

# 10482

Original

Diag. Cht. No. 1210-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-163 Office No. T-10482

### LOCALITY

State Rhode Island

General locality Narragansett Bay

Locality Barrington

1954-1956

### CHIEF OF PARTY

Ira R. Rubottom Chief of Party  
William E. Randall, Balto. Dist. Officer

### LIBRARY & ARCHIVES

DATE 11 FEB 1968

COMM-DC 61300

10482

DESCRIPTIVE REPORT - DATA RECORD

- 2 -

T- 10482

Ph-163

Project No. (II): ~~25126~~ Quadrangle Name (IV):

Field Office (II): East Providence, R. I.

Chief of Party: Ira R. Rubottom

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: William E. Randall

Instructions dated (II) (III):

(II) 9 April 1956

13 March 1957

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): Kelsh plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

1:6,000 (Kelsh-pantograph ratio 3/5)

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

~~MEAN SEA LEVEL~~ MHW  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): CONNIMICUT 2, 1956

Lat.: 41° 43' 01.900" (58.6 m) Long.: 71° 21' 31.658" (731.8 m)

Adjusted  
~~USCG 1956~~

Plane Coordinates (IV):

State: Rhode Island Zone: —

Y=

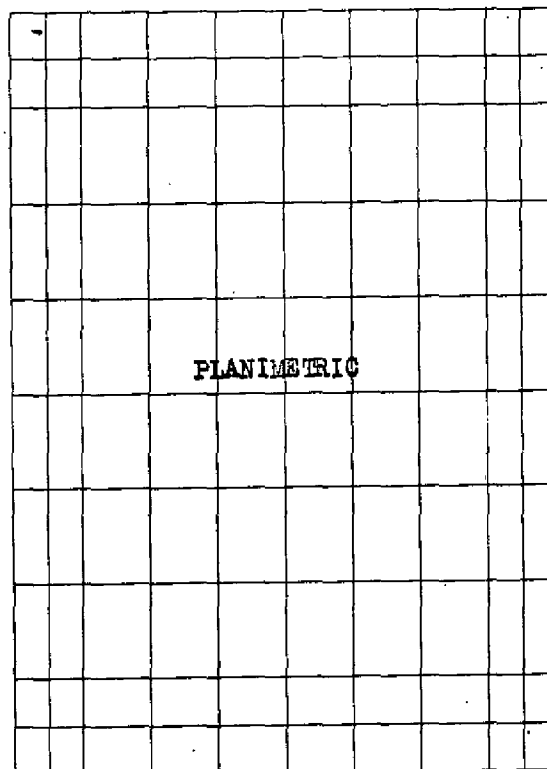
X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,  
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DESCRIPTIVE REPORT - DATA RECORD

71° 22.5'



41° 45.0'

41° 41.25'

71° 18.75'

Areas contoured by various personnel  
(Show name within area)  
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

- 4 -

Field Inspection by (II): Mathew A. Stewart  
Leo F. Beugnet

Date: May - October 1956

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

REFER TO FOOTNOTE PAGE 5

Mean High Water Location (III) (State date and method of location):

1956 (Photogrammetric)

Projection and Grids ruled by (IV): J. B. Phillips

Date: 8/7/57

Projection and Grids checked by (IV): J. B. Phillips

Date: 8/7/57

Control plotted by (III): J. C. Cregan

Date: 8/28/57

Control checked by (III): D. M. Brant

Date: 8/28/57

~~Control~~ or Stereoscopic E. L. Rolle

Date: 9/30/57

Control extension by (III):

Planimetry B. Kurs  
Stereoscopic Instrument compilation (III):

Date: 12/11/57

~~Control~~

Date:

Manuscript delineated by (III):

Date:

Photogrammetric Office Review by (III): J. W. Vonasek

Date: 10/23/59

Elevations on Manuscript  
checked by (II) (III):

---

Date: ---

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS Camera "W" 6" focal length.

- 5 -

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
56-W-207,208	5/1/56	0904	1:10,000	2.1" above MLW

Tide (III)  
(from predicted tables)

Reference Station: Newport  
Subordinate Station: Nayatt Point  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	3.5	4.4
	4.6	5.7

Washington Office Review by (IV): S.G. BLANKENBAKER

Date: ~~NOV~~ NOV. 1966

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 5  
Shoreline (More than 200 meters to opposite shore) (III): 9 st. mi.  
Shoreline (Less than 200 meters to opposite shore) (III): 2 st. mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 12 Recovered: 4 Identified: 2  
Number of BMs searched for (II): Recovered: Identified:

Number of Recoverable Photo Stations established (III): None

Number of Temporary Photo Hydro Stations established (III): See paragraph 38.

Remarks:

Two (2) third-order triangulation stations established.

FIELD EDIT:

LIMITED FIELD EDIT BY HYDROGRAPHIC  
SURVEY PARTY, H-8314

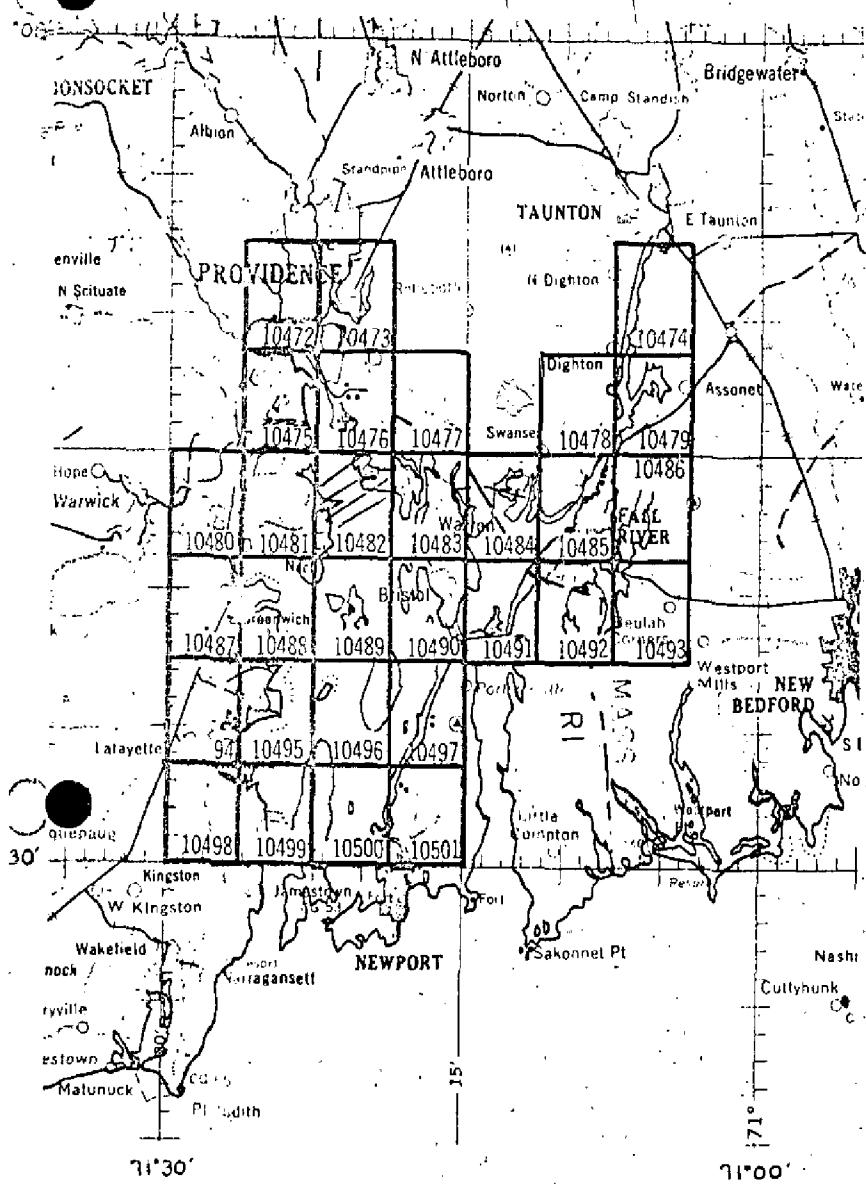
DATE: ~~1966~~  
1956

NO FIELD EDIT SHEET SUBMITTED

# PLANIMETRIC MAPPING PROJECT PH-163

Narragansett Bay, Mass.- Rhode Island

- 6 -



OFFICIAL MILEAGE FOR COST ACCOUNT		
SHEET NO.	Lin. Mi. SHORELINE	AREA SQ. MI
10472	10	12
10473	7	13
10474	- 0 -	14
10475	8	10
10476	6	11
10477	2	13
10478	1	13
10479	7	12
10480	2	13
10481	4	13
10482	8	4
10483	6	11
10484	8	8
10485	8	10
10486	7	10
10487	3	13
10488	6	6
10489	7	3
10490	8	7
10491	8	6
10492	4	11
10493	3	13
10494	2	13
10495	5	6
10496	5	4
10497	5	7
10498	- 0 -	14
10499	10	7
10500	6	4
10501	2	13

TOTALS 158 294

- 7 - 6

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS  
T-10477, T-10481, T-10482 and T-10483

Job PH-163 is a planimetric survey project comprised of thirty maps covering Narragansett Bay, Rhode Island-Massachusetts.

A complete field inspection preceded compilation. Limited field edit was accomplished in conjunction with contemporary hydrographic surveys. The project was bridged by multiplex and compiled by Kelsh plotter.

Refer to the accompanying addendum concerning adequacy and accuracy of the subject maps and recommendations regarding future surveys.

Cronaflex copies of the maps will be registered.

- 8 - 7

ADDENDUM TO SUMMARIES TO ACCOMPANY  
JOB PH-163 MAPS T-10472 through T-10501  
(ACCURACY AND FUTURE SURVEYS)

Most of the project maps were used in contemporary hydrographic survey operations. Four hydrographic surveys accomplished in the period of time between 1943 and 1955 cover the project area outside the areas of contemporary surveys.

The contemporary hydrographic surveys have been registered. With one exception they are classified "basic". Survey H-8367 is classified as "basic for charting only".

Considerable difficulty was experienced during smooth plotting and verification of some hydrographic surveys in using signals located by plane table methods. Many of the objects were identified on field photographs by the plane table party. Field identification of these objects was re-examined in the Baltimore Office, Compilation Unit. Some of the objects were relocated photogrammetrically and this revised information was furnished for use in smooth plotting.

The Norfolk Processing Office Addendum to Accompany Survey H-8316 mentions difficulties experienced when plotting sextant angles locating piles, piers, shoreline changes, etc. -- they were seldom in agreement with photogrammetric manuscript positions. The Washington office verifier was unable to adjust the subject information using the available hydrographic data. To assist in resolving the discrepancies, the Photogrammetry Division (Washington Office Review Group) rechecked signal locations on Maps T-10472, T-10473, T-10475 and T-10476. Fifty-seven signal locations and random portions of shoreline were revised by graphic methods using available field photographs that included field identified primary control and signals. This additional work is subject to error due to the condition of the photographs and the more limited use of project control; many discrepancies between the surveys, however, were resolved by using the revised information. No requests for similar rechecks were made by verifiers of other hydrographic surveys.

In part, the problems encountered in survey H-8316 (and H-8394) during hydrography and by verifiers can be attributed to the enlargement of these photogrammetric maps from 1:10,000 to 1:5,000 scale for use in hydro support. Similar problems on

-9-6  
R

other hydrographic surveys were attributed, in part, to incorrect transfer of signals, substandard plotting and use of weak sextant fixes.

Control for project bridging (multiplex) was classified "over abundant" (150 stations). While 25% of the stations were "difficult to see", only two stations were not held. Pass points between strips were averaged-adjustment less than 0.5 mm.

In addition to the previously mentioned supplemental work (relocation of signals and shoreline), two stereoplanigraph models were set to test horizontal map accuracy. The models covered parts of maps T-10472 and T-10473. A datum difference was found to exist between Bureau control and MGS and USGS control. Adjustment of these difference produced no appreciable shift in map details.

Rock information mapped on some of the photogrammetric surveys was incomplete as the result of poor photography inadequately supplemented by field inspection. The hydrographer located many rocks missed on the photogrammetric survey; and, in addition, the hydrographic survey reviewers found it necessary to bring forward considerable rock information without the benefit of verification by either the photogrammetric surveys or the contemporary hydrographic surveys.

These surveys have been used, in part, for nautical charting through both direct application of details and indirectly through contemporary hydrographic surveys. As previously mentioned, all but one of the contemporary hydrographic surveys have been registered as "basic surveys". Registration of these maps is recommended. Future use of the maps for hydro support purposes is not recommended due to the previously discussed problems that were encountered. Re-bridging by analytic aerotriangulation and new mapping with new color and infrared photography is recommended.

S. G. Blankenbaker  
S. G. Blankenbaker

NOTE: POLITICAL BOUNDARIES - With the exception of the Mass. - Rhode Island State Line, none of the numerous mapped political boundaries are shown on modern charts. In consideration of the loss of some field photographs, and requests by photogrammetric office reviewers for field verification of boundaries, it is recommended that the project maps not be considered sources for political boundaries (with the exception of the state line). See

- 10 -  
- 7 - 9

FIELD INSPECTION REPORT

Project 25120

Map T-10482

Please refer to the Field Inspection Report for Map T-10480  
for all data pertaining to this map.

*Leo F. Beugnet*

Leo F. Beugnet

Cartographic Survey Aid

Approved:

*Harish y. Fitzgerald*

*for*  
Ira R. Rubottom  
Chief of Party

FIELD INSPECTION PHOTOGRAPHS -

56W-182 thru 184

56W 208 " 209

54W 1082 thru 1084

54W 1099D, 1100, 1135

PHOTOGRAPHS 56W 182, 208, 209  
WERE MISSING AT THE TIME OF  
FINAL REVIEW - APPARENTLY LOST

MAP T. 10482

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000.....

[illegible]

1 1 FT. = 3048006 METER  
A. K. Heywood  
COMPUTED BY: J. C. Richter

DATE.

3/29/57  
7/30/57

CHECKED BY:..

**Henry P. Eichert**

DATE.

8 August 1957

COMM-DC-5784

- 12 -  
- 8 - 11

COMPILATION REPORT  
Project Ph-163  
T-10482

Photogrammetric Plot Report is part of the descriptive report for survey T-10472.

31. DELINEATION

The Kelsh plotter was used for delineation.

32. CONTROL

Horizontal control was adequate.

33. SUPPLEMENTAL DATA

Final Name Standard dated 5 March 1957.  
Copy of Boat Sheet, H-8314 for comparison.  
Map of the Town of East Providence, dated February 1954.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.  
Drainage is complete.

35. SHORELINE AND ALONGSHORE DETAILS

All shoreline details are from field inspection.

The low water lines are from field inspection.

Refer to paragraph 7 of the field report regarding the location of the submerged cable in this area.

36. OFFSHORE DETAILS

Refer to paragraph 8 of the field report regarding completeness of offshore details.

37. LANDMARKS AND AIDS

Forms 567 were submitted for two aids and four landmarks to be charted.

38. CONTROL FOR FUTURE SURVEYS

Of the twenty-eight signals in the area of this survey, fifteen could be verified in the models. Their positions were in fair to good agreement with the graphic control surveys (Ph-1-C-56, Ph-1-D<sub>2</sub><sup>N</sup>-56, Ph-1-D<sub>2</sub><sup>S</sup>-56, Ph-1-E-56). Refer to the "Descriptive Report to Accompany Graphic Control Survey Sheets Ph-1-A-56 through Ph-1-N-56" submitted for this project.

No recoverable topographic stations were established.

39. JUNCTIONS

To the north with T-10476.  
To the east with T-10483.  
To the south with T-10489.  
To the west with T-10481.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The county boundaries were delineated in the vertical projector from the U.S.G.S. Bristol quadrangle. Only short portions could be delineated.

42. through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. 7½ minute quadrangle, Bristol, R.I. - Massachusetts, scale 1:24,000; edition of 1955.

Bureau Survey T-5749 (1944) date of issue, July 1949.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 278, scale 1:20,000 published Nov. 11, 1946. Revised 8/25/58.

Items to be applied to Nautical Charts immediately: None.

Items to be carried forward: None.

Respectfully submitted  
23 October 1959

Approved and forwarded

*William E. Randall*

William E. Randall  
LCDR, C&GS  
Baltimore District Officer

*Joseph W. Vonasek*  
Joseph W. Vonasek  
Super. Carto. (Photo.)

PHOTOGRAMMETRIC OFFICE REVIEW

T. 10482

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

4a. Classification label ☒

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒  
9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

40. Joseph W. Van der Aar Joseph Steinberg  
Reviewer Supervisor, Review Section of Unit

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.

S. G. BLANKENBAKER Supervisor  
Complier

43. Remarks: Nov. 1966

14.  
- 15 -

REVIEW REPORT  
Planimetric Maps  
T-10477, T-10481, T-10482 and T-10483  
November 1966

61. General Statement

These surveys provided, in part, hydrographic support data for surveys H-8313, 8314 and 8396. Changes in photogrammetric survey details, shown in red on the hydrographic surveys, were applied to the subject maps during this review.

62. thru 65. Comparisons

All prior Bureau topographic information (topographic and hydrographic surveys - and the subject maps) located in the alongshore area was evaluated by hydrographic survey parties and/or verifiers. Prior Bureau surveys were not compared with the new maps during the subject review.

Comparison was made with contemporary hydrographic surveys (refer to side headings 61 and 66, the Summary and its addendum).

Comparison with nautical charts and maps of other agencies were made by photogrammetric compilers. A number of discrepancies - involving features (school and street names and boundaries) not applicable to either hydrographic surveys or modern charts - between these surveys and USGS quadrangles were noted on discrepancy prints. These discrepancies can be disposed of only through a field check. The compilation report for project map T-10475 contains a general discussion of boundary discrepancies.

66. Adequacy of Results and Future Surveys

Hydrographic survey verifiers experienced considerable difficulty in adjusting hydrography (H-8396) and in mapping rock information. Some plane table signal positions were corrected by photogrammetric methods prior to completion of smooth sheet plotting. Refer to the Summary and its addendum included in the Descriptive Report concerning the adequacy of results and future surveys.

Reviewed by:

Approved by:

Charles Thomas  
Chief, Photogrammetric Branch

S. G. Blankenbaker  
S. G. Blankenbaker

Ralph Sobieralski FEB 05 1968  
Chief, Photogrammetry Division

John P. Boyer 2/13/68  
Chief, Marine Chart Division

16-15  
1-9-68

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-163 (Rhode Island)

T-10482

✓Allen Ledge

✓Annawomscutt

✓Barren Ledge

✓Barrington

✓Barrington Beach

✓Barrington River

✓Bay Spring

✓Bullock Cove

✓Bullock Neck

✓Bullock Point

✓Conimicut

✓Conimicut Point

✓Drown Cove

✓East Providence

✓Echo Lake

✓Highland Beach

✓Longmeadow

✓Mussachuck Creek

✓Narragansett Bay

✓Nyatt

✓Nyatt Point

✓Old Mill Creek

*Prince Hill-JA* Providence River  
*Prince Pond-JA* River View

✓Rocky Point

✓Shawomet

✓Warwick

✓Warwick Neck

✓West Barrington

Approved by:

*A. Joseph Wraight*  
A. J. Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician

**STRIKE OUT TWO**

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

**Morgan City, Louisiana**

5 February, 1957

I recommend that the following objects which have ~~(44444/4444)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(444444/444444)~~ the charts indicated.

The positions given have been checked after listing by Leo F. Beugnet

**I. R. Rubottom**

Chief of Party:

- 17- 16

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

**\* TABULATE SECONDS AND METERS**

**TO BE CHARTERED**  
**10/10/2010**

**STRIKE OUT ONE**

## MONEY/COINING/AIDS/ OR LANDMARKS FOR CHARTS

**Baltimore, Maryland**

15 October 1959

I recommend that the following objects which have ~~(not been)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(not in)~~ the charts indicated.

The positions given have been checked after listing by

**R. ELIAS**

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

\* TABULATE SECONDS AND METERS

Comm-DC 28356

NOTES TO REVIEWER

- 19 - 18

T-10482

During the photogrammetric office review some signals were transferred graphically to the worksheet for comparison. Appreciable discrepancies were noted at signals GAD (photo 54-W-1100) and POI (photo 54-W-1099D) (with Planetable Sheet E). It is believed these are due to misidentification; both are on buildings in areas where other similar buildings exist.

No field data was furnished for the TEM's at Nayatt Point.

Refer to the Notes to Reviewer T-10475 regarding boundaries in this area.

The following is furnished as Coast Pilot information:

The three marine railways at Bullock Point have capacities of 50 feet in length, 6 feet in draft and 25 tons. (photo 56-W-182)

