

9158



Diag. Cht. No. 1229

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-45 (49) Office No. T-9158

LOCALITY

State North Carolina

General locality Albemarle Sound

Locality Manns Harbor

194 53

CHIEF OF PARTY

H. F. Garber, Chief of Field Party

J. E. Waugh, Tampa Photogrammetric Office

LIBRARY & ARCHIVES

DATE AUGUST 31, 1955

B-1870-1 (1)

9158

DATA RECORD

T

Project No. (II): **Ph-45(49)** Quadrangle Name (IV):Field Office (II): **Edenton, North Carolina**Chief of Party: **Harry F. Garber**Photogrammetric Office (III): **Tampa, Florida**Officer-in-Charge: **J. E. Waugh**Instructions dated (II) (III): **15 Sept. 1949**Copy filed in Division of
Photogrammetry (IV)**Supplement 1 19 Jan. 1950***Office Files*Method of Compilation (III): **Graphic**Manuscript Scale (III): **1:20,000**Stereoscopic Plotting Instrument Scale (III): **Inapplicable**Scale Factor (III): **None**

Date received in Washington Office (IV):

APR 28 1952

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): *13 July, 1955*

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N. A. 1927**Vertical Datum (III): **MSL**

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

Reference Station (III): **MASHOE, 1933**Lat.: **35° 57' 31".408 (968.0m.)** Long.: **75° 48' 36".046 (903.3m.)**Adjusted
~~Unadjusted~~

Plane Coordinates (IV):

*Lambert*State: *N.C.*

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.

75⁰-52.5'

750-451

36°-00'

All contouring	
done by	
Richard E. Conway, Jr.	

Cartographic Survey Aid

35°-52.5'

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

DATA RECORD

Field Inspection by (II): R. E. Conway, Jr., Cart. Sur. Aid
R. L. McGlinchey, Cart. Sur. Aid

Date: Sept., 1950
April 1951

Planetable contouring by (II): R. E. Conway, Jr., Cart. Sur. Aid

Date: Sept., 1950

Completion Surveys by (II): *R. L. McGlinchey*

Date: *March 1953*

Mean High Water Location (III) (State date and method of location): ~~Air Photo compilation - April 1951~~
Identified on photographs taken 1949

Projection and Grids ruled by (IV): L. B.C. (W.O.)

Date: 12 July 1951

Projection and Grids checked by (IV): H. D. W. (W.O.)

Date: 13 July 1951

Control plotted by (III): R. J. Pate

Date: 24 July 1951

Control checked by (III): M. M. Slavney

Date: 27 July 1951

Radial Plot or Stereoscopic
Control extension by (III):

M. M. Slavney

Date: 16 October 1951

Stereoscopic Instrument compilation (III):

Planimetry

Inapplicable

Contours

Date:

Date:

Manuscript delineated by (III):

R. R. Wagner

Date: 7 Dec. 1951

Photogrammetric Office Review by (III): J. A. Giles

Date: 28 Mar. 1952

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

J. A. Giles

Date:

5 Dec. 1951

Camera (kind or source) (III): Fairchild Cartographic - 6" Metrogon lens, Camera "0"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
49-C-1783	5 Dec. 1949	13:30	1,20,000	No tide *
49-C-1786	"	13:30	"	"
49-C-1830-to				
1833 incl.	6 Dec. 1949	11:24	"	"
49-C-1834	"	11:34	"	"
49-C-1835	"	11:35	"	"
49-C-1836	"	11:36	"	"
49-C-1837	"	11:37	"	"
49-C-1838	"	11:38	"	"

Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

* Less than 1/2 foot. SHR
~~No tide~~

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): Everett H. Ramey

Date: 27 April 1954

Final Drafting by (IV): Anna P. Berry

Date: 12/1/54

Drafting verified for reproduction by (IV): W. H. H. H. H.

Date: 1-4-55

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 27

Shoreline (More than 200 meters to opposite shore) (III): 34

Shoreline (Less than 200 meters to opposite shore) (III): 1

Control Leveling - Miles (II): 3.5 (Third Order)

Number of Triangulation Stations searched for (II): 7

Recovered: 45

Identified: 45

Number of BMs searched for (II):

Recovered: 0

Identified: 0

Number of Recoverable Photo Stations established (III): 03

Number of Temporary Photo Hydro Stations established (III): 0

Number of Bench Marks established 4

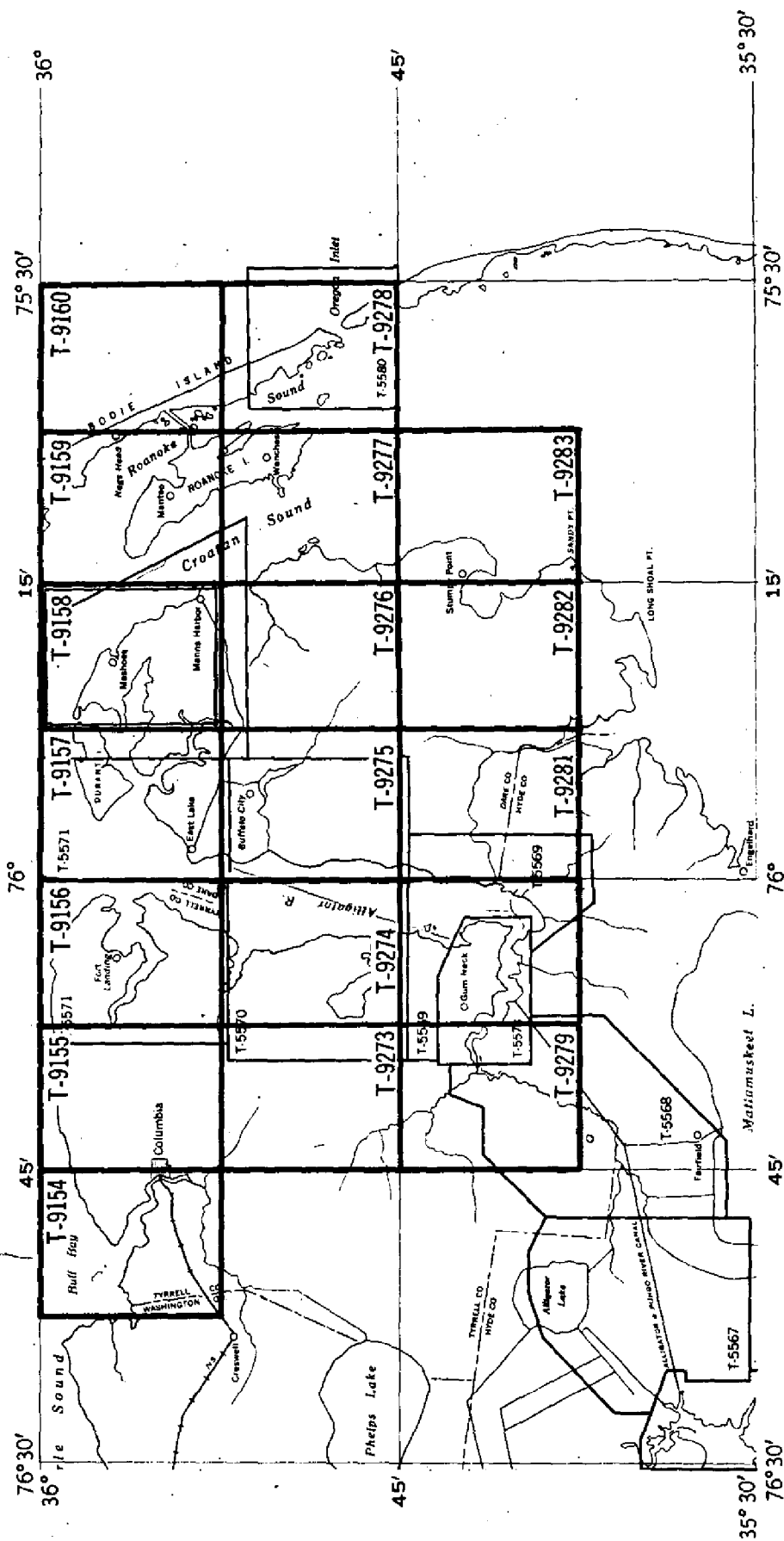
Identified 4

Remarks:

TOPOGRAPHIC MAPPING PROJECT

PH-45 (49)

NORTH CAROLINA, Vicinity of Albemarle Sound



Summary to Accompany Topographic Map T-9158

Topographic map T-9158 is one of eighteen similar maps of project Ph-45(49). It covers land area in Dare County, North Carolina, along Albemarle Sound and Croatan Sound.

Project Ph-45(49) is a graphic compilation project. Field work in advance of compilation included the recovery and identification of horizontal control, the establishment of some vertical control, the inspection of shoreline and interior features, the delineation of 5-foot contours directly on the photographs and the investigation of political boundaries and geographic names.

Map T-9158 was compiled at a scale of 1:20,000 using single lens photographs taken in 1949. The map was field-edited. With the addition of hydrographic information, the map will be forwarded to the Geological Survey for publication as a standard 7½-minute topographic map at a scale of 1:24,000.

Items registered under T-9158 will include a cloth-mounted print of the map manuscript at a scale of 1:20,000, a cloth-mounted color print of the published map at a scale of 1:24,000 and the descriptive report.

FIELD INSPECTION REPORT

Quadrangle T-9158
35°-52'-30"/75°-45'-00"
Project Ph-45(49)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with instructions dated 19 September 1950. Field work was done by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Ralph G. Holland Topographic Engineer	Horizontal Control, Recovery & Identification	March, 1950
Richard L. McGlinchey Cartographic Survey Aid	Horizontal Control, Recovery, Identification, Field Inspection	April, 1951
Richard E. Conway, Jr. Cartographic Survey Aid	Contouring and Spot Elevations	September, 1950
John R. Smith Cartographic Survey Aid	Third Order Levels	November, 1949

This report is written in accordance with paragraph 724 of the Topographic Manual (Special Publication No. 249).

2. AREAL FIELD INSPECTION

This quadrangle lies along the southern shore of Albemarle Sound and the western shore of Croatan Sound. One highway, U. S. Routes 64 and 264, enters the quadrangle from the south and terminates at the Manns Harbor ferry dock. A free ferry, operated by the State of North Carolina, serves these routes across Croatan Sound to Roanoke Island. Two villages, Manns Harbor and Mashoes, are located on Croatan Sound. Neither village is incorporated.

No difficulty was encountered in the interpretation of the photographs. The field inspection is believed to be complete.

3. HORIZONTAL CONTROL

(c) Stations not established by this agency are:

Pipe Station R1 (USE) destroyed.

Pipe Station R2 (USE) recovered and identified.

(d) Sufficient stations were identified to satisfy the project instructions.

(e) All known horizontal control stations were searched for and reported on Form 526.

Stations reported as "Lost" or "Not Recovered" are:

DERRICK MAST ON FISH HOUSE, 1933
CROAT, 1933

4. VERTICAL CONTROL

In order to supplement existing control, a Third Order Level Line was run along U.S. Highway 264 to the ferry dock. A water crossing was made by the hook gage method to Roanoke Island. Four bench marks were established at approximately 1-mile intervals within the quadrangle. They are:

S-247, 1949

T-247, 1949

U-247, 1949

V-247, 1949

This line was adjusted by the Washington Office.

As the tidal bench marks of Croatan Lighthouse were unmarked, other than the surfaces of structural members of the lighthouse, no attempt was made to recover the bench marks.

The third order bench marks were used for vertical control, and no additional fly level points were established. The spot elevations along the waterways were determined from the plane of water elevation. The water level was established in the morning and afternoon from a third order bench mark. As long as there was no shift in the wind, the elevations remained constant within a few tenths of a foot, as the tide is negligible.

5. CONTOURS AND DRAINAGE

The area was contoured directly on the photographs at five-foot contour intervals. However, with the exception of a ridge at Manns Harbor, and occasional sand ridges along Croatan Sound, the land is less than five feet above mean sea level. Spot elevations of less than five feet were obtained where the area was accessible. As the land is very flat, drainage is by seepage or drainage canals.

6. WOODLAND COVER

The flora consists of scrub pine, gum, and cypress trees; various bushes; bamboo-like reeds; broom sage, and other various grasses; and marsh grass along parts of the waterways. As the area is low and flat, the transition from swamp to firm ground covers a considerable belt of land of a marginal nature. This makes it extremely difficult to define the swamp limits. The limits were determined in typical areas by field inspection according to the type of flora found. In general, cypress and gum indicate swamp, as well as a mixture of stunted pine and gum. A mixture of pine and reeds were classified as "trees", as this type of reeds grows in comparatively dry ground. These reeds are often 12 to 15 feet high. The areas which are mostly broom sage, about 3 feet high, have been classified as "open". Some of the land has been burnt over, which photographs in a light tone.

7. SHORELINE AND ALONGSHORE FEATURES

(a) Samples of the mean high water line have been indicated on the photographs.

(b) As the tide has very little range, no attempt was made to delineate the low water line.

(c) The foreshore is sand.

(d) There are no bluffs or cliffs, other than sand ridges along portions of Croatan Sound.

(e) Wharves, piling, and buildings over the water are clearly indicated on the field photographs.

(f) There are no submarine cables within the quadrangle limits.

8. OFFSHORE FEATURES

There are no offshore features other than Aids to Navigation and structures discussed in paragraph 7.

9. LANDMARKS AND AIDS TO NAVIGATION

There are no landmarks.

Three fixed Aids to Navigation (Croatan Light, Collington Island Shoal Light, and Manns Harbor Canal Light) are within the quadrangle, and are reported on Form 567.* The first two named were listed in a special report of Aids to Navigation submitted in June, 1950, and the latter is being submitted with T-9282.

** Form 567 attached to this report.*

10. BOUNDARY INVESTIGATION

See Special Report submitted by Richard L. McGlinchey, in June, 1950, for Ph-45(49). *Filed in Division of Photogrammetry under project data.*

11. OTHER CONTROL

No topographic stations were established.

See §56

12. OTHER INTERIOR FEATURES

There are no other interior features of any note.

Small fixed bridge at lat. 35° 32.8' - long. 75° 46.5'. S#2

13. GEOGRAPHIC NAMES

The geographic names report* for the entire project, will be submitted at a later date. **Special Report for Project, Part II by Merle W. Smith filed in Geo. Names Section, Div. of Charts.*

14. SPECIAL REPORTS

The Coast Pilot Report for the entire project will be submitted at a later date.

11 May 1951
Submitted by:

Harry F. Garber
Harry F. Garber
Commander, USC&GS
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT.

21. AREA COVERED.

This report is on Photogrammetric Plot No. 2 of Ph-45(49) which covered Quadrangles T-9154 through T-9158, T-9273 through T-9276, T-9279 through T-9283 and the portions of T-9159 and T-9277 shown cross-hatched on the accompanying sketch.

The sketch on Page 14 of this report shows the quadrangles comprising this radial plot, the junctions with Plot No. 1 of Ph-45, and with Ph-20(47), the control, and the centers of the photographs used. The cross-hatched areas of T-9159 and T-9277 were postponed from Photogrammetric Plot No. 1 because it was believed that better results would be achieved by including those areas in this plot. A list of control stations is a part of the sketch.

22. METHOD.

Radial Plot:

Map Manuscripts. -- The map projections are on vinylite at a scale of 1:20,000 with the North Carolina Lambert Grid in red and the polyconic projection in black. All the projections are 7'30" in latitude and longitude. Preparation for the radial plot disclosed discrepancies in the relation of the grids to the polyconic projections on several manuscripts. Computations disclosed that T-9275 was most greatly in error; so a new projection was ordered (see accompanying letter). The grid "ticks" on the adjoining manuscripts have been inked in their correct position.

The geographic positions of the substitute stations were computed and all the control was plotted using dividers and meter bar.

Photographs. -- Single-lens and nine-lens photographs were used in this radial plot. The single-lens photographs, taken for Ph-45(49), were 1:20,000 prints from 1:40,000 negatives taken in December 1949 with Cartographic Camera "O". Nine-lens photographs 22109 through 22117 flown for Ph-20(47) were used along the junction with that project. Nine-lens photographs 33196 through 33205 and 33208 through 33214 flown for Ph-61(49) were used along the junction with Ph-61(49).

COPY

DEPARTMENT OF COMMERCE
U. S. Coast and Geodetic Survey
Tampa Photogrammetric Office
Box 1689 Tampa Florida

22 October 1951

To: Chief, Division of Photogrammetry
U. S. Coast and Geodetic Survey
Department of Commerce Building
Washington 25 D C

Subject: Map projection, request for.

In laying out the sheets for the radial plot of Ph-45, it was found that satisfactory junctions of some of the projection lines could not be made. Careful study of the problem revealed that one projection (Map T-9275) seemed to be the only one with appreciable error. This error appears in the relationship of the grid coordinates to the polyconic projection lines. Geographic positions of grid intersections at each of the four corners were computed and these computed distances were compared to those on the grid sheet. A tabulation of the discrepancies found accompanies this letter.

It is believed that a correct projection on T-9275 will make satisfactory junctions with the four adjoining sheets. Accordingly, a new vinylite projection of T-9275 is hereby requested.

Arthur L. Wardwell
LCDR USCGS
Officer in Charge
Tampa Photogrammetric Office

alw/mb

COPY

Templets: -- Appropriate master templets were provided for the single-lens and different flights of nine-lens photographs, to prepare the vinylite templets for the correction of paper and printing distortion.

Closure and adjustment to control: -- Vinylite base sheets, with 10,000 ft. grids at 1:20,000 scale were used for this plot. Horizontal control points were transferred to the base sheets from the projections by matching common grid lines.

Because the relationship of projection to the plane coordinate grid was in error on T-9275, as discussed under "Map Manuscripts", all the control on T-9275 and the various bordering quadrangles which were given in geographic coordinates were converted to plane coordinates and plotted on the base grids. This served as a check on all the projections and made it possible to go ahead with the plot before a new projection for T-9275 was received.

The base grids were arranged to include a considerable area of T-8972 through T-8976 of Ph-20(47). When the plot for Ph-20(47) was run in 1950 it was extended into the area covered by this radial plot. The control, photograph centers and pass points used in the work on Ph-20(47) were utilized in this plot.

The preliminary radial plot revealed five control discrepancies that were investigated in subsequent laydowns. Their disposal is discussed under Item 23, (ADEQUACY OF CONTROL).

The final radial plot was run in two parts. The plot for T-9157, T-9159, T-9275, T-9276, western part of T-9277, T-9281 and T-9282 was run by laying the fixed templets down the east and west sides of this area, and along the junction with T-8975 and T-8976 of Ph-20(47). The adjustment of the uncontrolled templets down the middle of this area was done conventionally by bridging from the fixed templets. The plot for T-9283 had been run earlier but was rechecked as part of the aforementioned work.

The plot for T-9154, T-9155, T-9156, T-9273, T-9274, T-9279 and T-9280 was run from fixed templets through areas of diminishing control. Templets for nine-lens photographs 33209, 33210, 33211, 33212, 33213, 33214, 33197, 33198, 33199, 33200, 33201, 33202, 33203, 33204 and 33205 were laid in that order. Then templets for the fixed single-lens photographs along the east side of T-9156, T-9274 and T-9280 were laid. The remaining templets were adjusted for a tight plot.

Satisfactory junction was made with Project Ph-20(47) and this plot was extended far enough west to insure junction with Ph-61(49) on the west.

23. ADEQUACY OF CONTROL.

Supplemental control, established in three areas to provide adequate control for the radial plot, consisted of:

Triangulation along the Alligator River;
SG Traverse in T-9155, T-9273 and T-9279;
NSA Traverse in T-9282.

Copies of the reports on the field work are a part of this report.

With the additional control, there is considered to be sufficient control for this radial plot. The large area along the junction between T-9156 and T-9157; T-9275 and T-9276; and T-9281 and T-9282, is generally swamp with no control but it is believed that the perimeter control was adequate for a tight plot.

Seventy-seven control stations were identified for this plot, all but two of which were classified "positive" in identification. Five control discrepancies were discovered and were disposed of as follows:

SHINE, 1935 (No. 50 on sketch), on T-9157, which was labeled "doubtful" in identification would not hold. A pass point symbol is the radial plot position for this station.

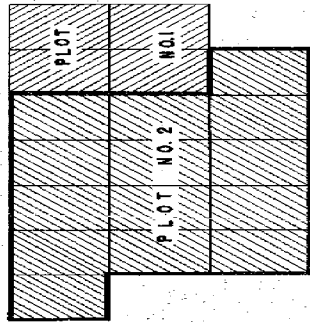
Mon. actually washed out on beach. EHR

Sub. Sta. SPOIL, 1935, "positive" (No. 22 on sketch), on T-9279, was identified for the Ph-20(47) radial plot. It could not be held on the Ph-20 plot and the field party identified Sub. Sta. ENTRANCE instead. This Ph-45 (49) plot checks the result of the Ph-20(47) work. The radial plot position of Sub. Sta. SPOIL is shown as a pass point. *

** Accuracy of map detail adjacent to SPOIL, 1935 was verified by Field Edit. EHR*

Sub. Sta. BUNTON, 1917, "positive" (No. 3 on sketch), on T-9154, refused to hold, the plot intersection being 0.8mm (16 meters) south of the field position. It was returned to the field where a new substitute station was identified and located. This gave excellent results.

SKETCH FOR REPORT ON PHOTOGRAMMETRIC PLOT NO. 2 OF PH-45(49)



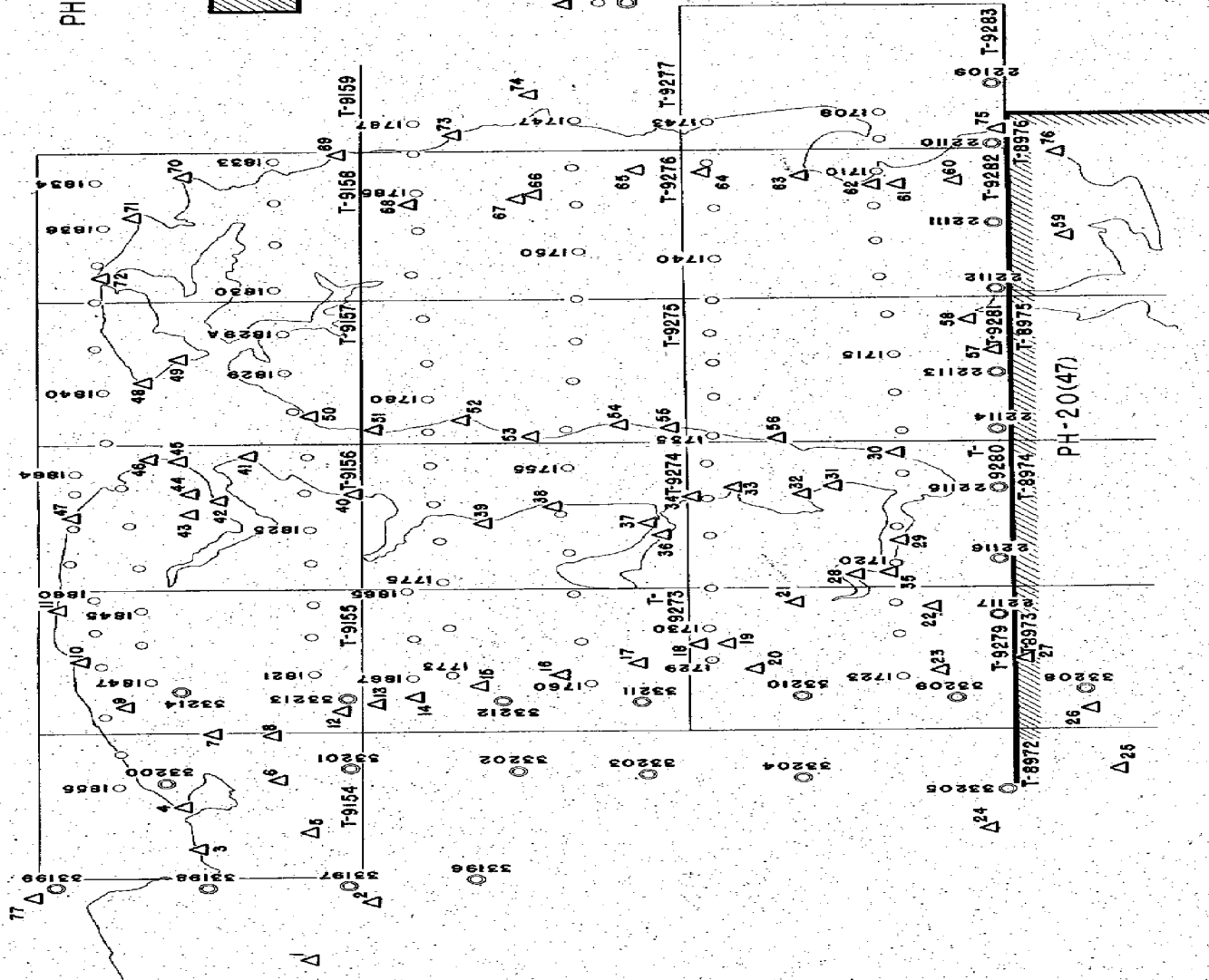
△ HORIZONTAL CONTROL STATION

○ CENTER OF SINGLE LENS PHOTOGRAPH (O-1)

◎ CENTER OF NINE LENS PHOTOGRAPH

LIST OF CONTROL

1. Sub. P. P. P. STATION D-4, 1942 (US)
2. Sub. P. P. P. STATION D-4, 1942 (US)
3. Sub. P. P. P. STATION D-4, 1942 (US)
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DEPARTMENT OF COMMERCE
U. S. Coast and Geodetic Survey

3rd ord.
excl. least pt. covered.
p. 234-6

P. O. Box 271
Edenton, North Carolina

27 June 1951

To: The Director
U. S. Coast & Geodetic Survey
Department of Commerce Building
Washington 25, D. C.

Subject: Additional Horizontal Control - Project Ph-45

1. As a result of a conference with the Assistant Chief of the Division of Photogrammetry and Mr. B. G. Jones, additional horizontal control points were established along the Alligator River, Project Ph-45, to tie the flight lines together for controlling the radial plot. Six control points were located and identified.

2. These points were located by taking three point theodolite fixes on previously located fixed Aids to Navigation. Check directions were obtained on existing triangulation stations when visible.

3. In order to leave some sort of control for future location of Aids to Navigation, these points were marked with standard topographic discs brazed to two-inch soil pipe, and referenced with standard reference marks set further inshore. Several new reference marks were set at the old triangulation stations.

4. The maintenance of marks in this area is extremely difficult. The shores are cypress swamps that are continuously receding, leaving stumps fifty to one hundred meters offshore. The marks either wash out, or are so far out in the water that it is difficult to make observations.

5. The observations for the location of the new control points are being forwarded to the Washington Office for computation or for graphic plotting.

Harry F. Garber
Commander, USC&GS
Chief of Party

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
P. O. Box 271
Edenton, North Carolina

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

15 March 1951

EXPRESS ADDRESS:

To: The Director
U. S. Coast and Geodetic Survey
Department of Commerce Building
Washington 25, D. C.

Subject: Traverse, Vicinity of Columbia, North Carolina - Ph-45

1. In order to control the ends of the flight lines along the western limits of Ph-45, a traverse was run from the vicinity of Gum Neck to the vicinity of Columbia, North Carolina. Unfortunately, all U. S. E. monumented stations between Kilkenny and Columbia along state route 94 had been destroyed through highway improvement, so that additional control was necessary.
2. The traverse was begun at triangulation station Sawyer, 1935, and closed on G-1 (USE), with a position check on triangulation station Sig, 1917. There was no azimuth available at Sig, 1917 as none of the adjacent stations could be recovered. An attempt was made to acquire third order accuracy as three pairs of traverse monuments were established along the line.
3. Angles were measured with a Wild Theodolite, using three positions of the circle. The distances were taped with a 300-ft. steel tape at 14 kg. tension supported throughout. The tape was calibrated by a standardized 50 meter invar tape before and after the traverse. The terrain is very flat, and grade corrections were applied only on the fill approaches to Rogers Creek. The spur line SG-11 to SG-14 was taped forward and backward. The traverse line Sawyer G-1 was double taped to guard against blunders. The spur line SG-37 to Sig, 1917 was taped forward.
4. Field computations consisted of correcting the distances, adjusting the grid azimuths by distributing the closing error of 20"2 equally to all azimuths, and the computation of plane coordinates. The coordinates were not adjusted in the field. The coordinates of the control points for the photographs were not computed as these can be more readily obtained after the final adjustment is made. The pricking cards for the control points are forwarded with the request that they be sent to the Tampa Photogrammetric Office after the coordinates are computed.
5. The field work of laying out the traverse and measuring the angles and distances was executed by Richard L. McGlinchey. With but little direction, he also made the field computations submitted herewith. The results obtained are very gratifying.

Harry F. Garber
Commander, USC&GS
Chief of Party

COPY

REPORT ON TRAVERSE NSA
VICINITY OF STUMPY POINT, N. C.
Ph-45 74243

1. In order to control the ends of the flight lines in the southeastern section of Ph-45, a traverse was run along U.S. Highway 264 in the vicinity of Stumpy Point, North Carolina. Stations METROPOLITAN, 1933, and N.C.G.S. 260, that normally would suffice as horizontal control in this area, could not be recovered and additional control was necessary. Three control points were established.
2. The traverse was begun at Station M-1 (USE) and ran southward for about four miles to traverse station NSA-13, closing on a sun azimuth. As the companion monument M-2 (USE) could not be recovered, the azimuth of the line N-1 (USE) - N-2 (USE) was carried to station M-1 (USE) by observing horizontal angles along the highway. A position check was made at Metropolitan R.M. No. 1, 1933, along the traverse line with a very small closure. No adjustment was made.
3. Angles were measured with a Wild theodolite, using three positions of the circle. The distances were taped with a 300-ft. steel tape at 15 kg. tension supported throughout. The tape was calibrated by a standardized 50 meter Invar tape before and after the traverse. No grade corrections were applied as all traverse lines were on the highway, which is very flat. Backward measurements were taken to the nearest foot to guard against blunders. Two solar observations were taken at the closing station to check the computed azimuth.
4. Field computations consisted of computing coordinates in feet to the Lambert Grid of Pipe Station N1, N2, and M2 (USE), and the Plane Azimuth between N1 and N2; correcting distances; computation of azimuth and sun azimuth; computation of coordinates of three control points and position check at Metropolitan R.M. No. 1. The coordinates of the control points have been shown on the pricking cards for the control points, and will be forwarded to the Tampa Photogrammetric Office when the quadrangle data is submitted.

Submitted by:

Richard L. McGlinchey
Richard L. McGlinchey,
Cartographic Survey Aid

Approved and Forwarded:

Harry F. Garber
Harry F. Garber,
Commander, USC & GS
Chief of Party

Sub. Sta. LUCK, 1951, "positive" (No. 51 on sketch), on T-9275, refused to hold. The radial plot intersection was 2.6mm (52 meters) north of the field position. The substitute station is "a tree in the water" and it was noted that there appeared on the photograph to be a tree in the water about 2.6mm south of the one identified by the field party, which would fit the field position. The data was returned to the field where this conclusion was corroborated and the point re-pricked.

Sub. Sta. PIPE STATION O-1, 1942 (USE), "positive" (No. 66 on sketch), on T-9276, would not hold on the plot, giving a position about 1.45mm (29 meters) northwest of the field position. It was returned to the field party where it was discarded and Sub. Sta. PIPE STATION O-2, 1942 (USE), (No. 68 on sketch) was located and identified. It gave excellent results.

24. SUPPLEMENTAL DATA.

Inapplicable.

25. PHOTOGRAPHY.

Photographic coverage was adequate and definition and contrast were good. Some tilt was evident but none so severe as to require special attention.

The scale of the various photographs varies for this 1:20,000 radial plot. The single-lens ratio prints average about 1:19,500; the nine-lens, 22000 series from Ph-20(47), averages about 1:19,200; and the nine-lens, 33200 series flown for Ph-61(49), are excellent, approximating 1:20,000.

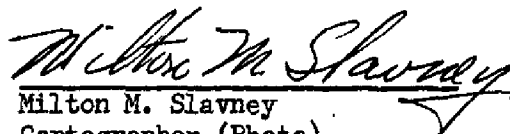
26. GENERAL.

A final check was made of all the map manuscripts to insure proper transfer of all pass points, control and photograph centers to the material limits of all manuscripts. "Dog-ears" for photograph centers needed for compilation were added to complete the preparation for compilation.

Dates of completion of the radial plot are as follows:

T-9154	on 29 November 1951
T-9155	on 30 November 1951
T-9156	on 14 November 1951
T-9157 and T-9158	on 16 October 1951
T-9273	on 2 January 1952
T-9274	on 14 January 1952
T-9275	on 18 October 1951
T-9276	on 22 October 1951
T-9279 and T-9280	on 11 January 1952
T-9281 and T-9282	on 17 October 1951
T-9283	on 9 August 1951

Respectfully submitted,


Milton M. Slavney
Cartographer (Photo)
Tampa Photogrammetric Office

APPROVED AND FORWARDED:


Arthur L. Wardwell, Chief of Party

MAP T-9158

PROJECT NO. Ph-45(49)

SCALE OF MAP

1:20,000

SCALE FACTOR: NONE

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: I. I. Saperstein

DATE 24 May 1951

CHECKED BY: R. J. Pate

DATE 29 May 1951

M-2388-12

MAP T-9273.

PROJECT NO. Ph-45(49)

SCALE OF MAP:

1:20,000

SCALE FACTOR

;

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: I. I. Saperstein

DATE 30 August 1951

CHECKED BY: M. M. Slayney

DATE 24 September 1951

M. 2388-12

PROJECT NO. PH-45(49).

SCALE OF MAP...1:20,000.

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: I. I. Saperstein

DATE 18 Sept. 1951

CHECKED BY: M. M. Slawney

DATE 20 Sept. 1951

M. 2388.12

COMPILATION REPORT T-915831. DELINEATION.

The graphic method was used.

The scale and clarity of the photographs used for delineation were good.

32. CONTROL.

The identification of control points was good. They are sufficient in number and so spaced as to insure good detail points.

33. SUPPLEMENTAL DATA.

None. See §10

34. CONTOURS AND DRAINAGE.

No difficulty was encountered in delineation of the drainage nor the transferring of contours.

35. SHORELINE AND ALONGSHORE DETAILS.

The shoreline inspection was adequate. Reference Item 7.

36. OFFSHORE DETAILS.

Reference Item 8.

37. LANDMARKS AND AIDS.

Reference Item 9.

38. CONTROL FOR FUTURE SURVEYS.

Reference Item 11. & 56. ^{ENR}

39. JUNCTIONS.

Junctions have been made with T-9159 to the east, T-9157 to the west and T-9276 to the south.

There is no contemporary survey to the north.

40. HORIZONTAL AND VERTICAL ACCURACY.

No statement.

See § 52 & § 53

46. COMPARISON WITH EXISTING MAPS.

Comparison was made with planimetric map T-5572, scale 1:20,000, and U. S. C. of E. Quadrangle ROANOKE ISLAND, N. C., scale 1:125,000, dated 1942. All are in good agreement.

See § 62 & § 63

47. COMPARISON WITH NAUTICAL CHARTS.

Comparison was made with Chart 1229, scale 1:80,000, published December 1942, corrected 31 August 1951. The two are in good agreement. The planimetric map listed in Item 46 appears to be the source of topography for this chart.

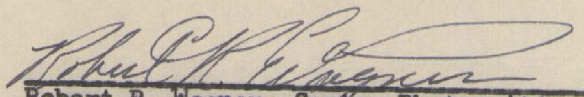
See § 65

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY.

None.

ITEMS TO BE CARRIED FORWARD.

None.


Robert R. Wagner, Carto. Photo. Aid

APPROVED AND FORWARDED:

J. E. Waugh, Chief of Party

FIELD EDIT REPORT
Project Ph-45(49)
Quadrangle T-9158

51. METHODS

The field edit for this quadrangle was accomplished by traversing, via truck, all roads, and walking to other areas in which the reviewer requested information. The shoreline was inspected from a skiff.

Corrections and additions were made by standard surveying methods in conjunction with visual inspections.

The reviewer's questions are answered on the discrepancy print, field edit sheet, field photographs 49-0-1832 and 1836, and in this report.

A legend appears on the field edit sheet which is self-explanatory.

The actual field work was accomplished during the first week of March, 1953.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data is applied.

See § 46

53. MAP ACCURACY

In general, the horizontal accuracy of the map detail is good.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. Melvin R. Daniels, Dare County Registrar of Deeds, Manteo, North Carolina, or Mr. David Cox, Registered Land Surveyor, Hertford, North Carolina, are best qualified to examine a proof copy of this work.

The following geographic names were investigated in the field:

POSTER GUT
POSTER GUT CREEK

POSTER GUT Recommended. This name verified by the majority of eight persons contacted in regards to this feature.

SPENCE CREEK - Name verified and recommended for mapping.

GAR CUT - Name verified and recommended for mapping.

DAVIS POND - Name verified and recommended for mapping.

PETER MASHOES CREEK
ALLIGATOR CREEK

PETER MASHOES CREEK is a well established name. This was verified by all persons contacted. No basis for ALLIGATOR CREEK could be found. PETER MASHOES CREEK is recommended for mapping.

"The Frying Pan" for "Frying Pan" recommended on field edit sheet. SNR

The following persons were contacted during the investigation:

Mr. E. P. Hudson	East Lake, N. C.	50-yr. resident
Mr. Emmett Smith	" " "	45-yr. "
Mr. Tom Tillett	Manns Harbor, N. C.	42-yr. "
Mr. Hugh Craddock	" " "	40-yr. "
Mr. C. B. Mann	Mashoes, N. C.	58-yr. "

56. OTHER CONTROL

Ref. Par. 11, Field Inspection Report.

Three topographic stations were established in this quadrangle:

CALM, 1953 was established by sub-station method.

DARK, 1953 was established by a 3-point theodolite fix.

BENCH MARK V-247, 1953 was pricked direct on the photographs.

57. JUNCTIONS

Satisfactory junctions have been made with Quadrangles T-9157 on the west; T-9276 on the south; T-9159 on the east. Albemarle Sound extends across the entire northern limits of this quadrangle.

27 March 1953

Submitted by:

Richard L. McGlinchey
Richard L. McGlinchey, *by R.L.*
Cartographic Survey Aid

10 April 1953

Approved by:

Paul Taylor
Paul Taylor
Lt. Comdr., USC&GS
Chief of Party

PHOTOGRAMMETRIC OFFICE REVIEW

50.

T- 9158

1. Projection and grids J.G. 2. Title J.G. 3. Manuscript numbers J.C. 4. Manuscript size J.G.

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads J.G. 28. Buildings J.G. 29. Railroads XXX 30. Other cultural features J.G.

BOUNDARIES

31. Boundary lines J.G. 32. Public land lines XXX

MISCELLANEOUS

33. Geographic names J.G. 34. Junctions J.G. 35. Legibility of the manuscript J.G. 36. Discrepancy overlay J.G. 37. Descriptive Report J.G. 38. Field inspection photographs J.G. 39. Forms J.G. 40. Jesse A. Giles Jesse A. Giles William A. Rasure
 Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT *by Tampa. SHK*

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:

M-2623-12

T-9158.

Geographic Names.

North Carolina

Dare County

- ✓ Croatan Township
- ✓ Nags Head Township
- ✓ East Lake Township
- ✓ Atlantic Township
- ✓ U.S. 64 and 264
- ✓ Albemarle Sound
- ✓ Croatan Sound

- ✓ Fleetwood Point
- ✓ Manns Harbor
- ✓ Manns Harbor
- ✓ Mt. Carmel Church
- ✓ Redstone Point
- ✓ Reeds Point
- ✓ Davis Pond
- ✓ Gar Gut
- ✓ Peter Mashoes Creek
- ✓ Spence Creek
- ✓ Poster Gut
- ✓ Mashoes
- ✓ Mt. Mitchell Church
- ✓ Croon Point
- ✓ Haulover Point
- ✓ Durant Island

(village)

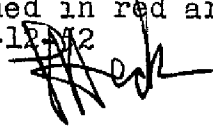
(delete word Creek)

✓ The Frying Pan

(pond)

- ✓ Long Point
- ✓ East Lake
- ✓ Lijehue Gut
- ✓ Northeast Prong
- ✓ South Lake
- ✓ Hooker Gut

Names underlined in red are
approved. 6-17-72



49. NOTES FOR THE HYDROGRAPHER.

~~There are no topographic stations.~~

The following ^{topo. stations} established during field edit: *EHK*

CALM 1953

DARK 1953

BENCH MARK V-247, 1953

History of Hydrographic Information for T-9158

Hydrography was added to the map manuscript in accordance with the General Specifications of 18 May 1949.

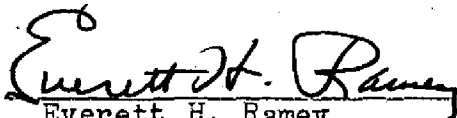
Depth curves and soundings are in feet at mean low water datum and originate with the following:

Hydrographic Surveys:

H-1361	1:20,000	1877
H-3732	1:30,000	1915
H-3772	1:20,000	1915

and Nautical Chart 1229, 1:80,000, 1942 corrected to 53-8/24.

Hydrography was compiled by Everett H. Ramey on 23 September 1954 and verified by O. Svendsen on 29 September 1954.


Everett H. Ramey

REVIEW REPORT

Topographic Map T-9158

27 April 1954

62. Comparison with Registered Topographic Surveys:

T-293	1:20,000	1848-49
T-825	"	1861
T-933	"	1864
T-2952	"	1909
T-3538	1:40,000	1915-16
T-5572	1:20,000	1935

There have been a few changes in culture and some erosion of shoreline since these surveys. Swamp limits are mapped differently on T-9158 in comparison with the above surveys. Map T-9158 is to supersede the above surveys for nautical charting purposes for the area encompassed by this map.

63. Comparison with Maps of Other Agencies:

Roanoke Island, N.C. (C.of E. quad.) 1:125,000 1942

Only a visual comparison was made. There are no differences between T-9158 and the above survey significant to charting which are not outlined under Item 62 above.

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

1229 1:80,000 1942 corrected to 53-8/24

Differences between the surveys noted under Item 62 above also apply to this chart. Changes made during this review are shown on the map manuscript in red.

66. Adequacy of Results and Future Surveys:

This map meets the National Standards of Map Accuracy and complies with project instructions. ✓

Reviewed by

Everett H. Ramey
Everett H. Ramey

APPROVED:

L.C. Lande
Chief, Review Section
Photogrammetry Division

W.B. Edmonson
Chief, Nautical Chart Branch
Charts Division *CFJ*

Will Swanson
Chief, Photogrammetry Division *MSR*

Carl O. Hartman
Chief, Coastal Surveys Division

24 Aug 1955

NAUTICAL CHARTS BRANCH

SURVEY NO. 9158

Record of Application to Charts

[illegible]

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.