

TP-00166

TP-00166

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-7004 Map No. TP-00166

Classification No. Field Edited Map Edition No.           

#### LOCALITY

State Massachusetts

General Locality Race Point To Chatham

Locality Head Of The Meadow Beach

1970 TO 1971

Alfred C. Holmes, Director, AMC

#### REGISTRY IN ARCHIVES

DATE .....

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

- ORIGINAL
- RESURVEY
- REVISED

SURVEY TP- 00166

MAP EDITION NO. ( )

MAP CLASS

JOB PH- 7004

PHOTOGRAMMETRIC OFFICE

Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE

Melvin J. Umbach, CDR, NOAA

LAST PRECEDING MAP EDITION

TYPE OF SURVEY

- ORIGINAL
- RESURVEY
- REVISED

JOB PH- \_\_\_\_\_

MAP CLASS \_\_\_\_\_

SURVEY DATES:

19\_\_ TO 19\_\_

I. INSTRUCTIONS DATED

1. OFFICE

2. FIELD

December 3, 1970  
March 5, 1971

August 12, 1970

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

4. GRID(S)

STATE  
MASS

ZONE  
Mainland

5. SCALE  
1:10,000

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS	NAME	DATE
1. AEROTRIANGULATION METHOD: Stereoplanigraph LANDMARKS AND AIDS BY	J. Perrow, Jr.	Feb. 1971
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat PLOTTED BY	P. Dempsey	Mar. 4/71
	"	Mar. 4/71
3. STEREOSCOPIC INSTRUMENT COMPILATION PLANIMETRY BY	R. White	Apr. 1/71
INSTRUMENT: Wild B-8 CHECKED BY	L. O. Neterer, Jr.	Apr. 1/71
SCALE: 1:7,500 CONTOURS BY	Inapplicable	
	"	
4. MANUSCRIPT DELINEATION PLANIMETRY BY	R. White	Apr. 13/71
CHECKED BY	L.L. Graves	May 4/71
CONTOURS BY	Inapplicable	
CHECKED BY	"	
HYDRO SUPPORT DATA BY	R. White	Apr. 9/71
CHECKED BY	L.L. Graves	Apr. 29/71
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	L.L. Graves	May 5/71
6. APPLICATION OF FIELD EDIT DATA BY	L.O. Neterer, Jr.	Mar. 1/72
CHECKED BY	R.R. White	Mar. 2/72
7. COMPILATION SECTION REVIEW BY	S. Kumer	July 30/73
8. FINAL REVIEW BY	C.H. Bishop	July 1973
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	Blonkenbaker	MAR. 1975
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	R. CATOR	JULY 1975

COMPILATION SOURCES TP-00166

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "L"		TYPES OF PHOTOGRAPHY LEGEND  (C) COLOR (P) PANCHROMATIC (I) INFRARED	TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY			ZONE Atlantic	<input checked="" type="checkbox"/> STANDARD
			MERIDIAN 75th	<input type="checkbox"/> DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
70-L-(c)-8246 and 8247	Sept. 12/70 "	11:15 EST "	1:15,000 "	3.9 ft. above MLW "
70-L-(c)-8272	Sept. 12/70	11:37 EST	1:20,000	3.7 ft. above MLW
70-L-(c)-8273 and 8274	Sept. 12/70	11:39 EST	1:20,000	3.0 ft. above MLW

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Air Photo Compilation.  
Date of Photography - Sept. 12, 1970.

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

Air Photo Compilation.  
Date of Photography Sept. 12, 1970.  
  
Proved incorrect by soundings and removed from final manuscript.

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 None	EAST TP-00167	SOUTH None	WEST TP-00165
---------------	------------------	---------------	------------------

REMARKS

HISTORY OF FIELD OPERATIONS TP-00166

I.  FIELD INSPECTION OPERATION  FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Wilson	Sept. 1970
2. HORIZONTAL CONTROL <i>* Field inspection operation</i>	RECOVERED BY E. W. Hartford	Sept. 10/70
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY E. W. Hartford	Sept. 10/70
3. VERTICAL CONTROL	RECOVERED BY Inapplicable	
	ESTABLISHED BY "	
	PRE-MARKED OR IDENTIFIED BY "	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY	
	LOCATED (Field Methods) BY	
	IDENTIFIED BY E.W. Hartford	Sept. 7/71
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 E.W. Hartford	Sept. / Oct. 71
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
70-L-(c)-8244	Truro Corner 3, 1887		
70-L-(c)-8245	High Head, 1933		
	<i>*</i>		

3. PHOTO NUMBERS (Clarification of details)  
70-L-(c)-8246 & 8272

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED  
1 Landmark, no aids on above photos.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
70-L-8272	Tank 1971		

5. GEOGRAPHIC NAMES:  REPORT  NONE

6. 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, 1 form 76-40, 7 forms 526 & 1 report in duplicate.



RECORD OF SURVEY USETP-00166

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete Pending Field Edit.	May 4, 71	Class III Manuscript		5/13/71
Field Edit Applied	Mar. 1972	Class I Manuscript		
Final Review	July 1973	Minor Corrections (CHART, MAINT. PRINT)	10/1/73	
Final Review	Aug. 1974	CHART MAINT. PRINT See below *	3/10/75	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		8/1/73	Landmarks for charting.
1		8/1/73	Landmarks to be deleted.

2.  REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_
3.  REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

III. FEDERAL RECORDS CENTER DATA

1.  BRIDGING PHOTOGRAPHS;  DUPLICATE BRIDGING REPORT;  COMPUTER READOUTS.
2.  CONTROL STATION IDENTIFICATION CARDS;  FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3.  SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:
4.  DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: Mar. 10, 1975

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

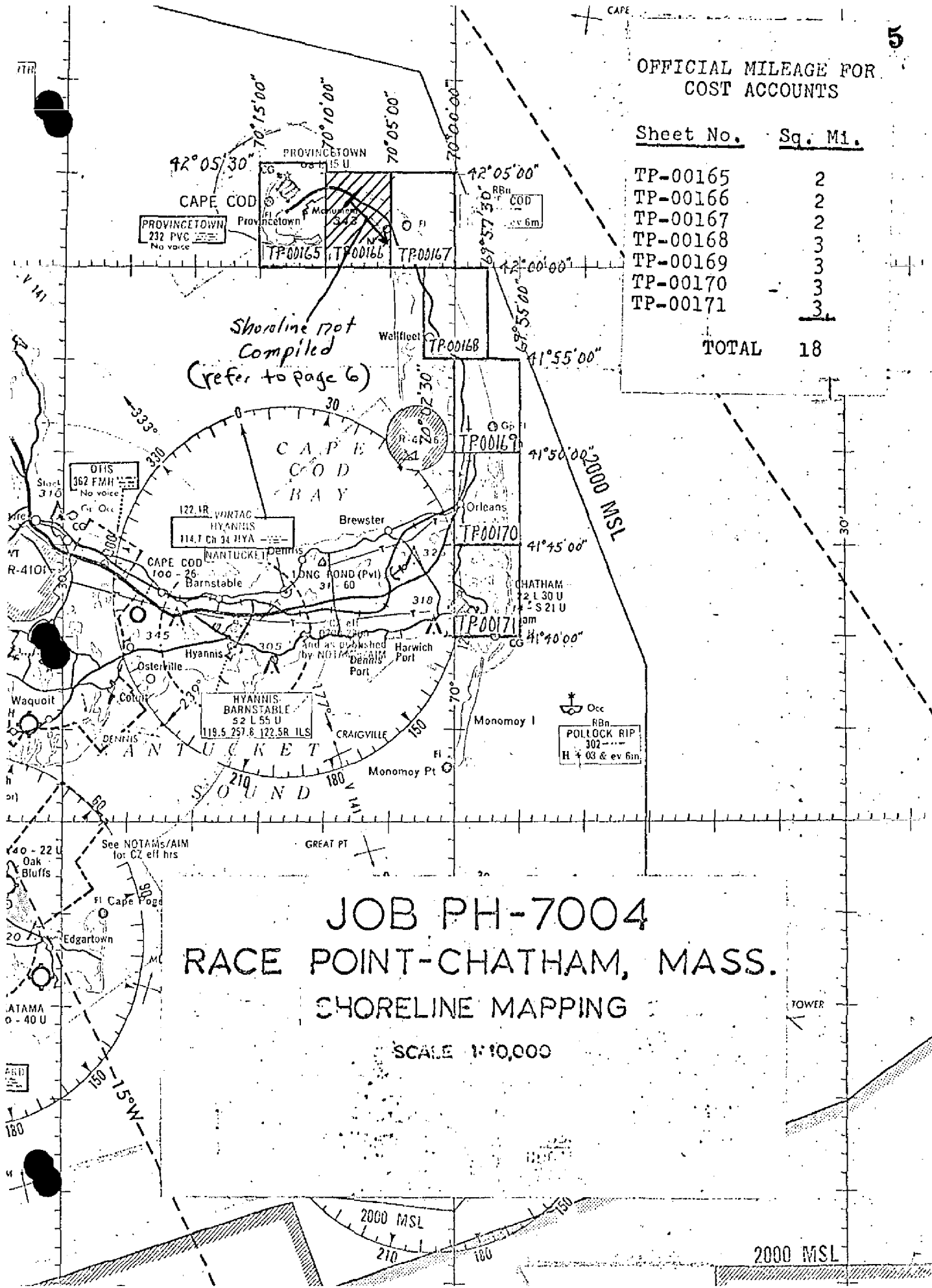
SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	<input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	<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 - _____	<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	

OFFICIAL MILEAGE FOR  
COST ACCOUNTS

Sheet No.    Sq. Mi.

TP-00165	2
TP-00166	2
TP-00167	2
TP-00168	3
TP-00169	3
TP-00170	3
TP-00171	3
<b>TOTAL</b>	<b>18</b>

*Shoreline not  
Compiled  
(refer to page 6)*



JOB PH-7004  
RACE POINT-CHATHAM, MASS.  
SHORELINE MAPPING

SCALE 1:10,000

2000 MSL

## SUMMARY TO ACCOMPANY

## DESCRIPTIVE REPORTS TP-00165 THROUGH TP-00171

These 1:10,000 scale shoreline manuscripts comprise Project PH-7004, Cape Cod, Massachusetts. The shoreline on this project is mostly sandy beach along the Atlantic Ocean. The position of the mean high water line, the mean low water line, shoals close to shore and channel into Nauset Harbor are subject to continuous change. The job index in the lower left corner of each sheet shows the location of each map in the project.

The only field work preceding compilation was the identification of horizontal control necessary for bridging.

The C-8 Stereoplanigraph was used for bridging to provide control for compilation, using 1:15,000 and 1:20,000 scale color photography taken on September 12, 1970. Compilation was by Wild B-8 Plotter in the spring of 1971. Stable base copies of the map and ratio color prints of the photographs were furnished for hydro support.

Field edit was accomplished by an experienced photogrammetrist ~~in the summer of 1970 and~~ in the fall of 1971.

Final review was done at the Atlantic Marine Center in July and August, 1973.

A cronaflex positive and a negative of the final reviewed manuscript were forwarded for record and registry.

*Note: a portion of the Cape Cod Bay shoreline covered by this map (TP-00161) was not compiled - apparently as the result of modification of the requirements for hydro-support, since it is not accounted for in reports and instructions. MS*

PH-7004

TP-00166

FIELD INSPECTION REPORT

There was no field inspection prior to compilation.

Photogrammetric Plot Report  
Race Point - Chatham, Massachusetts  
Job PH-7004  
February 1971

21. Area Covered

The project covers part of Cape Cod, Massachusetts, from Race Point to Chatham. Included in the area are sheets TP-00165 thru TP-00171.

22. Method

Five bridges were run on the C-8 Stereoplanigraph to provide control for compilation, and ratio points for the offshore photography. All strips were adjusted on the IBM 1620. Strip # 1 (70-L(C)-8200 thru 8214) was adjusted on four triangulation stations with companion points, and four additional triangulation stations as checks. This adjustment did not give the best results, since it did not hold the two central points by approximately seven feet. However, the strip was balanced and other control points proved that the answers were the best that could be expected with a number of weak alongshore models. Strip # 2 (70-L(C)-8221 thru 8228) was adjusted on four triangulation stations with three additional stations and six tie points as checks. Strip # 3 (70-L(C)-8238 thru 8249) was adjusted on four triangulation stations with five stations and ten tie points as checks. Strip # 4 (70-L(C)-8232 thru 8236) was adjusted on five triangulation stations with four companion points and seven tie points as checks. Strip # 5 (70-L(C)-8276 thru 8281) was adjusted on five triangulation stations with two stations and eight tie points as checks. All triangulation stations, pass points and ratio points were prepared and plotted on the map manuscripts. Vertical adjustments of these strips are only approximate and should not be relied on for vertical control.

23. Adequacy of Control

All control was adequate and complied with project instructions. All stations held within National Map Accuracy.

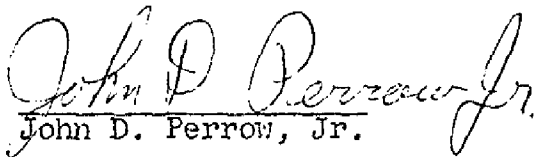
24. Supplemental Data

Local GS quads were used to provide vertical elevations for adjustments.


25. Photography

All photography was adequate as to overlap, definition and quality. Coverage by individual strips could have been changed to provide more land areas in the models.

Submitted by:

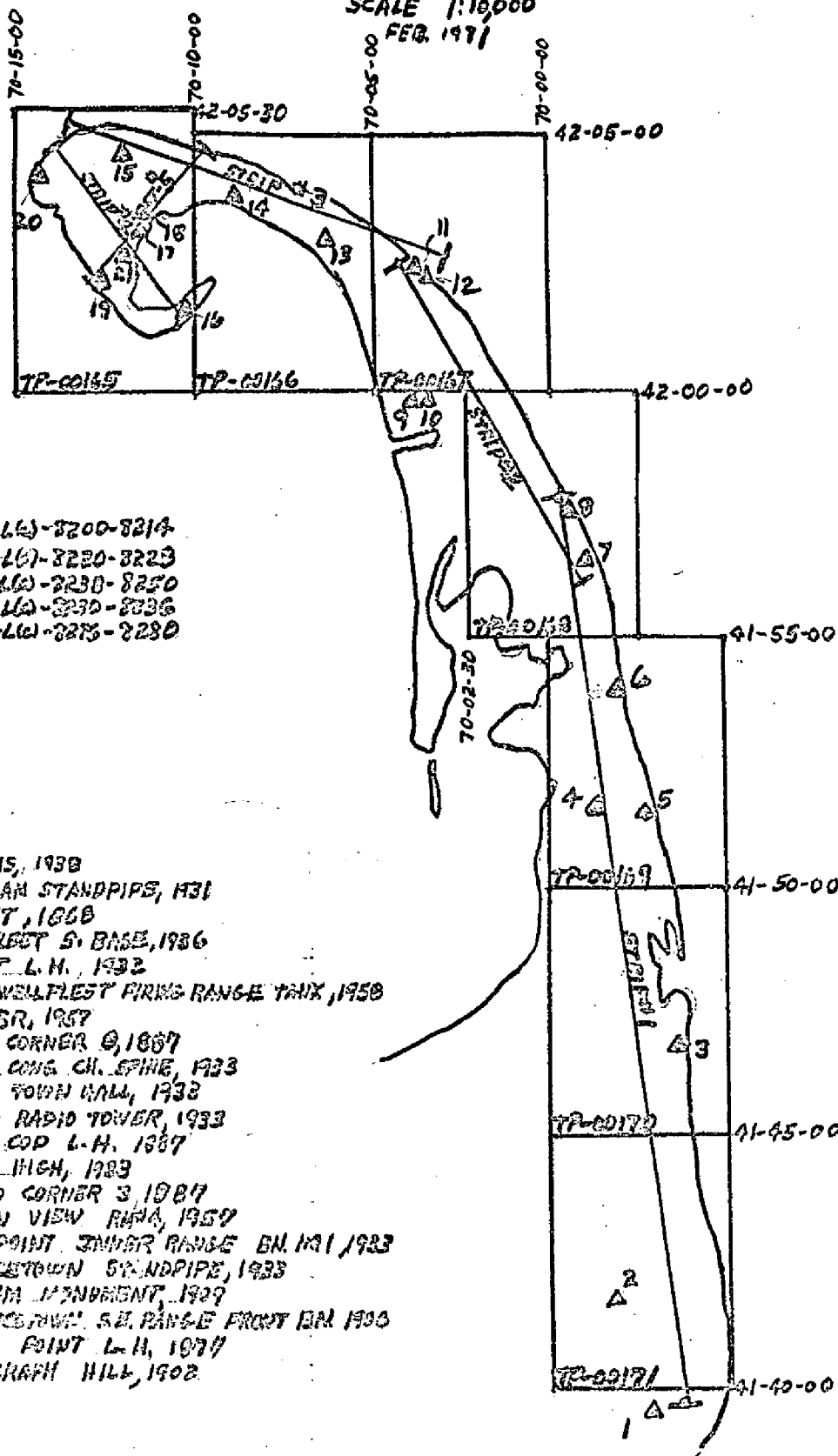
  
John D. Perrow, Jr.

Approved by:

  
Henry P. Eichert  
Chief, Aerotriangulation Section

# PH-7004 RACE POINT - CHATHAM, MASS.

SCALE 1:10000  
FEB. 1971



- STRIP#1 70-16-00-8200-8214
- STRIP#2 70-16-00-8220-8223
- STRIP#3 70-16-00-8230-8250
- STRIP#4 70-16-00-8230-8236
- STRIP#5 70-16-00-8275-8280

1. MORRIS, 1938
2. CHATHAM STANDPIPE, 1831
3. POCKET, 1868
4. WELFLEET S. BASE, 1936
5. NAUSSET L.H., 1932
6. CAMP WELFLEET FIRING RANGE TRUX, 1958
7. FRAZIER, 1957
8. TRURO CORNER 9, 1867
9. TRURO CORN. CH. SPINE, 1933
10. TRURO TOWN HALL, 1932
11. SOUTH RADIO TOWER, 1933
12. CAPE COP L.H., 1887
13. HEAD-INCH, 1983
14. TRURO CORNER 3, 1887
15. OCEAN VIEW RANG, 1957
16. LONG POINT JUNIOR RANGE BN. 1911/1923
17. PRINCETOWN STANDPIPE, 1933
18. PILGRIM MONUMENT, 1907
19. PRINCETOWN S.E. RANGE FRONT BN. 1900
20. RACE POINT L.H., 1977
21. TELEGRAPH HILL, 1902





PH-7004

TP-00166

## COMPILATION REPORT

31. DELINEATION

The B-8 Plotter was used. There was no field inspection prior to delineation. Photography was adequate except that the low water photographs were at a stage of tide too high to interpret the mean low water line accurately. The quality of the photographs was generally good.

32. CONTROL

See Photogrammetric Plot Report, dated February, 1971.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water line was delineated by office interpretation of photographs taken at about mid-stage of tide.

The foreshore area details and mean lowwater line were delineated from photographs of 3 ft. stage of tide. The mean low water line was difficult to interpret due to the 3 ft. depth of water and should be considered as approximate.

36. OFFSHORE DETAILS

Shoal areas are apparent, however as mentioned in item 35, the depth of tide above mean low water caused difficulty of interpretation of their limits. A dashed line was used to define these areas.

37. LANDMARKS AND AIDS

One Form 76-40 Landmark for Charting, one Form Landmark to be Deleted were submitted to Rockville Office on August 1, 1973.

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

See Form 76-36b, Item 5.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. FIELD EDIT

Field Edit was adequate.

46. COMPARISON WITH EXISTING MAPS

Comparisons were made with USGS Quadrangles NORTH TRURO, MA, and PROVINCETOWN, MA, scale 1:24,000, dated 1958.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart No. 580, scale 1:20,000, 5th Edition, Dec. 12, 1970.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:

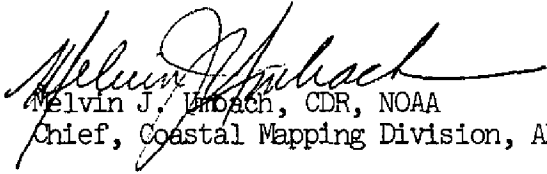
*Charles H Bishop*

*for* L. L. Graves  
Cartographic Technician


~~May 5, 1971~~

August 2, 1973

Approved for forwarding:

  
Melvin J. Urbach, CDR, NOAA  
Chief, Coastal Mapping Division, AMC

Approved:

  
Alfred C. Holmes  
RADM, NOAA  
Director, Atlantic Marine Center

July 5, 1973

GEOGRAPHIC NAMES  
FINAL NAMES SHEETS

Ph-7004 (Mass)

TP-00166

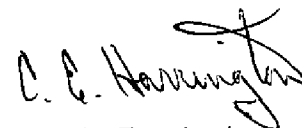
Atlantic Ocean

Cape Cod

Mayflower Heights

Pilgrim Beach

Provincetown Harbor



C. E. Harrington  
Geographic Names

FORM C&GS-1002  
(9-66)U.S. DEPARTMENT OF COMMERCE  
ESSA  
COAST AND GEODETIC SURVEYPHOTOGRAMMETRIC OFFICE REVIEW  
TP-00166

1. PROJECTION AND GRIDS LLG	2. TITLE LLG	3. MANUSCRIPT NUMBERS LLG	4. MANUSCRIPT SIZE LLG
<b>CONTROL STATIONS</b>			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LLG	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX	7. PHOTO HYDRO STATIONS XX	
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT Wash. Science Center	11. DETAIL POINTS LLG
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE LLG	13. LOW-WATER LINE LLG	14. ROCKS, SHOALS, ETC. LLG	15. BRIDGES XX
16. AIDS TO NAVIGATION XX	17. LANDMARKS XX	18. OTHER ALONGSHORE PHYSICAL FEATURES LLG	19. OTHER ALONGSHORE CULTURAL FEATURES LLG
<b>PHYSICAL FEATURES</b>			
20. WATER FEATURES LLG	21. NATURAL GROUND COVER XX		22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES
<b>CULTURAL FEATURES</b>			
27. ROADS LLG	28. BUILDINGS LLG	29. RAILROADS XX	30. OTHER CULTURAL FEATURES
<b>BOUNDARIES</b>			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
<b>MISCELLANEOUS</b>			
33. GEOGRAPHIC NAMES LLG	34. JUNCTIONS LLG		35. LEGIBILITY OF THE MANUSCRIPT LLG
36. DISCREPANCY OVERLAY LLG	37. DESCRIPTIVE REPORT LLG	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS LLG
40. REVIEWER L.L. Graves May 5, 1971		SUPERVISOR, REVIEW SECTION OR UNIT	
41. REMARKS (See attached sheet)			
<b>FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT</b>			
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 L.O. Neterer, Jr. Mar./1/1972		SUPERVISOR	
Reviewer: R.R. White Mar./2/1972			
43. REMARKS Field edit applied from: Field edit ozalid & field photographs, 70-L-(c)-8246 and 70-L-(c)-8272. 2 forms 526.			

FIELD EDIT REPORT  
Job-7004  
Race Point to Chatham Mass.  
TF-00166

This report is submitted for manuscript TF-00166 field edited September 1971. The manuscript was compiled without field inspection prior to compilation, therefore, a complete and thorough field edit was done.

All of the shoreline in this manuscript is in the National Seashore Park, it has no high bluffs; but has some very high sand dunes just north of Mayflower Heights, also some scrub oak and pine inshore.

#### 51 METHODS

Field edit was accomplished by the following methods, by skiff and truck travel and by walking sections of the shoreline.

All discrepancies on the field edit sheet have been verified directly on the sheet or referenced to a photograph. All notations on the field edit sheet and photographs have been made in violet ink.

Notations for this manuscript are on the following Photos  
70-L-8246 and 8272

#### 52 ADEQUACY OF COMPILATION

The compilation of this manuscript appeared to be adequate.

#### 54 RECOMMENDATIONS

None

#### 55 GEOGRAPHIC NAMES

No discrepancies was noted in geographic names in this manuscript.

#### 56 NAUTICAL LANDMARKS AND FIXED AIDS

Only one landmark was inspected and submitted on form 76-40 in this manuscript, there are no Aids.

#### 57 BLUFFS

Two bluffs recommended for charting are noted on the field edit sheet and referenced to a photo.

#### 58 LANDMARK BUILDINGS STREETS AND TRAILS

All corrections and additions for landmark buildings are noted on the field edit sheet and referenced to a photograph.

All street and trails corrections are made directly on the field edit sheet.

Submitted by E.W. Hartford  
Nov. 1, 1971

*E.W. Hartford*







## REVIEW REPORT TP-00166

## SHORELINE

July 11, 1973

61. GENERAL STATEMENT

See summary on page 6 of this Descriptive Report.

An ozalid comparison print is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

There was no registered topographic survey available for comparison of the Atlantic Ocean shoreline. The short stretch of shoreline bordering Provincetown Harbor was compared with T-11175, scale 1:10,000, dated 1959. Differences between the registered survey and TP-00166 were shown in blue on the comparison print.

TP-00166 supersedes previously compiled surveys of the area of nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with USGS Quadrangles PROVINCETOWN, MA, and NORTH TRURO, MA, both 1:24,000 scale and both dated 1958. Shoreline was not in agreement in this area where frequent changes occur. Differences between the quadrangles and TP-00166 were shown in brown on the comparison print.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There was no contemporary hydrographic survey in the Provincetown Harbor area of this map. The Atlantic Ocean area was compared with Boat Sheets H-9225 (PE-10-2-71) and H-9226 (PE-20-1-71). The source of the MHWL was the Incomplete Manuscript. Inaccuracies in transferring from the Incomplete Manuscript show up as differences between the two surveys. The final reviewed manuscript should be used for the smooth sheet shoreline. Soundings on the boat sheets disproved the mean low water line on TP-00166 and it was removed from the map. Differences between the hydrographic surveys and TP-00166 were shown in brown on the comparison print.



65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 580, 1:20,000 scale, 6th edition, dated October 21, 1972. Differences between this chart and TP-00166 were shown in red on the comparison print. \*

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with Project Instructions and meets the National Standards of Map Accuracy.

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer

Approved for forwarding:

*Melvin J. Umbach*  
Melvin J. Umbach, CDR, NOAA  
Chief, Coastal Mapping Division, AMC

Approved:

*Alfred C. Holmes*  
Alfred C. Holmes, RADM, NOAA  
Director, Atlantic Marine Center

Approved:

*D.K. Langford* Chief, Photogrammetric Branch  
*Wesley Hill* Chief, Coastal Mapping Division

## ADDENDUM TO REVIEW REPORT

AUGUST 1, 1974

The measurements to the MHWL, supplied by the field editor, were too widely spaced to up-date the entire shoreline and produced an illogical inconsistency. On the advice of Rockville Quality Control Authority the shoreline was re-delineated to conform to its location as of the date of photography. *Adjusted shoreline appears on the comparison sheets in ball point pen.*

*Bernard Kurs*  
Bernard Kurs  
Cartographer



70° 10' 00"

09' 30"

X=965,000 FT

70° 09'

22

42° 05' 00"

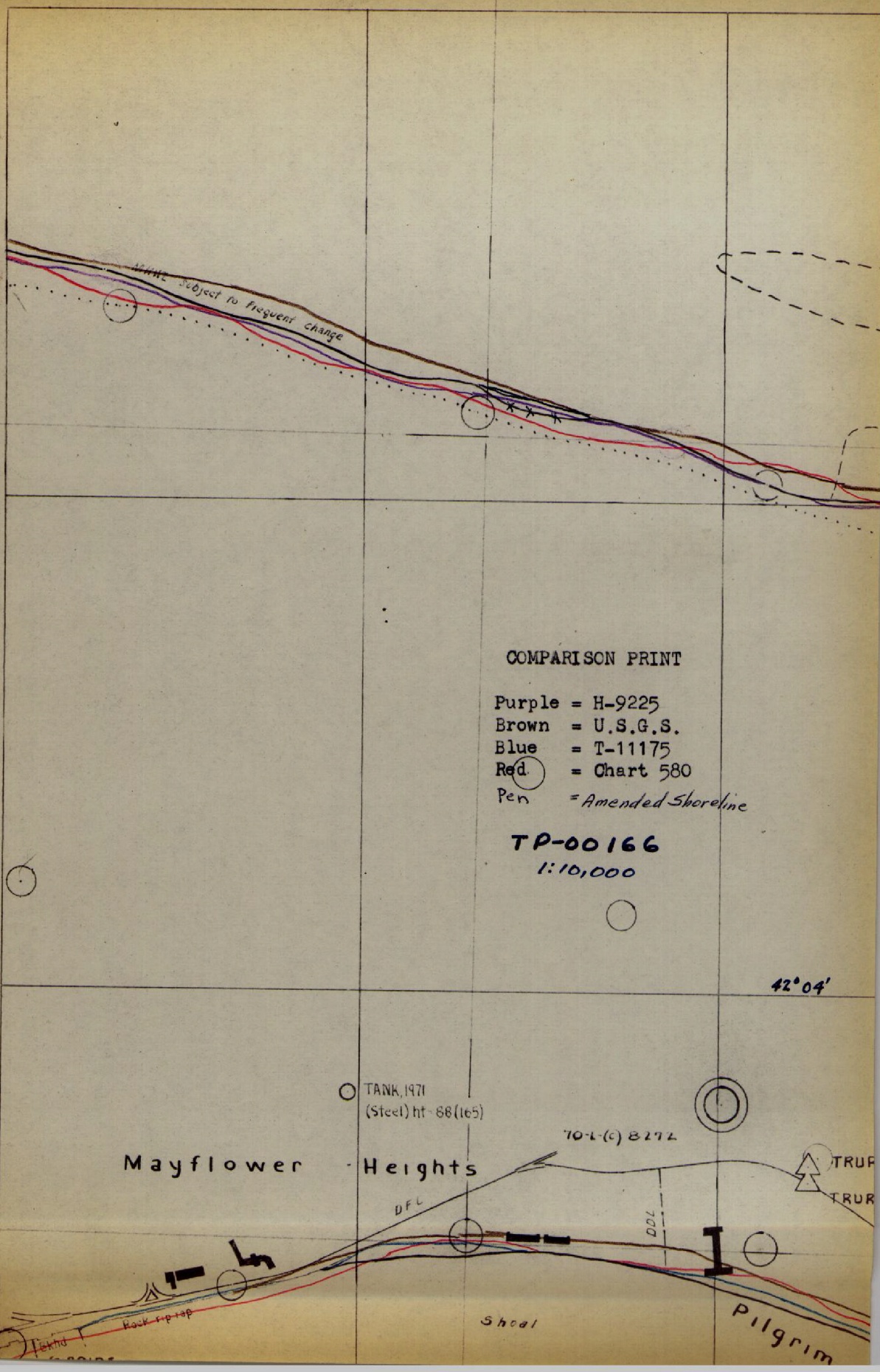
95,000 FT

04' 30"

04'

42° 04'

390,000 FT



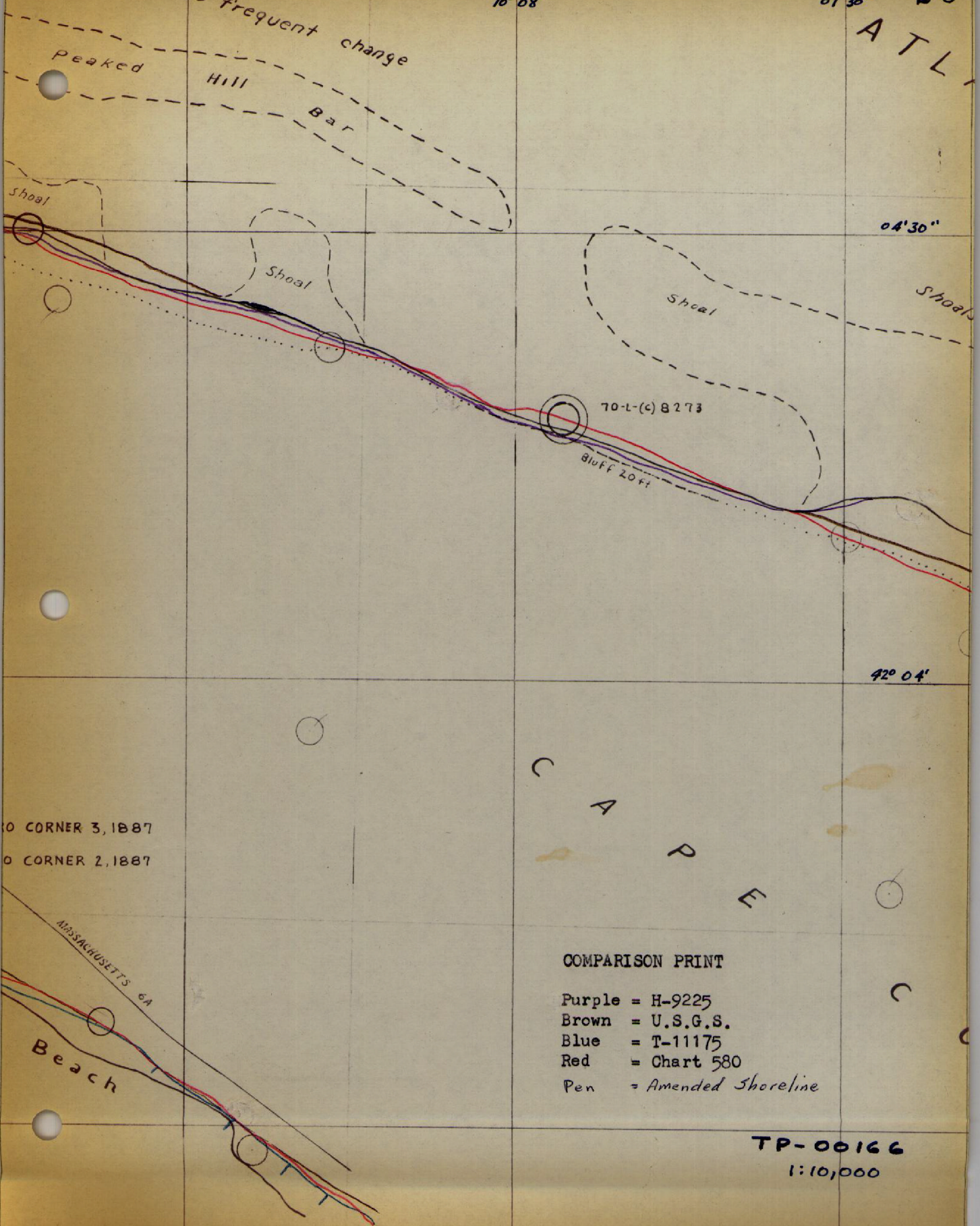


subject to frequent change

70° 08'

07' 30" 23

ATL



0 CORNER 3, 1887  
0 CORNER 2, 1887

C  
A  
P  
E

COMPARISON PRINT

- Purple = H-9225
- Brown = U.S.G.S.
- Blue = T-11175
- Red = Chart 580
- Pen = Amended Shoreline

TP-00166  
1:10,000



70° 06' 24

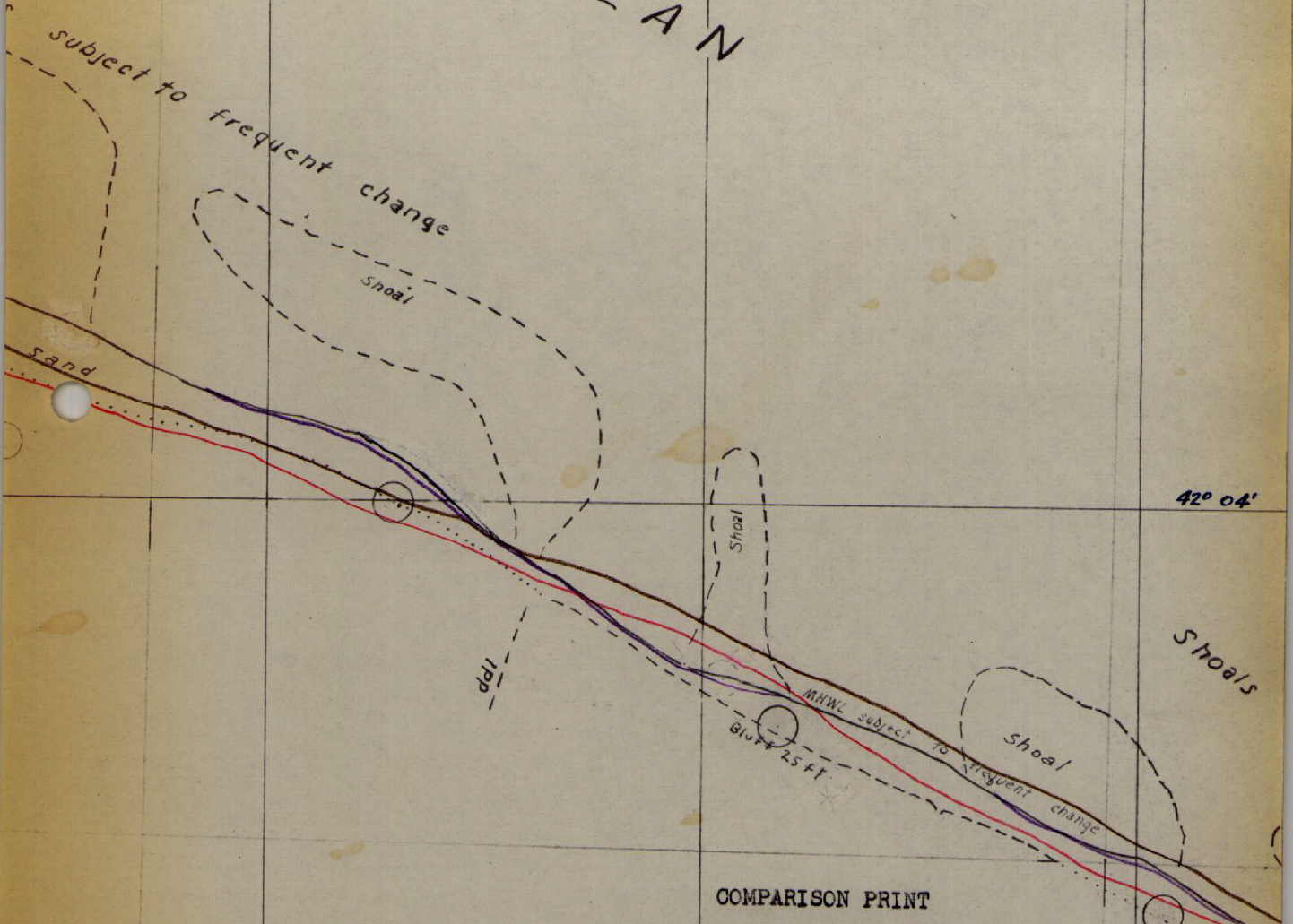
06' 30"

70-L-(c)-8274

ANTIC

OCEAN

04' 30"



42° 04'

Shoals

COMPARISON PRINT

- Purple = H-9225 & H-9226
- Brown = U.S.G.S.
- Red = Chart 580
- Pen = Amended shoreline

70-L-(c) 8246

TP-00166  
1:10,000



05'30"

70°05'

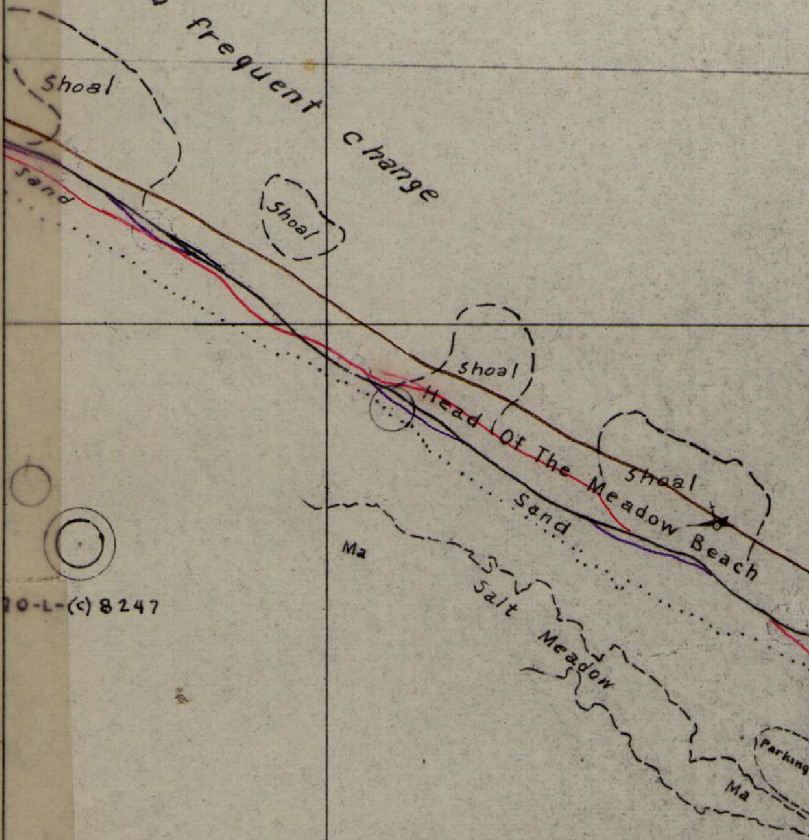
25

42°04'

Y= 390,000 FT

03'30"

subject to frequent change



70-L-(C) 8247

70-L-(C) 8248

03'

COMPARISON PRINT

TP-00166  
1:10,000

Purple = H-9226

Brown = U.S.G.S.

Red = Chart 580

Pen = Amended Shoreline

Y= 385,000 FT

70-L-(C) 8255