

2164-2165-2166

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Diag. Cht. No. 1217-1 & 1218-1

<p>Form 504</p> <p>U. S. COAST AND GEODETIC SURVEY</p> <p>DEPARTMENT OF COMMERCE</p> <p>DESCRIPTIVE REPORT</p>	
Type of Survey	<i>Hydrographic</i>
Field No.	<i>2164 2165</i>
Office No.	<i>2166</i>
<p>LOCALITY</p>	
State	<i>New Jersey</i>
General locality	<i>Coast of</i>
Locality	<i>New Jersey</i>
	<i>1891</i>
	191
<p>CHIEF OF PARTY</p>	
	<i>Haskell</i>
<p>LIBRARY & ARCHIVES</p>	
<p>DATE</p>	

2165

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Acc. No:

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

J. C. Mendenhall
Superintendent.

State: *New Jersey*

DESCRIPTIVE REPORT.

Hyd. Sheet No. 2165

LOCALITY:

Coast of New Jersey

See S.H.A. 2164

1891
190

CHIEF OF PARTY:

Man Haskell

2165
2972

2166

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COAST AND GEODETIC SURVEY

J. C. Mendenhall

Superintendent.

State: *New Jersey*

DESCRIPTIVE REPORT.

Hyd. Sheet No. 2166

LOCALITY:

Coast of New Jersey

See SHA 2164

1891
100

CHIEF OF PARTY:

Man J. Huskell

COAST
2166



U. S. COAST AND GEODETIC SURVEY.

T. C. Mendenhall, Superintendent.

State: *New Jersey.*

DESCRIPTIVE REPORT.

*Hydrographic Sheets Nos. 2164,
2165 & 2166.*

LOCALITY:

Coast of New Jersey.

1891.

CHIEF OF PARTY:

Marr & Haskell

Report by A. Lindenkuhl.

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Descriptive Report

Hydro Sheets - 2164-2165-2166

UNITED STATES COAST AND GEODETIC SURVEY,

DEC. 19. 1893. 016718

WASHINGTON, D. C., Dec. 18, 1893

Assistant in Charge

Mr B. L. Colonna,
Assistant in charge of Office:



Dear Sir:

I herewith submit four original hydrographic sheets, containing the result of the survey on the coast of New Jersey by Messrs. Marr & Haskell in 1891. There are only about a dozen lines of soundings omitted on these sheets on account of insufficient data and they are complete with the exception of some minor detail, such as a table of statistics. On returning these sheets with the original records, I wish to append a few remarks.

While it cannot be denied that Mr. Marr did not waste any time and managed to get over a very large space of ground in one season, it takes but a very superficial examination of the records to show that the method adopted was not calculated to insure a high degree of accuracy or to facilitate the work of plotting. Instead of making it an object to obtain a very close connection with the triangulation of the coast, Mr.

U. S. COAST AND GEODETIC SURVEY,

WASHINGTON, D. C.,

....., 18.....

M. seems to have adapted the habit of using whatever
as signals, whatever objects appeared to him as most con-
venient and although he did not neglect a chance when it
came into his way of taking angles to these objects from
well established points, he treated this part of his work
as a matter of subordinate importance. Under these
conditions of things it was very fortunate that Mr. M.
very frequently measured three or four angles from
one position of his boat, because these check angles often
furnished the only means of locating his stations.

Since the completion of the plotting I have had
occasion to verify several positions obtained in this
manner with quite satisfactory results. The hotel
at Seewalls Point, for instance, a point which was used
a great deal, was carefully determined by Lt. Oberhaus
in 1882. The "White Cupola" at Annapolis, also extensively used,
was determined by Lt. Pillsbury in 1886. There are
a few positions however, such as the Old Water Tower at
Atlantic City and the Sugarstack back of Cape May
Ct. which could not be plotted with any consid-
erable degree of accuracy on account of the acuteness
of the angle formed by the limiting directions.
But it is not supposed that the uncertainty in these

positions will materially affect the accuracy of the plotting.

A great part of the hydrography is covered by the work of the U.S. Engineers in 1887 and the latter survey has been made use of to supply deficiencies. In general there has been found to be a very close agreement between the two surveys as well as regards the shape and position of shoals and channels as to general depth which goes to prove that the planes adopted for mean low water are not far out of the way.

The adjustments of the 'planes of reference' has been another very troublesome matter. With the exception of the Drawbridge at Atlantic City where the tide observation extend over a full lunation, the balance elsewhere only cover a few days. As it would not do to take for plane of reference a level derived from a few days observations at spring tide or neap-tide either, I have applied a correction to "mean low water" obtained from the differences between the predicted tides and the assumed mean low water at Sandy Hook. There have been no serious differences when there was an overlap but it is rather singular

that in the only two instances where Messrs Merr
and Bartlett used the same bench marks for their
gauges as at Anglesen and Aken City there should
be inexplicable discrepancies of several feet. This
is a subject however which which to wrestle the
Tidal Division is more competent.

The Coast Survey and also the Geob. Survey maps
of this part of our coast are lamentable deficient
in geographical names, and it has been my ob-
ject to supply them as far as possible and also
to make several corrections. Our charts have
for inst. Swann's Channel when it should
be Swans or better Swan Channel after the
bird & not the man. Likewise the Geob. Survey
& Nat. Survey have "Genesis Bay." It appears to me
impossible to credit the natives of the Jersey Coast with the
invention and perpetuation of such a name and
I think Lt. Sands who surveyed the Coast half a century
ago caught better hold of the right sound when he
spelled "Jennings Bay."

I also beg leave to call your attention to
the extraordinary changes which have taken
place on the Coast of N. J. since the dates of the

last preceding surveys, within from 5 to 11 years.
Not only have the channels and bars at the inlets been
shifted a great deal - at Hereford Inlet I suppose
nearly $\frac{1}{3}$ mile - but there are every where evidences of
a heavy wear of the coast. At Follewood on a long
stretch of straight coast line about 5000 feet. It is
not to be assumed that the gradual subsidence
of the coast which had a strong advocate in the
late Prof. Cook had much to do with this alarming
state of things, but it will be well to keep a close
watch upon further developments.

Yours, very respectfully,
S. Lincoln