

10498

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-10498

LOCALITY

State Rhode Island

General locality Narragansett Bay

Locality Pettaquomscutt River

1956

CHIEF OF PARTY

Ira R. Rubottom Chief of Party

William F. Deane, Balto. District Officer

LIBRARY & ARCHIVES

DATE February 26, 1968

COMM-DC 61300

10498

DESCRIPTIVE REPORT - DATA RECORD

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T-10498

Project No. (II): **Ph-163**
~~1951/94~~ Quadrangle Name (IV):

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

Chief of Party: **Ira R. Babottom**

Photogrammetric Office (III): **Baltimore, Md.**

Officer-in-Charge: **William F. Deane**

Instructions dated (II) (III):

Copy filed in Division of
Photogrammetry (IV)

(II) **9 April 1956**
(III) **13 March 1957**

Method of Compilation (III): **Multiplex**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III): **1:10,000**

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 low water or mean lower low water~~ **MHW**
Elevations shown as (25) refer to mean high water
Elevations shown as (S) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): **REYNOLDS, 1868**

Lat.: **41° 33' 44.996" (1388.2 m)** Long.: **71° 26' 52.185" (1209.2)**

Adjusted
~~unadjusted~~

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.

FORM 181a
(4-23-54)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

71° 30.0'

41° 33.75'

PLANIMETRIC

41° 30.0'

71° 26.25'

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

DESCRIPTIVE REPORT - DATA RECORD

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Field Inspection by (I): **Mathew A. Stewart**

Date: **May - October 1956**

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

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

1 May 1956 (Date of photography)

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

Date: **5 August 1957**

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

Date: **5 August 1957**

Control plotted by (III): **E. L. Rolle**

Date: **26 August 1957**

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

Date: **4 Sept. 1957**

~~Radial Plot~~ Stereoscopic **E. L. Rolle**
Control extension by (III):

Date: **30 Sept. 1957**

Planimetry **J. C. Richter**
Stereoscopic Instrument compilation (III):
Contours ---

Date: **10 Oct. 1957**

Date: ---

Manuscript delineated by (III): **R. E. Lindauer**
(scribed)

Date: **5 June 1959**

Photogrammetric Office Review by (III): **D. M. Brant**

Date: **3. Nov. 1958**

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

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

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Number	Date	Time	Scale	Stage of Tide
56-W-143 thru 145	5/1/56	0817	1:30,000	No Tidal Waters
56 W 159	5/1/56	0828	"	1.3 above MLW

* See below

Tide (III)

Reference Station: NEWPORT, R. I.
Subordinate Station: Wickford, R. I.
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	3.5	4.4
	3.8	4.7

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

Date: DEC. 1966

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 14.0

Shoreline (More than 200 meters to opposite shore) (III):

None

Shoreline (Less than 200 meters to opposite shore) (III):

None

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 11

Recovered: 9

Identified: 5

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

None

Number of Temporary Photo Hydro Stations established (III):

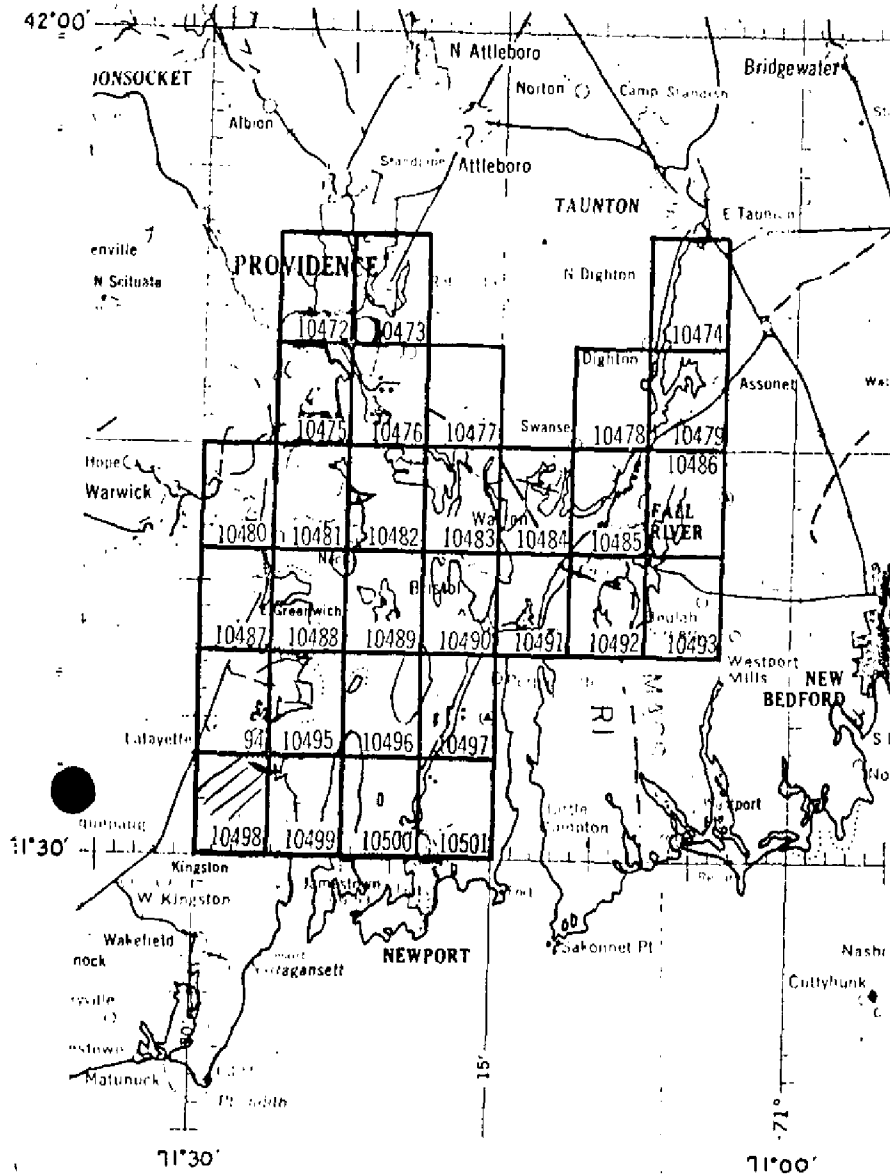
None

*
Remarks: WITH THE POSSIBLE EXCEPTION OF THE PETTAQUAMSCUTT RIVER
(UPPER REACHES ONLY SHOWN ON THIS MANUSCRIPT), MHW
LINE SHOWN ON THIS MANUSCRIPT IS LIMITED TO DUCK
AND BISSEL COVES (N.E. CORNER OF MAP).

PLANIMETRIC MAPPING PROJECT PH - 163

Narragansett Bay, Mass. - Rhode Island

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OFFICIAL MILEAGE FOR COST ACC

SHEET NO.	Lin. Mi. SHORELINE	SQ. F.
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	1	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

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SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT
T-10498

Map T-10498 is one of 30 planimetric maps comprising Job PH-163. The project covers Narragansett Bay, Rhode Island-Massachusetts. The project was field inspected prior to compilation. Map T-10498 was not field edited.

Multiplex was used for both bridging and compilation.

The addendum accompanying this Summary includes information concerning adequacy and accuracy of project maps.

A cronaflex copy of T-10498 will be registered.

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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

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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). sgs

FIELD INSPECTION REPORT

Project 25120

Map T-10498

Please refer to the Field Inspection Report for Map T-10494
for all data pertaining to this map.

Mart. C. Moody
Martin C. Moody
Cartographic Survey Aid

Approved:

Ira R. Rubottom

Ira R. Rubottom
Chief of Party

FIELD INSPECTION PHOTOGRAPHS -
56W 143 THRU 146
157 " 159

ALL PHOTOGRAPHS WERE MISSING
AT THE TIME OF FINAL REVIEW -
APPARENTLY LOST.

MAP T. 10498

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
INDIAN RUN, 1954	G-1068 p. 167	N.A. 1927	41 29 29.509 71 28 57.849	910.4 1341.9		South of limits	
KINGSTON CHURCH SPIRE, 1838	G-6522 p. 144	"	41 28 48.371 71 31 33.652	1492.2 780.8		South of limits	
HAMILTON POWER STATION CHY, 1912	p. 95	"	41 33 04.223 71 26 25.248	130.3 585.1			
HAMMOND (USE) 1912	G-6522 p. 134	"	41 30 53.896 71 27 14.679	1662.7 340.4			
MITCHELL (USE), 1909	p. 136	"	41 29 21.131 71 26 52.124	651.9 1209.2		South of limits	
GREEN (USE), 1909	p. 134	"	41 32 25.707 71 26 24.692	793.1 572.3			
HAMILTON MILLIS CUPOLA, 1868	p. 145	"	41 32 56.955 71 26 17.140	1757.1 397.2			
CHAMPLIN (USE) 1909	p. 136	"	41 29 41.166 71 26 49.737	1270.0 1153.7		South of limits	
CHAMPLIN 2, 1932	G-1246 p. 3	"	41 29 15.843 71 46 48.598	488.8 1127.4			
REYNOLDS, 1868	G-6522 p. 145	"	41 33 44.996 71 26 52.185	1388.2 1209.2			
MONROE (USE), 1909	p. 136	"	41 29 05.410 71 26 27.730	166.9 643.3		South of limits	
JOHNSON (USE), 1909	p. 136	"	41 29 42.137 71 26 18.930	1300.0 439.1		South of limits	

1 FT. = 3048006 METER
COMPUTED BY J. C. Richter

DATE 19 July 1957

CHECKED BY: Henry P. Eichert

DATE 1 Aug. 1957

COMM. DC-57843

FACTOR DISTANCE
FROM GRID OR PROJECTION LINE
IN METERS

FORWARD (BACK)

[illegible]

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COMM-DC-57843

COMPILATION REPORT
Survey T-10498
Project Ph-163

The photogrammetric plot report for this survey is part of the descriptive report for Survey T-10472.

31. DELINEATION

The delineation was done by multiplex.

32. CONTROL

Horizontal control was adequate.

Vertical control is inapplicable.

33. SUPPLEMENTAL DATA

Final Name Sheet dated 5 March 1957.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage is complete.

35. SHORELINE AND ALONGSHORE DETAILS

All shoreline was field inspected and is complete and adequate.

There is no low-water line on this survey.

36. OFFSHORE DETAILS

Inapplicable.

37. LANDMARKS AND AIDS

Form 567 is submitted with this report.

38. CONTROL FOR FUTURE SURVEYS

There are no Recoverable Topographic or photo-hydro stations on this survey.

39. JUNCTIONS

Junction has been made with the following:

- To the north survey No. T-10494.
- To the east with survey No. T-10499.
- To the south with survey No. T-11432 (Ph-142)
- To the west no contemporary survey.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The town boundaries were taken from the USGS quadrangle.

42 thru 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

AMS Wickford, R. I. quadrangle, scale 1:24,000, edition of 1959.

Bureau Survey No. T-5751, scale 1:20,000.

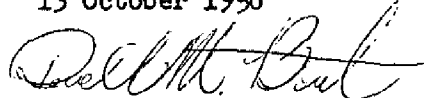
47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 236, scale 1:20,000, published 12 January 1953, revised 20 February 1956.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
13 October 1958



Donald M. Brant
Carto. (Photo.)

Approved and forwarded

William F. Deane
William F. Deane,
CDR, C&GS

Baltimore District Officer

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PHOTOGRAMMETRIC OFFICE REVIEW

T. 10498

PH 163

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

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. Donald M. Pratt Henry P. Eickert
Reviewer Supervisor, Review Section or 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.

Compiler

Supervisor

43. Remarks:

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REVIEW REPORT
Planimetric Map T-10498
December 1966

61. General Statement

Except for one inland river, this maps covers land area only. No hydrographic surveys have been accomplished in the water area.

62. Comparison with Registered Topographic Surveys

T-5751	1:20,000	1944
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Map T-10498 supersedes the prior survey for nautical charting purposes in the common area.

63. Comparison with Maps of Other Agencies

USGS Quad, Wickford	1:24,000	1957
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The maps were compared during compilation. No significant differences were noted.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

No. 263	1:20,000	dated 7/66
No. 353	1:40,000	revised 1/17/66

No significant differences were noted.


66. Adequacy of Results and Future Surveys

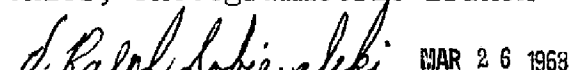
The addendum to the Summary for this report includes information concerning the adequacy and accuracy of project maps. The maps will be registered; remapping, however, is recommended for future hydrographic survey support purposes. The subject map covers only land area and is considered adequate for charting purposes.

Reviewed by:

Approved by:


Chief, Photogrammetric Branch


S. G. Blankenbaker


Chief, Photogrammetry Division

MAR 26 1968


Chief, Marine Chart Division

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GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-163 (Mass. & R. I.)

T-10498

·Allenton
·Annaquatucket River
·Annaquatucket Road
·Belleville
·Belleville Pond
·Boston Neck Road
·Boston Post Road
·Colonel Rodman Highway
·Congdon Hill
·Congdon Hill Road
·Duck Cove
·Elm Grove Cemetery
·Gilbert Stuart Road
·Hamilton
·Hamilton Allenton Road
·Hamilton Reservoir
·Hammond Hill
·Hammond Hill Road
·Indian Corner Road
·Kettle Hole Pond
·Mattatuxet River
·Mill Pond
·Narragansett

·Narragansett Bay
·North Kingstown
·Oak Hill Pond
·Oak Hill Road
·Old Post Road
·Pausacaco Pond
·Pettaquamscutt River
·Prospect Avenue
·R. I. 2
·Ridge Hill
·Saugatuckett River
·Secret Lake
·Shadylea
·Shermantown Road
·Silver Spring Lake
·Swamptown Road
·Stook Hill
·Tower Hill Road
·U. S. 1 } * see note
·U. S. 1A }
·Wannuchecomecut Brook
·West Allenton Road

Approved by:

A. Joseph Wraight
A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

* Apparently U.S. 1 and ALT. 1 at time of
compilation - Map date, 1956

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-10498

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]