

<p style="text-align: center;">U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE</p> <p style="text-align: center;">HORIZONTAL AND VERTICAL CONTROL REPORT</p>
<p><i>Type of Survey</i> Basic Hydrographic and Field Examination</p> <p><i>Field No.</i> F00504</p> <p><i>Registry No.</i> H11395, H11400, H11467</p> <p>This report covers all registered surveys for the 2005 field season.</p>
<p>LOCALITY</p> <p><i>State</i> New York, Pennsylvania, Maine</p> <p><i>General Locality</i> See Chapter I</p> <p><i>Sublocality</i> See Chapter I</p>
<p style="text-align: center;"><u>2005</u></p> <p style="text-align: center;">CHIEF OF PARTY</p> <p style="text-align: center;">LTJG Jasper D. Schaer</p> <p style="text-align: center;">NOAA Navigation Response Team 5</p>
<p>LIBRARY & ARCHIVES</p> <p>DATE</p>

I. Projects Surveyed

A. S-D913_NRT5-04

- Registry #: F00504
- State: Pennsylvania
- General Locality: Delaware River near Philadelphia
- Chief of party: LTJG Jasper D. Schaer
- Project Instructions: March 17, 2005

B. OPR-B310-NRT5-04

- Registry #: H11395 & H11400
- State: New York
- General Locality: Southern Section of Hudson River
- Chief of party: LTJG Jasper D. Schaer
- Project Instructions: January 5, 2005

C. S-A911-NRT5-05

- Registry #: H11467
- State: Maine
- General Locality: Approaches to Portland
- Chief of party: LTJG Jasper D. Schaer
- Project Instructions: May 23, 2005

II. Vertical Control

A. S-D913-NRT5-04

All tide stations for this project utilized Vitel's Acoustic VX1100 data logger and associated sensors. Preliminary tide zoning was provided with the project instructions. Observed water level data was downloaded and applied, until verified water level data was made available from the CO-OPS website. Additionally, preliminary tidal zoning were applied to bathymetric data within Caris HIPS.

Philadelphia, PA

- Station ID: 854-5240
- Latitude: 39° 56.0' N
Longitude: 75° 8.5' W

Marcus Hook, PA

- Station ID: 854-0433
- Latitude: 39° 48.7' N
Longitude: 75° 24.6' W
- Time Meridian: +4
- Dates used:

Year_DOY	Min Time	Max Time
2004_338	00:00:00	23:54:00
2004_339	00:00:00	23:54:00
2004_340	00:00:00	23:54:00
2004_341	00:00:00	23:54:00
- No unusual tidal, water level or current conditions were reported and no changes to height and time correctors or zoning were applied.
- No installation, setup or leveling was required for this project.

B. OPR-B310-NRT5-04

All tide stations for this project utilized Vitel's Acoustic VX1100 data logger and associated sensors. Preliminary tide zoning was provided with the project instructions. Observed water level data was downloaded and applied, until verified water level data was made available from the CO-OPS website.

The Battery, NY

- Station ID: 851-8750
- Latitude: 40° 42.0' N
Longitude: 74° 0.9' W
- Time Meridian: +4
- Dates used:

Year_DOY	Min Time	Max Time
2005-075	16:24:00	22:18:00
2005_076	15:42:00	23:18:00
2005_077	13:30:00	23:42:00
2005_078	16:30:00	23:00:00
2005-079	14:30:00	23:54:00

2005_080	00:00:00	23:54:00
2005_081	00:00:00	23:54:00
2005_082	00:00:00	23:54:00
2005_083	00:00:00	23:54:00
2005_084	00:00:00	23:54:00
2005-085	00:00:00	23:54:00
2005_086	00:00:00	23:54:00
2005_087	00:00:00	23:54:00
2005_088	00:00:00	23:54:00
2005-089	00:00:00	23:54:00
2005_090	00:00:00	23:54:00
2005_091	00:00:00	23:54:00
2005_104	00:00:00	17:00:00
2005-139	00:00:00	15:30:00
2005_291	00:00:00	20:54:00
2005_305	00:00:00	19:30:00
2005_306	00:00:00	17:00:00
2005-312	00:00:00	17:30:00
2005_313	00:00:00	17:54:00
2005_318	00:00:00	23:54:00
2005_321	00:00:00	19:30:00
2005_335	00:00:00	20:00:00
2005-339	00:00:00	20:30:00
2005_340	00:00:00	18:54:00

- No unusual tidal, water level or current conditions were reported and no changes to height and time correctors or zoning were applied.
- No installation, setup or leveling was required for this project.

C. OPR-310-NRT5-04

All Tide Stations used for this project were Acoustic VX1100. No preliminary tide zoning was need. Observed water level data was downloaded and applied, until verified water level data was made available from the CO-OPS website.

Sandy Hook, NY

- Station ID: 853-1680
- Latitude: 40° 28.0' N
Longitude: 74° 00.6' W
- Time Meridian: +4
- Dates used:

Year_DOY	Min Time	Max Time
2005_081	00:00:00	23:54:00
2005_082	00:00:00	23:54:00
2005_083	00:00:00	23:54:00
2005_084	00:00:00	13:36:00
2005_305	11:33:00	18:33:48
2005_306	09:17:00	16:16:19
2005_318	11:15:00	18:51:01
2005_321	11:28:00	18:27:48
2005_335	09:16:00	19:08:03
2005_339	09:47:00	19:25:32
2005_340	10:45:00	17:38:51
2006_030	17:53:29	18:10:44
2006_031	09:48:00	18:43:21

2006_081	14:17:27	18:05:42
2006_123	13:16:34	15:52:06
2006_130	14:28:29	14:43:23
2006_138	14:55:25	15:56:26
2006_303	17:33:21	18:08:13

- No unusual tidal, water level or current conditions were reported and no changes to height and time correctors or zoning were applied.
- No installation, setup or leveling was required for this project.
- There are unusual current conditions reported for the area.
- No installation, setup or leveling was required for this project.

D. S-A911-NRT5-05

All Tide Stations used for this project were Acoustic VX1100. No preliminary tide zoning were provided with the Project Instructions. Observed water level data was downloaded and applied, until verified water level data was made available from the CO-OPS website.

Portland (Casco Bay), ME

- Station ID: 841-8150
- Latitude: 43° 39.4' N
Longitude: 70° 14.8' W
- Time Meridian: +4
- Dates used: Year_DOY Min Time Max Time

2005_153	00:00:00	16:30:00
2005_159	00:00:00	17:00:00
2005_174	00:00:00	15:30:00
2005_179	00:00:00	20:00:00
2005_180	00:00:00	14:30:00
2005_182	00:00:00	15:00:00
2005_186	00:00:00	19:00:00
2005_187	00:00:00	16:30:00
2005_188	00:00:00	14:30:00
2005_199	00:00:00	15:30:00
2005_200	00:00:00	21:00:00
2005_201	00:00:00	18:30:30
2005_202	00:00:00	14:30:50
2005_221	00:00:00	21:00:42
2005_228	00:00:46	15:51:37
2005_233	00:00:36	21:43:31
2005_234	00:00:43	19:00:04

- No unusual tidal, water level or current conditions were reported.
- No installation, setup or leveling was required for this project.

III. Horizontal Control

All parameters were provided in the letter instructions and no additional fieldwork were completed that would change any parameters.

IV. Approval

As Chief of Party, I have ensured that all information contained in the Vertical and Horizontal Control Report is complete and accurate to the best of my knowledge.

Approved and Forwarded:



LTjg Jasper D. Schaer, NOAA
Team Leader

Submitted:



Bert S. Ho
Physical Science Technician