Form 594
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

State: Florida

DESCRIPTIVE REPORT

Air Photo __ 4371
Topographic Sheet No. __ 4372

LOCALITY:

West Coast of Florida
Aerial Phototopographic Surveys
Cape Romano and Coon Key to Little Marco Pass
Wiggins Pass to Naples
Little Marco Pass to Naples
Naples to Little Marco Pass
Naples to Wiggins Pass
Little Marco Pass to Cape Romano

1927

CHIEF OF PARTY:
Guy Kirksey, USAC, Pilot
R. P. Eyman and Charles Shaw, Comdg
Str. Hydrographer; O. S. Reading
Reduction of Photographs.
Descriptive Report To Accompany Aero Topographic Sheets.

No. Wiggins Pass to Naples.
No. Naples to Little Marco Pass.
No. Little Marco Pass to Cape Romano.

These three sheets are a compilation of aero photographs Nos. 1 to 52 (first roll) taken with Army Air Corps tri lens camera No. 11. A Loening Amphibian plane piloted by Lieutenant Guy Kirksey was flown at an altitude of about 9500 feet giving an approximate scale of 1:19000 to the photographs. The photographs were taken on February 22, 1927, the plane passing over Cape Romano about 10:40 A.M. and Wiggins Pass at 11:00 A.M., about one half an hour before a low water of minus two tenths of a foot by the tide tables.

**Limits** This single strip of three lens photographs extends about four miles inshore from the highwater line and from about a mile north of Wiggins Pass southward to Cape Romano. There is a gap of a little more than a mile which was not photographed between Photo No. 1 (roll one) of this strip and photo No. 170 (roll two) of the strip extending southward from the Caloosahatchee River.

In addition to the detail obtained from the photographs, the Atlantic Coast line R. R. is shown from data obtained on the control traverse; the Tamiami Trail is shown from the prints of the Florida State Road Engineer and adjusted to the control. The roads from Collier City to Royal Palm Hammock and the shore line of Addison and Unknown
Sheet No. Naples to Little Marco Pass, Photographs 17 to 30, was compiled by first plotting the graphic radial line traverse on the mean scale of the photographs. The intersections for control stations "Pine" and "Henderson" thus obtained were used as a base on which to fit a projection. The difference between the position of "Naples Tank" and "Little Marco 2", as plotted on this projection and as given by the radial traverse was then adjusted proportionally throughout the radial control net. This adjustment amounted to fifty meters at "Naples Tank" and 20 meters at "Little Marco 2". The photographic detail was then traced in black ink adjusting discrepancies between adjacent radial control points by eye and using the central half of the photographs only. It is thought that any error remaining from this adjustment will be negligible on a scale of 1:80,000.

Sheet No. Little Marco Pass to Cape Romano, Photographs 31 to 52, was compiled as above to the scale of the photographs on the base Johnson - South Base, excepting that the radial traverse was re-plotted to fit the remaining control instead of a proportional adjustment, this method giving better results with the additional control available. Considerable adjustment of the coast line intersections between Big Marco Pass and Cape Romano was necessary due probably to tilt. The lack of control stations and the distance out from the center of the photographs gives a weaker determination of the coast line than the remainder of the sheet. The outer coast line has changed so much in the vicinity of the passes as to make the previously executed topography valueless for control. The old topography of the inside passes
near the coast line agrees very well and it is believed that the resulting adjustment contains no errors that will be appreciable on a scale of 1:80,000.

All three celluloid sheets were reproduced by the photolithographic process to prints on a scale of 1:20,000. Two prints on Whatmans and two prints on mounted detail paper were made of each. The blue radial intersection net is not reproduced in this process. The resulting prints need very little retouching except for the addition of control station names in red. A distortion of the projection amounting to about 1/8 of an inch more shrinkage in the length of the sheet than across it occurs in this process due apparently to the stretching of the paper under the offset press roll.

Changes. Such changes as are shown on the outer coast line between these sheets and the topography executed around 1890 are believed to be due to hurricanes and the erosion of waves and currents on sandy shores and inlets.

A discrepancy in the position of islets and shoreline of Big Marco Pass in Latitude 25° 57' Longitude 61° 41', between the photographs and sheet 2005 is believed to be due to an error in Sheet 2005. The photographs agree with the sheet a mile or two to the eastward and the photographic traverse required little adjustment in this vicinity. If an error so large as this were due to the photographs and ended so abruptly, its presence would be indicated by large discrepancies between overlapping pictures. The pictures agree very well
with each other in this vicinity and the error is therefore believed to be in the topographic traverse.

**Additional Field Work** It is understood that some hydrography is planned of the inlets and passes shown on these sheets. The topographic culture symbols shown on these sheets depend only on observations made while passing through the country establishing control. There is therefore considerable opportunity for differences in areas not visited and it is especially desirable that culture symbols be checked when passing over any part of the sheet. It is also particularly desirable that any landmarks such as houses, changes in vegetation, etc., which show from the water, be accentuated on the sheets. If opportunity offers during the hydrographic examination, it is desired that the following features be noted:

- **Height of Naples Tank.**
- **Houses conspicuous from Seaward or visible from the water in the various passes.**
- **Location of conspicuous clumps of Australian pines at Naples and especially at Little Marco Pass.**

**Names** The names on these sheets are those heretofore appearing on the charts with the following exceptions:

<table>
<thead>
<tr>
<th>Name</th>
<th>Authority</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamiami Tail</td>
<td>General Usage</td>
<td>Connects Tampa and Miami.</td>
</tr>
<tr>
<td>Collier City</td>
<td>Petition to postal authorities by inhabitants.</td>
<td>Barron G. Collier ownership (living)</td>
</tr>
<tr>
<td></td>
<td>Also, <em>Rory s Giude</em></td>
<td></td>
</tr>
</tbody>
</table>
Landmarks for Charts - Positions

The selection of suitable landmarks for charting is deferred until the hydrographic examination. A list of three objects which are known to be conspicuous is appended. The location of Caxambas Cupola, depending on only two theodolite directions, is reported incorrect. The position shown on the sheet depends on the direction from station Johnson and a distance given by the Florida Development Company. If the signal at Romano 2 is still standing a check on the position can be obtained easily when the locality is revisited. The position shown is believed to be close enough for 1:80,000 chart as the distance was obtained from prints plotted on a scale of 1:7200.

APPROVED

K. T. Adams
FIELD RECORDS (O)

L. O. Robb
Chief, Division of Charts

F. S. Borden
Chief, Section Field Work

Chief, Div. of Hyd'v and Ton'y
May 11, 1931.

Lieutenant O.S. Reading, U.S.C. & G.S.,
Department of Commerce,
Washington, D.C.

My dear Lieutenant Reading:

With reference to your letter 10-IE of the 23rd ultimo addressed to Mr. Nebiker, please be advised that the road from Marco Island to Royal Palm Hammock has not been abandoned and instead that we hope within the present year to commence the completion of that portion of the road on Marco Island proper. As you probably know the road has been completed from Royal Palm Hammock to Marco Island Channel, a distance of approximately six miles.

We will greatly appreciate your sending us a copy of the new air photo-topography chart with soundings which we understand will be published in a few months. We shall be pleased to pay for this as soon as bill is rendered.

With kindest personal regards,

Very truly yours,

[Signature]

D. Graham Copeland.

[Company Logo]
LANDMARKS FOR CHARTS

WASHINGTON, January 30, 1929.

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

O. S. Reading

Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>26 07 1533.0 81 48 274.4</td>
<td>Appx.</td>
<td>1115 1254</td>
</tr>
<tr>
<td>Stack</td>
<td>25 59 686.9 81 48 1127.9</td>
<td>n</td>
<td>1254</td>
</tr>
<tr>
<td>Cupola</td>
<td>25 54 1766 81 48 697</td>
<td>n</td>
<td>1254</td>
</tr>
<tr>
<td>Coon Key Beacon</td>
<td>26 52 1753.6 81 37 1461.9</td>
<td>Tri.</td>
<td>1113, 1254</td>
</tr>
<tr>
<td>Savannah Beacon</td>
<td>25 56 867 81 43 1140</td>
<td>n</td>
<td>1113, 1254</td>
</tr>
<tr>
<td>Big Three Pass Beacon</td>
<td>25 57 1490 81 44 1567</td>
<td>n</td>
<td>1113, 1254</td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these objects are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

AIR PHOTO-TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 

REGISTER NO. 4371

State Florida

General locality West Coast

Locality Cape Romano and Coon Key to Little Marco Pass

Aerial Photographic Survey

Scale 1: 20,000 Date of survey February 22, 1927

Vessel U.S. Army Amphibian Plane; Str. Hydrographer standing by.

Chief of Party R. P. Eyman cooperating with Lt. Guy Kirksey, U.S.A.C.

Surveyed by Photographs plotted by O. S. Reading

Inked by Photolithographic print retouched by O. S. Reading

Heights in feet above none shown to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated 192

Remarks: Photographs assembled by radial intersections and traced on celluloid, Tracing reproduced to scale on sheets by photolithography. Sheet accompanied by one print on Whatman's and two prints on boat sheet paper for field revision and hydrographic use.
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REGISTER NO. 4372

State: Florida

General locality: West Coast

Locality: Naples to Little Marco Pass to Naples

Aerial Photopographic Survey

Scale: 1:20,000  Date of survey: February 22, 1927

Vessel: U.S. Army Amphibian Plane; Str. Hydrographer standing by

Chief of Party: R.P. Eyman cooperating with Lt. Guy Kirksey U.S.A.C.

Surveyed by: Photographs plotted by O.S. Reading

Inked by: Photolithographic print retouched by O.S. Reading

Heights in feet above: none shown to ground to tops of trees

Contour, Approximate contour, Form line interval: 192 feet

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