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Diag. Cht. No. 9400

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

FOR OFFICIAL USE ONLY

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC
Field No. Ph-29(47) Office No. 9354 & 9355
9356 & 9357

LOCALITY

State TERRITORY OF ALASKA

General locality BEAUFORT SEA (ARCTIC COAST)
An area about 5 miles wide located 0 to 9
Localities miles interior from the south shore of
of Beaufort Sea between Kadleroshilik River
and Canning River.

1949

CHIEF OF PARTY

A. Earle, Chief of Party
W. Clark, Portland, Oregon Photogrammetric
Office

LIBRARY & ARCHIVES

DATE Nov - 6 - 1953

8-1870-1 (1)

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FOR OFFICIAL USE ONLY

DATA RECORD

T-9354 to T-9358⁷ Incl.

Project No. (II): Ph-29(47) Quadrangle Name (IV):

Field Office (II): Barter Island, Alaska Chief of Party: R.A. Earle

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: C.W. Clark

Instructions dated (II) (III): 4 February 1948 - Field

15 February 1948 - Office

14 December 1949 - Office

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): 7-20-50 Date reported to Nautical Chart Branch (IV): 7-24-50

Applied to Chart No.:

Date:

Date registered (IV): 25 Sept. 1953

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): FLAXMAN ISLAND

*(Correction figures to N.A. 1927 available, Jan. 1953)*** Difference between "level of sea ice" and Mean Sea Level not obtained.*Elev. Triangulation: *level of * Sea Ice* Unknown (Assumed)

Planimetry: Vertical Datum (III): Mean High Water)

Mean sea level except as follows:

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

See reverse side of this sheet for Corrections to Preliminary N.A. 1927 Datum. G.B.W.-10-54

Reference Station (III): (See Sub-heading 12 of Office Instructions Ph-29(47) dated 14 December 1949.)

Lat.:

Long.:

Adjusted
Unadjusted

Plane Coordinates (IV):

State:

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.

DATA RECORD

T-9354 to T-9358 Incls.

T-9354

The difference between Flaxman Island Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
126 m. and Long. plus/minus 109 m.

T-9355

The difference between F.I. Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
125 m. and Long. plus/minus 111 m.

T-9356

The difference between F.I. Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
133 m. and Long. plus/minus 112 m.

T-9357

The difference between Flaxman Island Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
139 m. and Long. plus/minus 113 m.

T-9358

The difference between _____ Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
_____ m. and Long. plus/minus _____ m.

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

DATA RECORD

Field Inspection by (II): C.A.J. Pauw and L.M. Ganoung Date: Season 1949

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): From 1949 Field Inspection Data; Shoreline indicated on boat sheets; examination of the photographs with the aid of the stereoscope, and by conference with personnel of the Arctic Party in Seattle, Washington on 1 March 1950.

Projection and Grids ruled by (IV): Washington Office (2nd ruling) Date: February 1950

Projection and Grids checked by (IV): Washington Office (2nd ruling) Date: February 1950

Control plotted by (III): R.A. Davidson and Carita Wiebe Date: 10 March 1950

Control checked by (III): R.A. Davidson, and Carita Wiebe Date: 10 March 1950

Radial Plot or Stereoscopic Control extension by (III): James L. Harris and J.E. Deal Date: 13 March 1950
(Final)

Planimetry Date:

Stereoscopic Instrument compilation (III): Contours Date:

Manuscript delineated by (III): T-9354 - F.H. Elrod
T-9355 - Carita Wiebe
T-9356 - R.A. Davidson (Final) Date: 17 March 1950 to
T-9357 - M.B. Elrod 3 April 1950
T-9358 - Helen Laube

Photogrammetric Office Review by (III): Ree H. Barron (all sheets) Date: 27 March 1950 to
(Final) 4 April 1950

Elevations on Manuscript checked by (II) (III): Ree H. Barron Date: 27 April 1950 to
4 April 1950

Camera (kind or source) (III): U.S.C. & G.S. 9 lens, focal length 8.25 inches

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
20160 and 20161	7-29-47	12:22/23	1:20,000	
20186 to 20192 Incl.		12:57/13:05	1:20,000	
20225 to 20235 Incl. 20236		14:36/46 47	1:20,000	

Note: Date and time of above photography was not furnished the photogrammetric office

Kodiak *Flaxman Id. -0.40 min, 0.1 ratio*
 H at 11:32 = 5.6 ft 10:52 = 0.56 ft
 L " 16:22 = 3.4 ft 15:42 = 0.34 ft.

Tide (III)

Reference Station: *Kodiak*
 Subordinate Station: *Flaxman Island, Arctic Ocean*
 Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal Spring Range
0.1	0.5	0.7

Washington Office Review by (IV): *Lena J. Stevens*

Date: *10 Sept 1951*

Final Drafting by (IV): *Sylvia U. Dean Breen*
Wm O. Hallin

Date: *6-29-53*

Drafting verified for reproduction by (IV): *Wm O. Hallin*

Date: *6-29-53*

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 390
 Shoreline (More than 200 meters to opposite shore) (III): 25.0 statute miles
 Shoreline (Less than 200 meters to opposite shore) (III): 128.0 statute miles
 Control Leveling - Miles (II):
 Number of Triangulation Stations searched for (II): 2 Recovered: 2 Identified: 1
 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:

Summary to Accompany T-9354 to T-9357

Planimetric project Ph-29(47) consists of 69 maps, scale 1:20,000, - 26 in Part I (Martin Point westward to Jones Islands), and 43 in Part II (Jones Islands westward to Point Barrow). The project area extends from 143° 10' to 156° 30' west longitude, Arctic Ocean coastal area (Beaufort Sea).

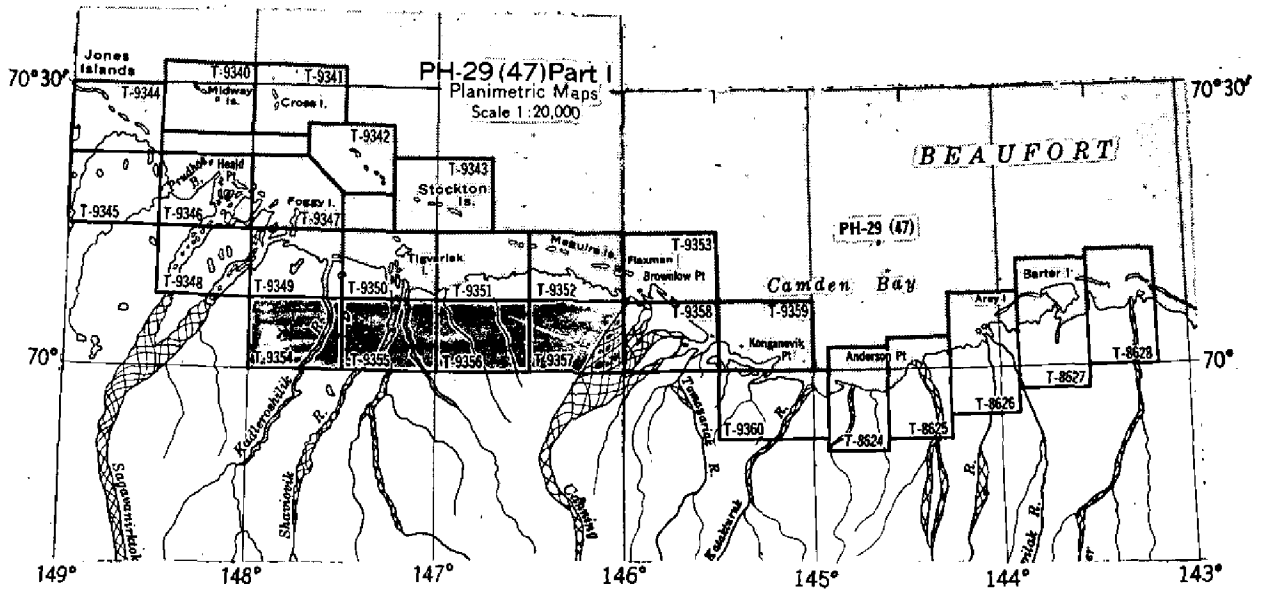
The project was designed to furnish basic surveys for special nautical charts.

T-9354 to T-9357 form part of the Part I group which covers the interior south of Beaufort Sea. They include portions of Kadleroshilik, Shaviorik, and Canning Rivers.

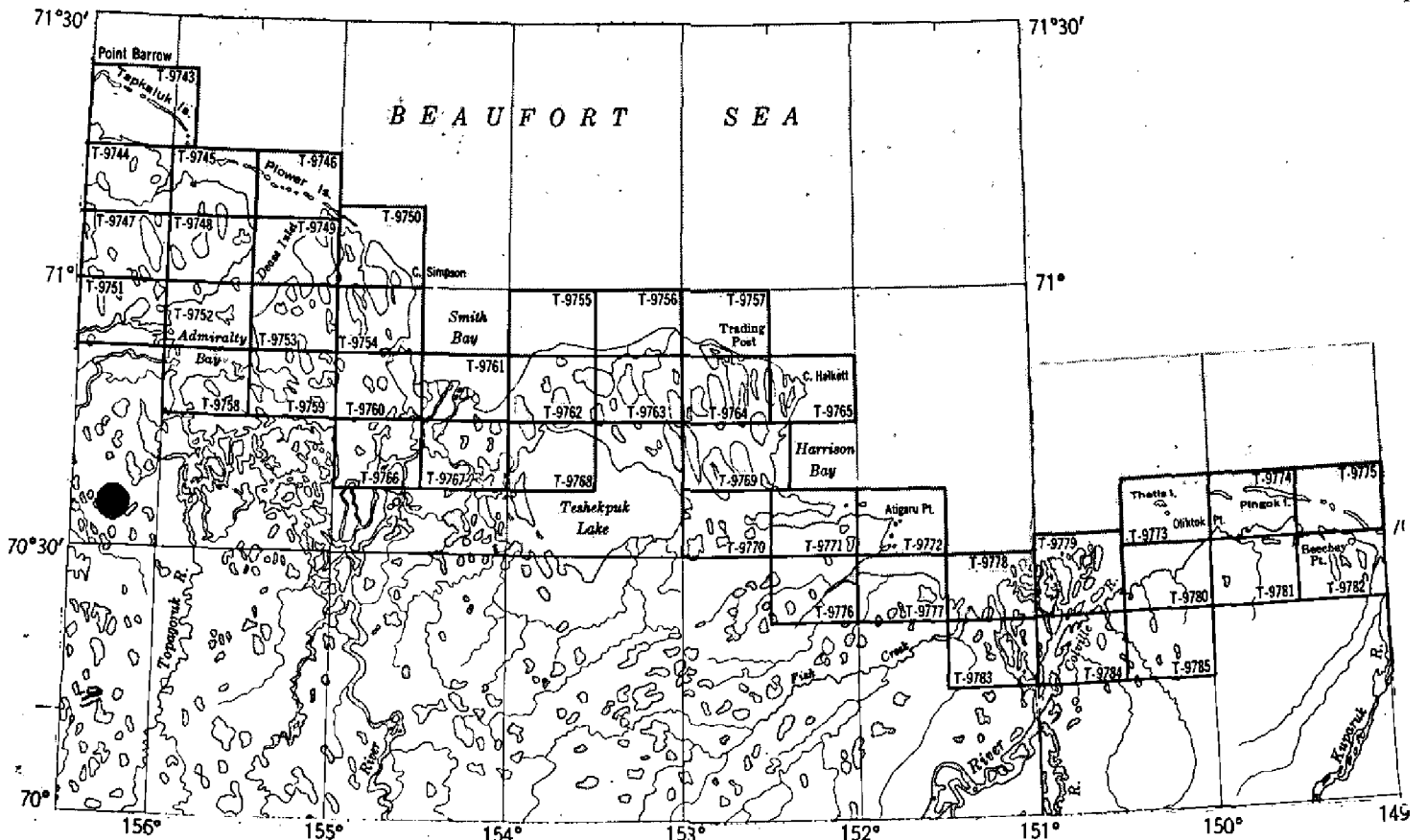
PLANIMETRIC MAPPING PROJECT PH-29 (47)

Photographs taken July 1947 Scale 1:20,000

Part I ALASKA Barter Island to Jones Islands



Part II ALASKA Jones Islands to Point Barrow



FIELD INSPECTION REPORT ⁷
Map Manuscripts T-9354 to T-9358 Incl.
Project Ph-29(47)

The photogrammetric office was not furnished a detailed field inspection report for Project Ph-29(47).

There are certain field inspection data included in a report submitted by the Arctic Party entitled: "Photogrammetric Control Station Identification, Return Island to Brownlow Point, Arctic Coast, Alaska, Project CS 320, 1949".

Filed in Archives with Completion Report.

PHOTOGRAMMETRIC PLOT REPORT⁷
Map Manuscripts T-9354 to T-9358 Incl.
Project Ph-29(47)

Facts relative to the radial plot for these map manuscripts are contained in a Photogrammetric Plot Report for Map manuscripts T-9344 to T-9358 Incl., (1949) which is included in the Descriptive Report for T-9344 to T-9348 incl., (1949)

T-9353 and T-9358 were later made a part of a radial plot for T-9359 & T-9360. The map manuscript for T-9358 was found to be in error, and it was completely redrawn. (See Descriptive Report T-9358, Revision.)

COMPILATION REPORT
Map Manuscripts T-9354 to T-9358 Incl.
Project Ph-29(47)

31: DELINEATION:

Map Manuscripts T-9354 to T-9357 incl., include an area about 5 miles wide located approximately 4 to 9 miles interior from the south shore of the Beaufort Sea, between Kadleroshilik River and an upstream area of Canning River. T-9358 includes a shoreline area at the mouth of the Canning River.

Facts contained in paragraphs 2, 3, 4, 5 and 7 of sub-heading 31: "DELINEATION" of the Descriptive Report for T-9340 to T-9343 incl (1949) are in general applicable to these five map manuscripts.

Paragraphs 1, 3, 5 and 6 of sub-heading 31: "DELINEATION" of the Descriptive Report for T-9344 to T-9348 incl. (1949) are applicable to these five map manuscripts.

Paragraph 4 of sub-heading 31 of this report is also applicable if the following river names are substituted for those listed in that paragraph. The Shaviovik, Kadleroshilik, and the Canning. The threaded streams in the upstream areas of two unnamed rivers have also been shown.

The planimetry for all five of these map manuscripts was compiled directly on the correct projections ruled in the Washington Office.

Planimetry for the entire manuscript areas of T-9354 to T-9357 incl. could not be compiled because of insufficient photograph coverage.

32: CONTROL: *See Descriptive Report T-9358 (Revision).*

There are only two horizontal control stations within the area of these five map manuscripts. One of these was identified by the selection of two sub-points and these were held in the radial plot.

Sub-headings 33 to 39 incl. of the Descriptive Report for T-9344 to T-9348 incl. (1949) are applicable to map manuscripts No's. T-9354 to T-9358 incl.

40: HORIZONTAL AND VERTICAL ACCURACY:

There is a probability that the planimetry shown on map manuscripts T-9354 to T-9358 incl. is not of the accuracy of that shown on T-9344,

T-9346, T-9347 and T-9349 to T-9353 because of the lack of identified control stations in their areas.

Sub-headings 46 and 47 of the Descriptive Report for T-9344 to T-9348 incl. (1949) are applicable to map manuscripts No's. T-9354 to T-9358 incl.

Approved:

Charles W. Clark
Charles W. Clark
Officer-in-Charge

Respectfully submitted:

J. Edward Deal Jr.
J. Edward Deal, Jr.
Cartographer

48: GEOGRAPHIC NAME LIST:

T-9354

Kadleroshilik River ✓

T-9355

Shaviovik River (old B.G.N. decision: use pending possible revision of old decision)

T-9356

No Names

T-9357

Canning River

T-9358

Canning River

Tamajariak Creek (use this spelling pending B.G.N. decision)
Beaufort Sea

Names underlined in red are approved.

9-10-57
L. HECK

Recommended for titles:

Arctic Coast

Alaska

Beaufort Sea

50:

PHOTOGRAMMETRIC OFFICE REVIEW

T-9354, T-9355, T-9356, T-9357 & T-9358

- 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. Ree H. Barron Reviewer J. Edward Deal Jr. 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:

Review Report T-9354 to T-9357
Planimetric Maps
10 September 1951

T-9354	Beaufort Sea Coastal Plain, Kadleroshilik River, Alaska
T-9355	" " " " Shaviovik " "
T-9356	" " " " " "
T-9357	" " " " Canning River "

(Western distributary)

61. These map manuscripts cover interior areas beginning from 1 mi. to 8 mi. from Beaufort Sea.

62. Comparison with Registered Surveys

No previous surveys were made in this area.

63. Comparison with Maps of other Agencies.

None.

64. Comparison with Contemporary Hydrographic Surveys

Not applicable in this series.

65. Comparison with Nautical Charts:

9400 1:1,587,870 (at 70°) ed. May 1947, rev. Nov. 1950

The great difference in scale between T-9354 to T-9357 and the chart affords a basis for only superficial comparison.

66. Control

The only control station within this group falls near the northern limit of T-9355, so that the accuracy of the map manuscripts from T-9354 to T-9357, inclusive, is dependent upon the control held in areas immediately to the north (T-9349 to T-9353).

67. Geographic Names in the area of Part I were reported in "Investigation of Geographic Names, Arctic Coast, Demarcation Point to Anderson Point, Project CS-320, Sept. 1948, and by a supplementary and additional report of the same title, Oct. 1949, submitted by the hydrographic parties.

68. Accuracy

These map manuscripts are adequate for ^{interior} charting purposes.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved by:

S. V. Griffith
Chief, Review Section
Div. of Photogrammetry

H. Edmiston
Chief, Nautical Chart Branch
Division of Charts GFD

O. S. Reading
Chief, Div. of Photogrammetry

Carl O. Hester
Chief, Division of Coastal
Surveys
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HORIZONTAL DATUM ADJUSTMENT

ARCTIC OCEAN AREA, ALASKA

Corrections to Preliminary N.A. 1927 Datum from the various independent horizontal datums on the north coast of Alaska have been determined by the Division of Geodesy, being computed from field positions, allowing for closure in azimuth and length. This procedure was started from adjusted N.A. 1927 Datum stations at about the 63rd Parallel on the Canadian Boundary, followed the 141st Meridian (IBC Datum) to Beaufort Sea (Arctic Ocean), thence westward through the Barter Island 1948, Flaxman Island and Point Barrow 1945 Datums to a connection with adjusted N.A. 1927 Datum in the area of Kotzebue Sound, off Chukchi Sea. The position of the stations in this area is subject to further adjustment after more geodetic field work.

PLANIMETRIC MAPPING PROJECT

Ph-29(47) PART I

Jones Islands to vicinity of Barter Island, Alaska

T-9340 thru T-9360 and T-8624 thru T-8628

T-9340 thru T-9360: Flaxman Island Datum, correction in Latitude ranging from minus 3.15 sec. on T-9344 to 4.99 sec. on T-9359, and in Longitude from plus 9.95 sec. on T-9344 to 11.16 sec. on T-9359.

T-8624 thru T-8628: Barter Island 1948 Datum, correction of -1.29 sec. in Latitude and -20.41 sec. in Longitude.

These corrections were converted into meters, and stamped on Page T-2 in each descriptive report and near the title block on each manuscript and cloth-backed recorded map, with the exception that the cloth-backed maps for T-8624 and T-8626 thru 8628 have not been completed. When these maps have been completed, they should be stamped the same as have been their descriptive reports, with the following stamp:

The difference between Flaxman Island Datum
and preliminary N.A. 1927 Datum is Lat. ~~plus~~/minus
~~X~~ m. and Long. plus/~~minus~~ ~~X~~ m.

See the Special Report on HORIZONTAL DATUM ADJUSTMENT for Ph-29(47) PARTS I, II, & III, filed with the Completion Report for a project index showing the correction for each map.

NAUTICAL CHARTS BRANCH

SURVEY NO. T 9356-7

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2/17/55	9474	J. Walker et al.	Before After Verification and Review
2/17/55	9403	H. MacLennan	Before After Verification and Review (T-9356 Through! T-9357 Chart 9474)
Oct 55	9403	H. Pearson	Before After Verification and Review No correction
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.