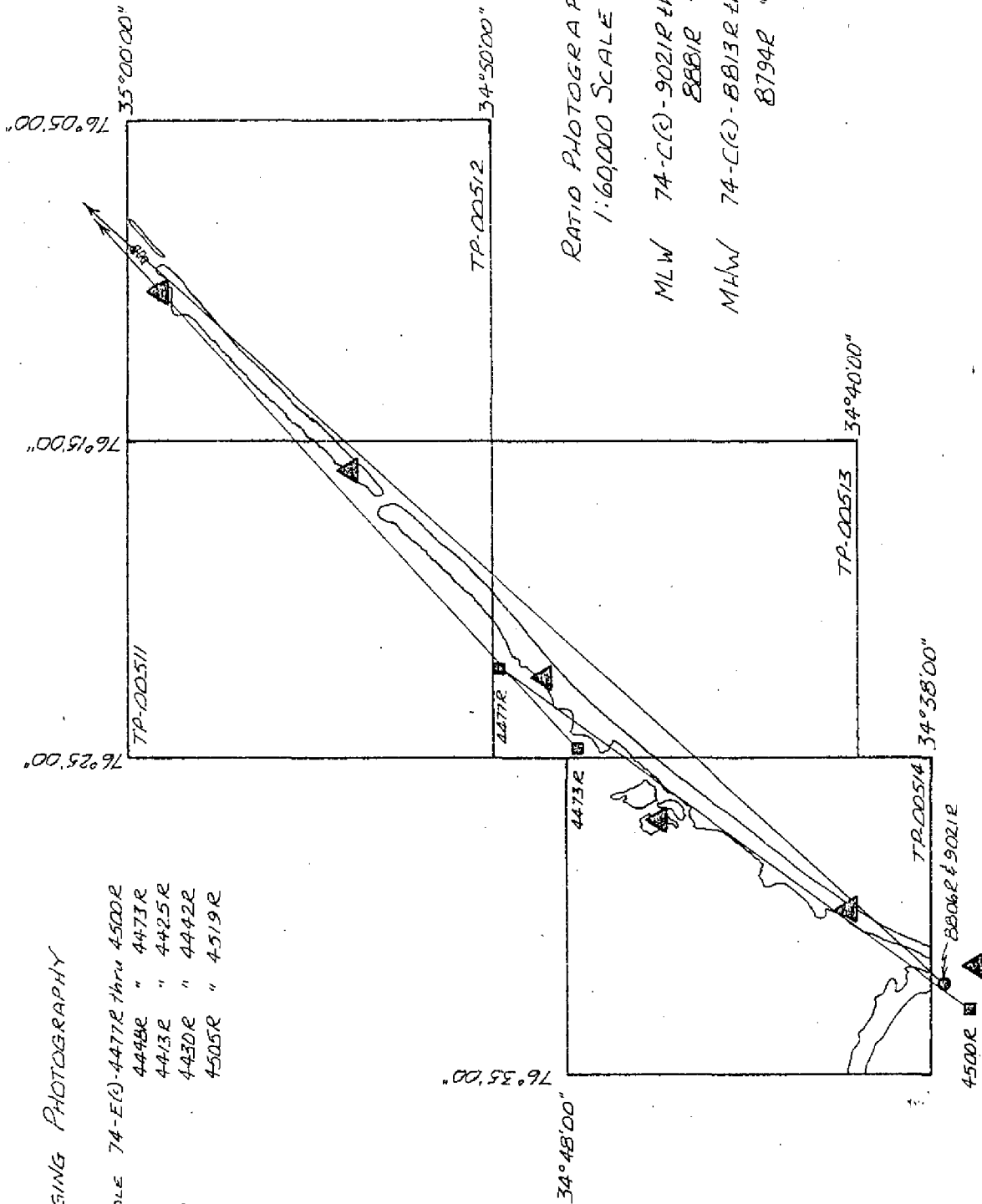
Strip 3 could not be bridged beyond model 74-E(C)-4420/4421. Image points were selected for pass points on photo 4421 to be used for scaling and orientating the photo for delineating the point of land not covered in the bridge. The image points selected are pricked on contact print 4421. A ratio photo of 4421 was ordered at 1:20,000.

JOB CM-7305
 CAPE HATTERAS TO CAPE LOOKOUT
 NORTH CAROLINA
 1:20,000 SCALE
 10-74



BRIDGING PHOTOGRAPHY

STRIP 1 1:150000 SCALE 74-E(1)-4477R thru 4500R
 STRIP 2 1:20000 " 4448R " 4473R
 STRIP 3 1:30000 " 4413R " 4425R
 STRIP 4 1:30000 " 4430R " 4442R
 STRIP 5 1:150000 " 4505R " 4519R



RATIO PHOTOGRAPHY
 1:60,000 SCALE

MLW 74-C(1)-9021R thru 9034R
 8881R " 8890R
 MLW 74-C(1)-8813R thru 8823R
 8794R " 8806R

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	GEODETTIC DATUM		ORIGINATING ACTIVITY		REMARKS	
			COORDINATES IN FEET STATE _____ ZONE _____	N.A. 1927	Division, Norfolk, VA	Coastal Mapping		
		SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEOGRAPHIC POSITION ϕ LATITUDE λ LONGITUDE		FORWARD	BACK	
FERRY, 1974		Field Comp. Bridge Form 164, P. 3 of 5		ϕ		9421.75	(578.25)	
				λ		1788.98	(8211.02)	
REEN, 1962		G.P. Vol III P. 3078		ϕ	35 10 27.72880	854.5	(994.5)	
				λ	75 48 05.53379	1140.0	(1378.3)	
LOOKOUT, 1962		G.P. Vol III P. 3081		ϕ	35 11 50.89308	1568.4	(280.6)	
				λ	75 43 57.44811	1453.3	(64.6)	
MP 54.5 (NPS), 1962		G.P. Vol III P. 3082		ϕ	35 12 21.66729	667.7	(1181.3)	
				λ	75 42 11.08217	280.3	(1237.4)	
HATTERAS INLET COAST GUARD LOOKOUT TOWER, 1962		G.P. Vol III P. 3093		ϕ	35 12 27.21126	838.6	(1010.4)	
				λ	75 42 22.03726	557.4	(960.3)	
				ϕ				
				λ				
				ϕ				
				λ				
				ϕ				
				λ				
				ϕ				
				λ				
				ϕ				
				λ				
COMPUTED BY	A. C. Rauck, Jr.		DATE	COMPUTATION CHECKED BY		DATE		
LISTED BY			11/7/74	F. Margiotto		11/8/74		
HAND PLOTTING BY			DATE	LISTING CHECKED BY		DATE		
			DATE	HAND PLOTTING CHECKED BY		DATE		

COMPILATION REPORT
TP-00508

31. DELINEATION:

Models of the area were set on the Wild B-8 stereoplotter using 1:30,000 scale photography. Ratios of the 1:60,000 scale tide controlled photography was also provided. Common points were dropped in the models and pricked on the ratios. These points provided control needed for the graphic delineation of the mean high water line and the mean low water line from the tide controlled ratios. There was no field inspection prior to compilation.

32. CONTROL:

See the attached Photogrammetric Plot Report, dated October, 1974.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. No drainage was delineated.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore details were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs. See Item 31 above.

36. OFFSHORE DETAILS:

The photography was of sufficient scale and quality to allow the delineation of several offshore shoal areas and the positioning of several navigational aids.

37. LANDMARKS AND AIDS:

Copies of Form 76-40 were forwarded to the field editor for additions, deletions and verifications.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the attached Form 76-36b, Item No. 5 of the Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following U.S. Geological Survey Quadrangles: Hatteras and Green Island, N. C., scale 1:24,000, dated 1950, photorevised, 1970.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following National Ocean Survey Chart: 11555, scale 1:80,000, 21st edition, dated August 31, 1974.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

A. L. Shands

A. L. Shands
Cartographer
February 21, 1975

Approved:

Albert C. Rauck, Jr.

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

ADDENDUM TO THE COMPILATION REPORT

TP-00508

FIELD EDIT

Field edit was adequate.

22 Oct. 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7305 (Cape Hatteras to Cape Lookout, N.C.)

TP-00508

Atlantic Ocean

Hatteras Inlet

Hatteras Island

Ocracoke Island

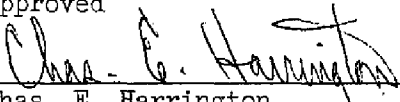
Raleigh Bay

Styron Hills

Tar Hole Plains

Hatteras

Approved


Chas. E. Harrington
Staff Geographer--C51x2

NOAA FORM 75-74
(2-74)U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T-10363
TP-00508

1. PROJECTION AND GRIDS ALS	2. TITLE ALS	3. MANUSCRIPT NUMBERS ALS	4. MANUSCRIPT SIZE ALS
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ALS	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT ALS	11. DETAIL POINTS GV
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE ALS	13. LOW-WATER LINE ALS	14. ROCKS, SHOALS, ETC. ALS	15. BRIDGES XX
16. AIDS TO NAVIGATION ALS	17. LANDMARKS ALS	18. OTHER ALONGSHORE PHYSICAL FEATURES ALS	19. OTHER ALONGSHORE CULTURAL FEATURES XX
PHYSICAL FEATURES			
20. WATER FEATURES XX		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 XX
CULTURAL FEATURES			
27. ROADS ALS	28. BUILDINGS XX	29. RAILROADS XX	30. OTHER CULTURAL FEATURES XX
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES ALS		34. JUNCTIONS ALS	35. LEGIBILITY OF THE MANUSCRIPT ALS
36. DISCREPANCY OVERLAY ALS	37. DESCRIPTIVE REPORT ALS	38. FIELD INSPECTION PHOTOGRAPHS ALS	39. FORMS ALS
40. REVIEWER <i>Arnold L. Shands</i> Arnold L. Shands Feb, 1975		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 <i>David P. Butler</i> David P. Butler Apr 30, 1975		SUPERVISOR <i>Albert C. Rauck, Jr.</i> A. C. Rauck, Jr.	
Reviewer: <i>F. Margotta</i> F. Margotta May, 1975			
43. REMARKS For sources of field edit data refer to Form 76-36C (field edit)			

FIELD EDIT REPORT
CAPE LOOKOUT TO CAPE HATTERAS, N.C.
JOB CM 7305
MAP TP-00508

52. Adequacy of Compilation

Compilation was adequate. The MHWL was accepted as compiled according to instructions received from the Chief, Coastal Mapping Division, dated May 28, 1974. No significant shoreline changes were noted during field edit. The shoreline near Hatteras Inlet is subject to continual change and was correctly labeled on the map. The two "wrecks" questioned near Ocracoke Island were left for the hydrographer as no adequate equipment to perform the investigation was available to the field editor.

54. Recommendations

None

55. Examination of Proof Copy

Geographic Names

Request for individual names investigations on this map were ignored due to the fact that geographic names for this area will be the subject of a special report to be performed during the fall of this year.

56. Landmarks and non-Floating Aids to Navigation.

One nautical landmark for this map was overlooked during compilation. It was visible on the photograph, and was indicated on the field edit ozalid and entered on forms 76-40 and 76-53 which are included with this report.

A new fixed aid, Hatteras Inlet Light, has been established on top of a former nautical landmark. The landmark, a "Lookout Tower" (LOOKOUT 1962), was deleted on form 76-40 and the new aid entered on another 76-40. The aid was indicated on the field edit ozalid and cross-referenced to form 76-53. Five fixed aids to navigation were compiled. Four of them were extant at the time of field edit and entered on form 76-40 as "position verified". The fifth aid, Hatteras Inlet South Terminal Light 3, was not extant at the time of the field edit and was deleted on form 76-40.

57. Rocks, Reefs, and Shoals.

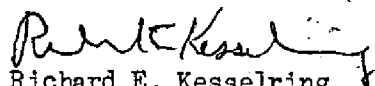
There are no rocks or reefs, as defined, within the compiled limits of this map. There are several shoals in Hatteras Inlet. As they are constantly changing, their delineation was accepted as compiled.

58. Photography.

Photography consisted of 1:20,000 ratio prints of color infrared photographs. The prints were of poor resolution and made field identification difficult.

59. Disposition of Data.

The field edit-ozalid, the film ozalid, the photographs and all pertinent data were sent to the Director, Atlantic Marine Center for proper dissemination.



Richard E. Kesselring
Surveying Technician
Photo Party 62
April 18, 1975

NONFLOATING AIDS FOR CHARTS

U.S. DEPARTMENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION

FOR CHARTS

ORIGINATING ACTIVITY

☐ HYDROGRAPHIC PARTY
☐ GEODETIC PARTY
☐ PHOTO FIELD PARTY
☒ COMPILATION ACTIVITY
☐ FINAL REVIEWER
☐ QUALITY CONTROL & REVIEW
☐ COAST PILOT BRANCH

See reverse for responsible parties

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

OPR PROJECT NO.

JOB NUMBER

SURVEY NUMBER

DATUM

TP-00508

CM-7305

N.A. 1927

DESCRIPTION

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

LATITUDE	1
	11
	D.M. Meiers

LONGITUDE

D. P. Merets

D. P. Merets

LIGHT

Hatteras Inlet South Terminal
Light 3

35-17

PT. 00	00
--------	----

75-1,5

100	46.77
-----	-------

100	46.77
-----	-------

145(0)(1)0000
1000 3 7071

145(0)(1)0000
1000 3 7071

1144
April 13, 1967

CCCTT

Aids can never be deleted
this light was not in place a

at time of field investigation

To charts
5/12/75

ROAA FORM 76-40 (18-74) Replaces CGS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NONFLOATING AIDS OR MARKERS FOR CHARTS				ORIGINATING ACTIVITY							
TO BE CHARTED (If field party, skip or office)		REPORTING UNIT (If field party, skip or office)		STATE		LOCALITY		DATE		<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)					
TO BE REVISED		Coastal Mapping Div.		North Carolina		Cape Hatteras to Cape Lookout		Apr. 1975							
TO BE DELETED		AMC - Norfolk, Va.													
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.				DATUM											
OPR PROJECT NO.		JOB NUMBER		SURVEY NUMBER		N.A. 1927									
437		CM-7305		TP-00508											
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)	LATITUDE		LONGITUDE		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED							
		°	'	°	'	OFFICE	FIELD								
LIGHT	Hatteras Inlet South Terminal Light 1	35-11	59.22	75-45	13.84	74C(C)(T)8886	V-Vis. Apr. 15, 1975		11555						
LIGHT	Hatteras Inlet Light (Superseded LUM 4917) (Lookout, 1962)	35-11	50.893	75-43	57.448	"	Triang. Rec. Apr. 15, 1975		"						
RADIO BEACON	Hatteras Inlet Station Radio Beacon	35-12	27.42	75-42	19.37	"	P-5 Apr. 17, 1975 74C(C)(T)8886		"						
LIGHT	Hatteras Inlet South Terminal Light 6	35-11	49.71	75-46	22.22	"	V-Vis. Apr. 15, 1975		"						
LIGHT	Hatteras Inlet Light 13	35-11	1532	75-44	58.74	"	"		"						
LIGHT	Hatteras Inlet Channel Light 11	35-11	46.24	75-44	1486	"	"		"						
LIGHT	Hatteras Inlet South Terminal Light 9	35-11	55.94	75-44	39.93	"	"		"						
LIGHT	* Hatteras Inlet South Terminal Light 9		1724		1010										
	* No position available. Cannot be positioned photogrammetrically. This is not a charted aid, although it is listed in the 1975 Light List.														

[illegible]

REVIEW REPORT
TP-00508

SHORELINE
October 21, 1976

61. GENERAL STATEMENT:

See Summary which is Pages 6 and 6a of this Descriptive Report.

A comparison print showing the differences noted in Paragraphs 62, 63 and 65 is included with the original of this report.

During the course of final review, it was discovered that several small sandy islands exist at Hatteras Inlet. These were symbolized on the Class I Manuscript as mere shoals with the standard dotted line symbol. Both the symbolization and positions of these features were changed on the final reviewed map. As justification, these facts are offered:

1. The features are shown on the latest Charts and U.S.G.S. Quad of the area as islands with fast shoreline symbolization.
2. Very strong and definite images of the features appear on the tide coordinated color infrared photography taken at mean high water from which the mean high water line was graphically compiled.
3. No photogrammetric pass points had been established in the area to serve as control for the graphic delineation of the features.
4. Ratios covering the area $\angle(74C(C)(I)8818$ and $74 C(C)(I)8819)$ were very small with a scale factor of .9644.

5. Realizing the possibility of placement errors which could result from this combination of factors, this reviewer employed the use of the 70A Portable Autofocusing Reflecting Projector to fit the ratio to the map scale using existing pass points as control. This resulted in a shift in the positions of the features from that shown on the Class I Manuscript.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with T-8616 n/2, T-8716 s/2 and T-8717 s/2, all 1:10,000 scale, dated 1947. Significant differences are noted on the comparison print in blue pencil.

In the area compared, TP-00508 supersedes the above mentioned surveys which are the latest registered prior surveys of the area.

The position of the piers, buildings and tower as they appear on T-8716 s/2 at Hatteras Inlet compares well with the two foul areas shown on Chart 11555. Each of these however, differ slightly with the two foul areas identified on cronapaque ratio 74 C(C)8885(I) by the field editor. It is suggested here that the features shown on T-8716 s/2 are in fact the source of the ruins, etc. currently charted and that the positions shown on the chart are probably more accurate than those shown on this map. The ruins are not visible on the photographs. The field editor did not use field methods to locate them. It is therefore, quite possible that his photo locations are in error.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with U.S.G.S. Quadrangles Hatteras, N.C. and Green Island, N.C., each scaled 1:24,000, dated 1950, photorevised 1970.

Significant differences are noted on the comparison print in brown pencil.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

No comparison was made. The contemporary hydrographic surveys were not available at the Atlantic

Marine Center at the time of final review. This reviewer was told by the Verification Branch, Atlantic Marine Center, that these surveys do not include in-shore soundings above 14 feet and therefore, would not give a good comparison.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 11555, 22nd edition, dated September 6, 1975, scaled 1:80,000. Significant differences are noted on the comparison print in red pencil.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with Office Instructions, CM-7305, dated November 6, 1974, except that it is not a standard shoreline map (See first paragraph of Summary). This map meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted:

Arnold L. Shands

Arnold L. Shands
Cartographer
October 21, 1976

Approved for forwarding:

Joseph W. Vonasek

Joseph W. Vonasek
Chief, Photogrammetric Branch, AMC

Approved:

D.K. Hargraves

Chief, Photogrammetric Branch

James C. Carter

Chief, Coastal Mapping Div.

RAS INLET SOUTH
NAL LIGHT 1

HATTERAS INLET
CHANNEL LT 14

HATTERAS INLET LT 13

Sand dunes

HATTERAS INLET LIGHT
(LOOKOUT, 1962)

Shoreline subject to
frequent change

Approx. MHWL (Unsurveyed S.L.)
on registered topo survey here.

TP-00508
Comparison Print
1:20,000 Scale

Brown line from Quad
Blue " " Topo
Red " " Chart

B A Y

NOTE:

"The photogrammetric
location and delineation of
features offshore from the
mean high-water line on this
survey may not be complete

435330

16a S

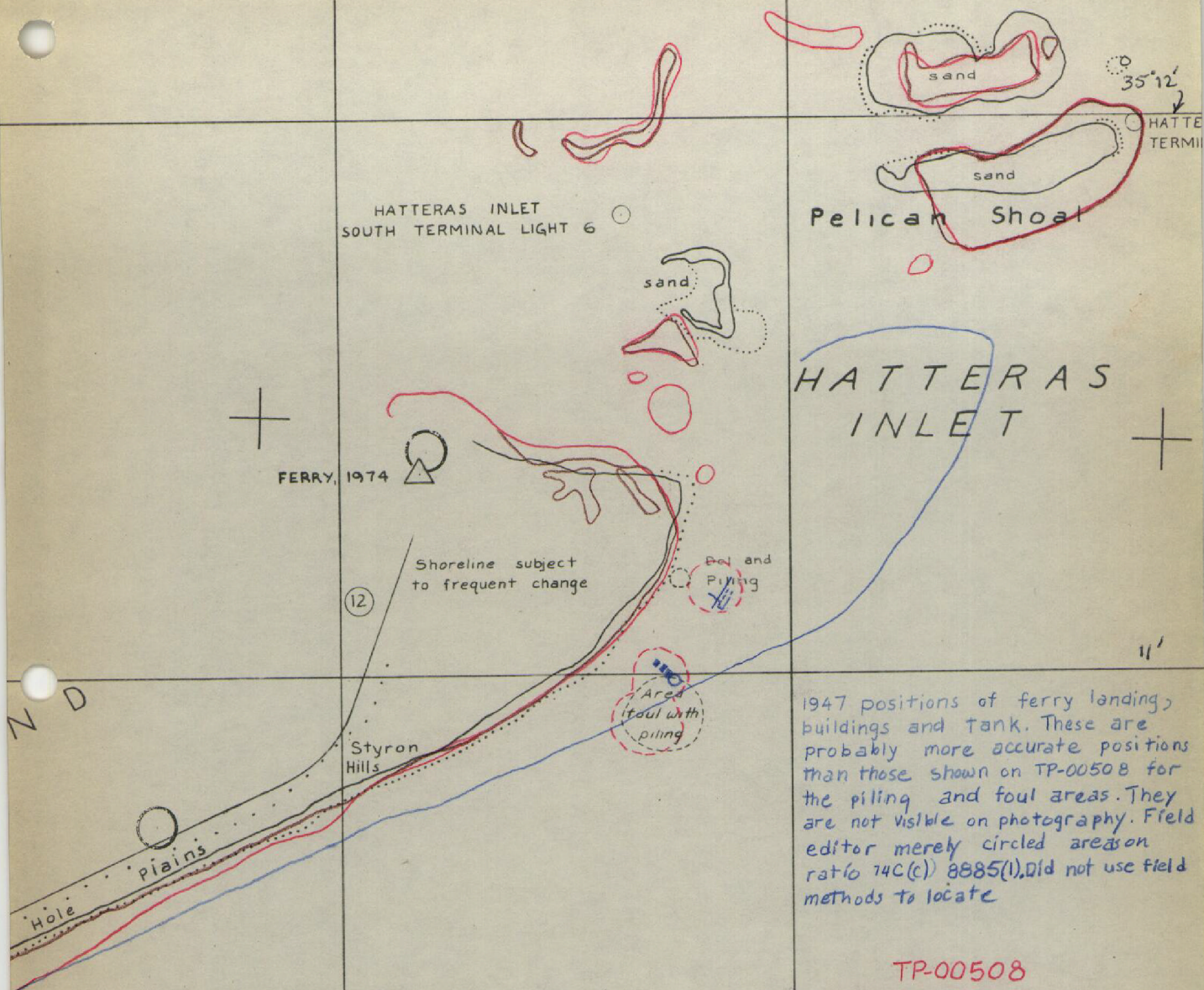
HATTERAS

35° 12'

35° 10'

75° 43'

44'



1947 positions of ferry landing, buildings and tank. These are probably more accurate positions than those shown on TP-00508 for the piling and foul areas. They are not visible on photography. Field editor merely circled area on rat 6 74C(1) 8885(1). Did not use field methods to locate

TP-00508
Comparison Print
1:20,000 Scale

Brown lines from Quad.
Blue || || Topo
Red || || chart

 $35^{\circ} 10'$ $75^{\circ} 46'$

R A L E +

35° 14'

14'

16c

436320

DURANT
1962

436330

HATTERÅS

TANK
ht = 132 (137)

13

No ponds on photos
here

Road not on photos

13'
y = 550,00N
MP 54.5 (NPS)
1962

S.L.

S.L.

35° 12'

12'

TP-00508
Comparison Print
1:20,000 ScaleBrown line from Quad
Blue || || Topo
Red || || Chart

y = 540,00

75° 42'

41'

75° 40'

35° 12'

16d

12'

Y=540,000 FT

11'

ISLA

OCRA COKE

REEN. 1962

35° 10'

10'

Y=530,000 FT

S.L. on Quad.

431330

S.L. on chart same as topo

Sand

35° 10'

12

TP-00508
Comparison Print
1:20,000 Scale

Brown	line	from	Quad
Blue			Topo
Red			Chart

75° 50'

49'

75° 48'

