

<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</p> <p><i>Registry No.</i> H11400, H11395, F00524, F00522, F00521, & F00529</p> <p>This report covers all registered surveys for the 2006 field season.</p>
<p>LOCALITY</p> <p><i>State</i> New York, Long Island Sound, Maine, & Virginia</p> <p><i>General Locality</i> See Chapter I</p> <p><i>Sublocality</i> See Chapter I</p>
<p style="text-align: center;">————— 2006 —————</p> <p style="text-align: center;">CHIEF OF PARTY</p> <p style="text-align: center;">LT 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. OPR-B310-NRT5-06**

- Registry #: H11396
- State: New York
- General Locality: Southern Section of Hudson River
- Chief of party: LT Jasper D. Schaer
- Project Instructions: January 5, 2005

B. OPR-B310-NRT5-06

- Registry #: H11400
- State: New York
- General Locality: New London Harbor
- Chief of party: LT Jasper D. Schaer
- Project Instructions: January 5, 2005

C. OPR-B470-NRT5-06

- Registry #: F00521
- State: Connecticut
- General Locality: New London Harbor
- Chief of party: LT Jasper D. Schaer
- Project Instructions: June 2, 2006

D. OPR-B301-NRT5-06

- Registry #: F00522
- State: Rhode Island
- General Locality: Newport Harbor
- Chief of party: LT Jasper D. Schaer
- Project Instructions: July 3, 2006

E. OPR-A911-NRT5-06

- Registry #: F00524
- State: Maine
- General Locality: Portland Harbor
- Chief of party: LT Jasper D. Schaer
- Project Instructions: August 15, 2006

F. S-E926-NRT5-06

- Registry #: F00529
- State: VA
- General Locality: Little Creek
- Chief of party: LT Jasper D. Schaer
- Project Instructions: November 09, 2006

II. Vertical Control

A. OPR-B310-NRT5-06

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: +5
- Dates used:

Year_DOY	Min Time	Max Time
2005_076	14:15:52	18:57:59
2005_077	14:56:06	17:55:59
2005_087	14:49:20	19:44:05
2005_089	15:30:38	16:17:41
2005_305	14:45:14	15:00:42
2006_005	17:24:23	13:31:20
2006_079	16:18:50	17:18:55

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. Unusual current conditions were reported for the area. No installation, setup or leveling was required for this project.

B. OPR-B310-NRT5-06

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: +5
- Dates used:

Year_DOY	Min Time	Max Time
2005_305	11:33:00	18:33:28
2005_306	09:17:00	16:16:19
2005_318	11:15:00	18:51:01
2005_321	11:28:00	18:27:49
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_303 17:33:00 18:30:00

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. Unusual current conditions were reported for the area. No installation, setup or leveling was required for this project.

C. OPR-B470-NRT5-06

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.

New London, CT

- Station ID: 846-1490
- Latitude: 41° 21.3' N
Longitude: 72° 05.2' W
- Time Meridian: +5
- Dates used:

Year_DOY	Min Time	Max Time
2006_151	12:23:23	16:16:07
2006_152	12:53:55	13:41:08
2006_156	13:09:43	16:08:11
2006_157	14:38:48	15:28:49
2006_163	14:15:50	14:42:35
2006_164	13:47:57	16:58:19

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. Unusual current conditions were reported for the area. No installation, setup or leveling was required for this project.

D. OPR-B301-NRT5-06

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.

Newport, RI

- Station ID: 845-2660
- Latitude: 41° 30.3' N
Longitude: 71° 19.6' W
- Time Meridian: +5
- Dates used:

Year_DOY	Min Time	Max Time
2006_178	14:06:59	15:55:12
2006_184	12:50:59	20:43:01
2006_186	12:16:15	18:02:39
2006_187	13:19:18	21:11:47
2006_188	12:50:27	16:11:11

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. Unusual current conditions were reported for the area. No installation, setup or leveling was required for this project.

E. S-A911-NRT5-06

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.

Portland, ME

- Station ID: 841-8150
- Latitude: 43° 39.4' N
Longitude: 70° 14.8' W
- Time Meridian: +5
- Dates used:

Year_DOY	Min Time	Max Time
2006_081	17:50:48	18:36:06
2006_082	13:01:15	19:21:07

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. Unusual current conditions were reported for the area. No installation, setup or leveling was required for this project.

F. S-E926-NRT5-06

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.

Little Creek, VA

- Station ID: 863-8863
- Latitude: 36° 58.0' N
Longitude: 76° 16.8' W
- Time Meridian: +5
- Dates used:

Year_DOY	Min Time	Max Time
2006_318	15:00:00	20:30:00
2006_319	15:00:00	20:45:00
2006_321	12:30:00	20:30:00

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. Unusual current conditions were reported for the area. No installation, setup or leveling was required for this project.

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.

Submitted:

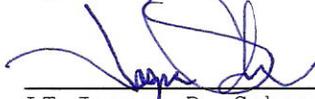


Vitad Pradith
Physical Science Technician



Bert S. Ho
Physical Science Technician

Approved and Forwarded:



LT Jasper D. Schaer, NOAA
Team Leader