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| NOAA FORM 76-35A<br><b>U.S. DEPARTMENT OF COMMERCE</b><br>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION<br>NATIONAL OCEAN SERVICE<br><br><b>DESCRIPTIVE REPORT</b>   |
| <i>Type of Survey</i> _____ <i>MULTIBEAM</i> _____<br><i>Field No.</i> _____ <i>F</i> _____<br><i>Registry No.</i> _____ <i>H11241</i> _____   |
| <b>LOCALITY</b><br><i>State</i> _____ <i>New Jersey</i> _____<br><i>General Locality</i> _____ <i>Atlantic Ocean</i> _____<br><i>Sublocality Approaches to Little Egg and Brigantine Inlets</i><br><br>_____<br><b>2003-2004</b><br><br><b>CHIEF OF PARTY</b><br><br>_____<br><i>PAUL L. DONALDSON</i> _____<br><br>_____<br><i>Science Applications International Corporation</i> _____ |
| <b>LIBRARY &amp; ARCHIVES</b><br><br><b>DATE</b> _____   |

|   |  |                       |
|---|--|-----------------------|
| NOAA FORM 77-28<br>(11-72)  | U.S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | REGISTRY NO.          |
| <b>HYDROGRAPHIC TITLE SHEET</b>   |  | <b>H11241</b>         |
| <b>INSTRUCTIONS</b> - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.  |  | FIELD NO.<br><b>F</b> |
| State <u>New Jersey</u>   |  |                       |
| General locality <u>Atlantic Ocean</u>  |  |                       |
| Locality <u>Approaches to Little Egg and Brigantine Inlets</u>  |  |                       |
| Scale <u>1:20,000</u> Date of survey <u>28 October 2003 – 25 January 2004</u>   |  |                       |
| Instructions Dated <u>24 January 2003</u> Project No. <u>OPR-C303-KR-03</u>   |  |                       |
| Vessel <u>R/V OceanExplorer US905425</u>  |  |                       |
| Chief of Party <u>PAUL L. DONALDSON</u>   |  |                       |
| Surveyed by <u>Paul Donaldson, Gary Davis, Rebecca Quintal, Pam Clark, Karen Hart, Chuck Key, Sheila Kosbab, Elizabeth Lobecker, Gary Parker, and Deb Smith</u>   |  |                       |
| Soundings taken by <u>echo sounder</u> hand lead, pole <u>MULTIBEAM RESON SEABAT 8101</u>   |  |                       |
| Graphic record scaled by _____  |  |                       |
| Graphic record checked by _____   |  |                       |
| Protracted by _____ Automated plot by <u>HP1055CM</u>   |  |                       |
| Verification by _____   |  |                       |
| Soundings in fathoms, <u>feet</u> meters at MLW, <u>MLLW</u>  |  |                       |
| <b>REMARKS:</b> <u>Contract DG133C-03-CQ-0014</u><br><u>Contractor:</u> Science Applications International Corp., 221 Third Street; Newport, RI 02840<br><u>Times:</u> All times are recorded in UTC<br><u>Purpose:</u> To provide NOAA with modern, accurate hydrographic survey data with which to update the nautical charts of the assigned area. |  |                       |

Science Applications International Corporation (SAIC) warrants only that the survey data acquired by SAIC and delivered to NOAA under Contract DG133C-03-CQ-0014 reflects the state of the sea floor in existence on the day and at the time the survey was conducted.

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**Descriptive Report to Accompany  
 Hydrographic Survey H11241  
 Scale 1:20,000, Surveyed 2003-2004  
 R/V OceanExplorer  
 Science Applications International Corporation (SAIC)  
 Paul L. Donaldson, Hydrographer**

**PROJECT**

**Project Number:** OPR-C303-KR-03

**Dates of Instructions:** 24 January 2003

**Original:** OPR-C303-KR-03

**Task Order #:** T0002

**Dates of Supplemental Instructions:** 22 July 2003, 24 July 2003 and 16 March 2004

**Sheet Letter:** F

**Registry Number:** H11241

**Purpose:** To provide NOAA with modern, accurate hydrographic survey data with which to update the nautical charts of the assigned area.

**A. AREA SURVEYED**

**Description:**

The area surveyed was a section of the Atlantic Ocean extending from the approaches to Little Egg to Brigantine Inlets. The area was surveyed with a multibeam sonar and a towed side scan sonar. The depth range encountered in this area was from 7 to 69 feet MLLW.

The survey area is defined by the following (NAD83) vertices:

| <u>Latitude</u>  | <u>Longitude</u> |
|--|------------------|
| 39° 31' 34.00"N  | 74° 14' 26.00"W  |
| Incorporating the search radii of AWOIS 1375 and 11201 |                  |
| 39° 29' 41.00"N  | 74° 07' 02.00"W  |
| 39° 25' 17.26"N  | 74° 11' 08.62"W  |
| 39° 23' 23.00"N  | 74° 14' 45.00"W  |
| 39° 25' 20.00"N  | 74° 18' 00.00"W  |

Thence, following the 8-meter curve to the point of beginning, incorporating the search radius of AWOIS 11197 to the 4-meter depth curve.

The survey area incorporated all thirteen of the full investigation AWOIS items assigned. The survey area also incorporated portions or all of the search radii for six informational AWOIS items.

**Table A-1. Dates of multibeam data acquisition in calendar and Julian days**

| <b>Calendar Date</b> | <b>Julian Day</b> |
|----------------------|-------------------|
| 28 October 2003      | 301               |
| 30 October 2003      | 303               |
| 1 November 2003      | 305               |
| 2 November 2003      | 306               |
| 3 November 2003      | 307               |
| 4 November 2003      | 308               |
| 5 November 2003      | 309               |
| 6 November 2003      | 310               |
| 7 November 2003      | 311               |
| 8 November 2003      | 312               |
| 9 November 2003      | 313               |
| 10 November 2003     | 314               |
| 11 November 2003     | 315               |
| 12 November 2003     | 316               |
| 15 November 2003     | 319               |
| 16 November 2003     | 320               |
| 17 November 2003     | 321               |
| 18 November 2003     | 322               |
| 21 November 2003     | 325               |
| 22 November 2003     | 326               |
| 4 December 2003      | 338               |
| 8 December 2003      | 342               |
| 9 December 2003      | 343               |
| 10 December 2003     | 344               |
| 12 December 2003     | 346               |
| 13 December 2003     | 347               |
| 16 December 2003     | 350               |
| 6 January 2004       | 006               |
| 8 January 2004       | 008               |
| 9 January 2004       | 009               |
| 11 January 2004      | 011               |
| 13 January 2004      | 013               |
| 14 January 2004      | 014               |
| 17 January 2004      | 017               |
| 18 January 2004      | 018               |
| 20 January 2004      | 020               |
| 21 January 2004      | 021               |
| 22 January 2004      | 022               |
| 24 January 2004      | 024               |
| 25 January 2004      | 025               |

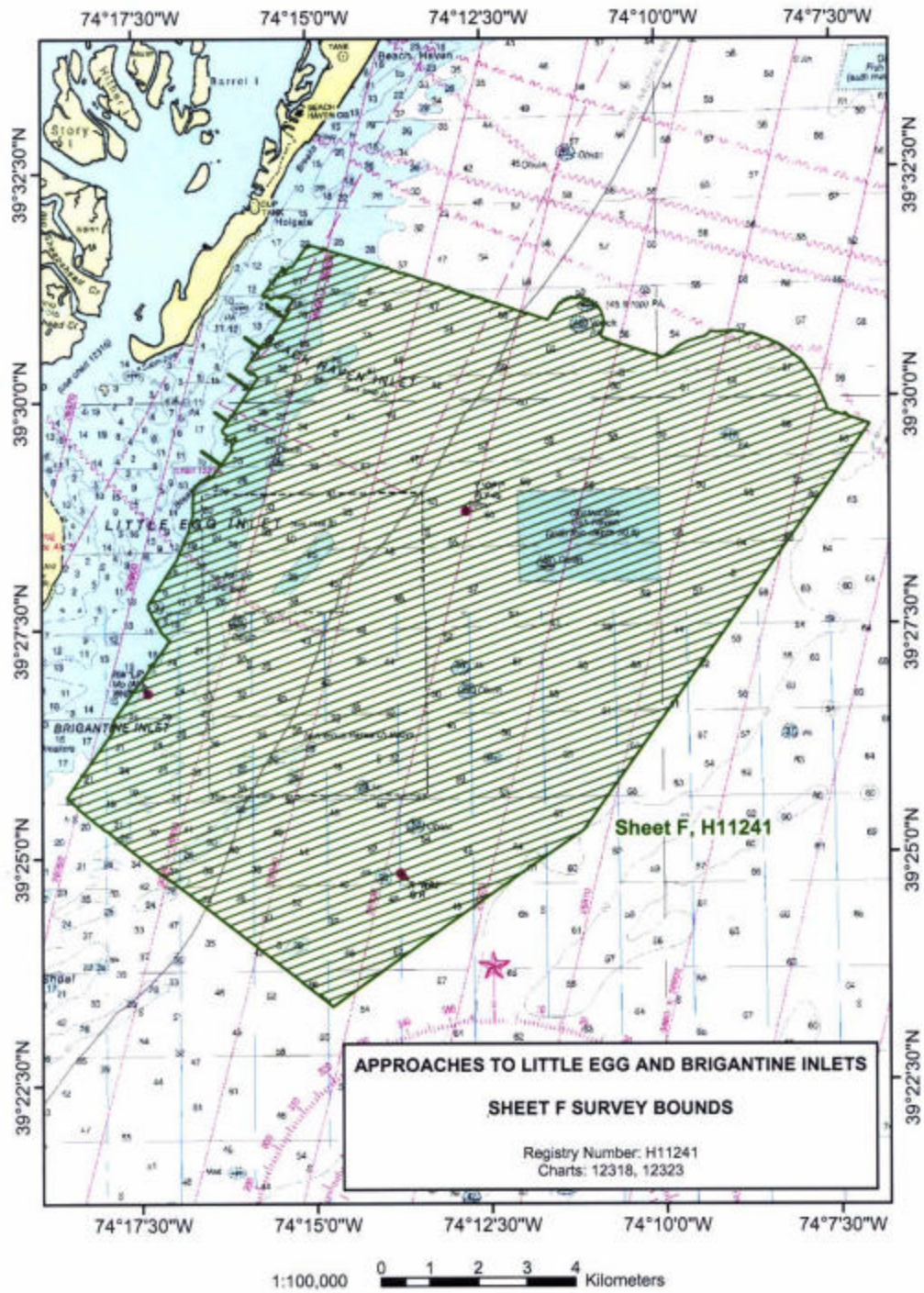


Figure A-1. H11241 Survey Bounds



## B. DATA ACQUISITION AND PROCESSING

### B.1 EQUIPMENT

A detailed description of the systems used to acquire and process these data has been included in the separate Data Acquisition and Processing Report for OPR-C303-KR-03 delivered 1 April 2004. There were no variations from the configuration described therein. The information below summarizes the larger report.

**Table B-1. Major Systems by Manufacturer and Model Number**

|                               | <b>Manufacturer / Model Number</b>                         | <b>Subsystem</b>  |
|-------------------------------|--|---|
| <b>Multibeam Sonar</b>        | RESON SeaBat 8101  | Transducer<br>8101 Processor                              |
| <b>Side Scan Sonar</b>        | Klein 2000 Towfish   | K-Wing Depressor,<br>Transceiver/Processing Unit<br>(TPU) |
| <b>Vessel Attitude System</b> | TSS POS/MV Inertial Navigation<br>System                   |   |
| <b>Positioning System</b>     | TSS POS/MV   |   |
|                               | Trimble 7400 GPS Receiver                                  |   |
|                               | Trimble Probeacon Differential<br>Beacon Receiver          |   |
|                               | Leica MX41R Differential Beacon<br>Receiver                |   |
| <b>Sound Velocity System</b>  | Brooke Ocean Technology Ltd.,<br>Moving Vessel Profiler-30 | Applied Microsystems Ltd.<br>Smart SV and Pressure Sensor |
|                               | Sea-Bird Electronics, Inc.<br>CTD Profiler                 |   |

### Survey Vessel

The *R/V OceanExplorer* was the platform for multibeam sonar, side scan sonar and sound velocity data collection. The main cabin of the vessel was used as the data collection center. Data were shipped to the Data Processing Center in the SAIC Newport, RI office for data processing. The POS/MV IMU was mounted on the vessel, centerline just forward and above the RESON 8101 transducer, below the main deck. The multibeam sounder transducer was mounted on the keel. Table B-2 is a list of vessel characteristics for the *R/V OceanExplorer*.

**Table B-2. Survey Vessel Characteristics**

| <b>Vessel Name</b>       | <b>LOA</b> | <b>Beam</b> | <b>Draft</b> | <b>Max Speed</b> | <b>Gross Tonnage</b> | <b>Power (Hp)</b> | <b>Registration Number</b> |
|--------------------------|------------|-------------|--------------|------------------|----------------------|-------------------|----------------------------|
| <i>R/V OceanExplorer</i> | 60'        | 16'4"       | 6'           | 17 kn            | 56                   | 1100              | US905425                   |

### Major Systems

SAIC used their Integrated Survey System (**ISS2000**) software on a windows 2000 platform to acquire these survey data. Survey planning and data analysis was conducted using SAIC’s **SABER** software on Linux platforms. Side scan data were collected and reviewed on a WindowsNT platform using Triton-Elics’ **ISIS** software, while coverage mosaics were produced using **SABER** on a Linux platform.

### B.2 QUALITY CONTROL

There were approximately 98 linear nautical miles of cross lines surveyed and approximately 1961 linear nautical miles of main scheme lines surveyed resulting in 5 percent coverage by cross lines. The cross lines were oriented at 125°/305° and were spaced approximately 800 meters apart, while the main scheme lines line were oriented at 35°/215° and were spaced 40 meters apart. The range scale was set to 50 meters for the side scan acquisition, while the swath width for the multibeam varied with depth. The following histograms represent the distribution of selected soundings by beam number. Figure B-1 illustrates the number of selected soundings versus beam number while Figure B-2 illustrates the percentage of selected soundings versus beam number.

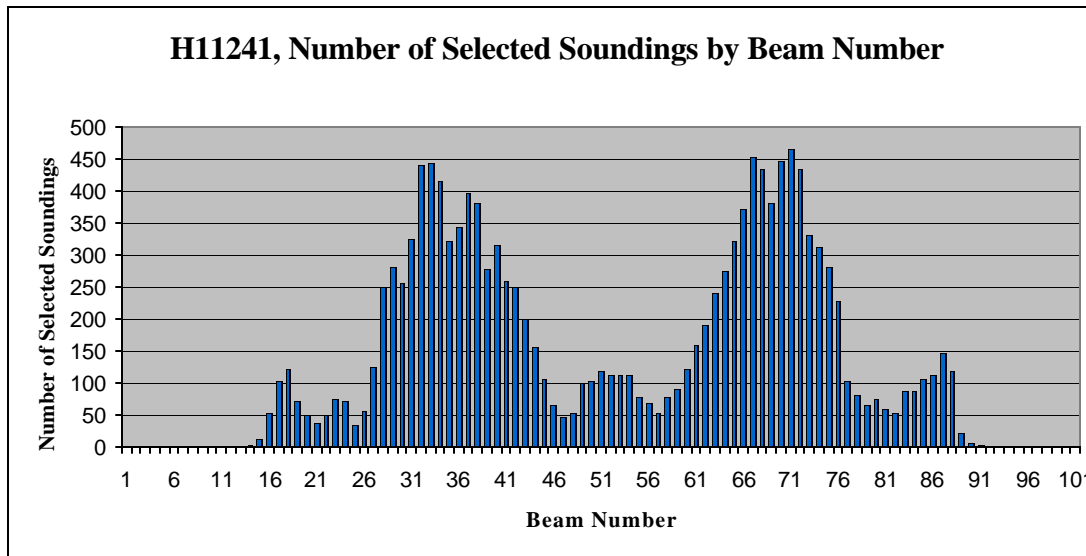
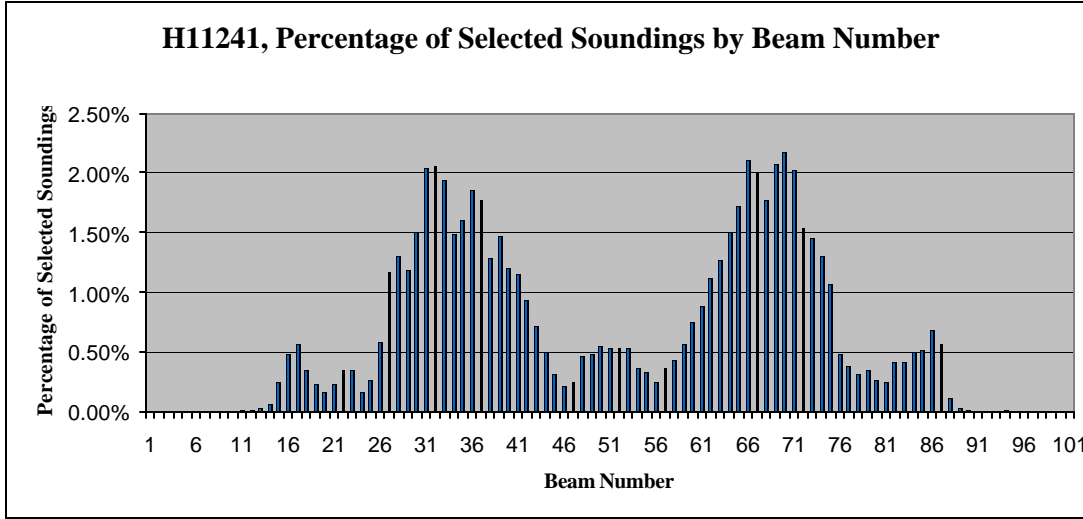


Figure B-1. Histogram of Selected Soundings by Beam Number – H11241



**Figure B-2. Histogram of Percentage of Selected Soundings by Beam Number - H11241**

Comparisons of all crossing data in H11241 show that 99.54% of comparisons are within 30 centimeters, 99.96% of comparisons are within 50 centimeters. The comparisons larger than 50 centimeters are accounted for by the normal small DGPS position scatter around obstructions. Fourteen of the eighteen comparison deltas between 55 cm and 100 cm are a result of objects within the fish haven (AWOIS #11212). AWOIS # 11212 also is responsible of the 4 comparison deltas seen from 100 to 220 cm. Two of the comparison deltas are due to a cylindrical feature standing on end within the fish haven (Feature #31). The normal DGPS position scatter is noticeable because soundings are circular around the opening of the feature and are comprised of one to two beams each. The remaining two comparison deltas (Feature #35) are located in the NW corner of the fish haven and are comprised of two small objects located close to one another with a height of approximately 2.5 meters. Table B-3 shows the comparisons using all crossings in H11241.

**Table B-3. Junction Analysis All Main Scheme vs. Cross Lines Near Nadir, H11241**

| Depth Difference Range |       | All   |         | Positive |         | Negative |         | Zero  |
|------------------------|-------|-------|---------|----------|---------|----------|---------|-------|
|                        |       | Count | Percent | Count    | Percent | Count    | Percent | Count |
| 0 cm to                | 5 cm  | 29312 | 49.19   | 13046    | 50.56   | 13409    | 43.36   | 2857  |
| 5 cm to                | 10 cm | 17304 | 78.23   | 8172     | 82.23   | 9132     | 72.89   |       |
| 10 cm to               | 15 cm | 7092  | 90.14   | 2940     | 93.62   | 4152     | 86.31   |       |
| 15 cm to               | 20 cm | 3816  | 96.54   | 1262     | 98.52   | 2554     | 94.57   |       |
| 20 cm to               | 25 cm | 1280  | 98.69   | 285      | 99.62   | 995      | 97.79   |       |
| 25 cm to               | 30 cm | 509   | 99.54   | 69       | 99.89   | 440      | 99.21   |       |
| 30 cm to               | 35 cm | 150   | 99.79   | 13       | 99.94   | 137      | 99.65   |       |
| 35 cm to               | 40 cm | 49    | 99.88   | 3        | 99.95   | 46       | 99.8    |       |
| 40 cm to               | 45 cm | 38    | 99.94   | 5        | 99.97   | 33       | 99.91   |       |
| 45 cm to               | 50 cm | 14    | 99.96   | 2        | 99.98   | 12       | 99.95   |       |

| Depth Difference Range |               | All   |         | Positive |         | Negative |         | Zero  |
|------------------------|---------------|-------|---------|----------|---------|----------|---------|-------|
|                        |               | Count | Percent | Count    | Percent | Count    | Percent | Count |
| 50 cm to               | 60 cm         | 8     | 99.98   | 0        | 99.98   | 8        | 99.97   |       |
| 60 cm to               | 70 cm         | 3     | 99.98   | 0        | 99.98   | 3        | 99.98   |       |
| 70 cm to               | 80 cm         | 2     | 99.98   | 1        | 99.98   | 1        | 99.99   |       |
| 80 cm to               | 90 cm         | 2     | 99.99   | 0        | 99.98   | 2        | 99.99   |       |
| 90 cm to               | 100 cm        | 3     | 99.99   | 3        | 99.99   | 0        | 99.99   |       |
| 100 cm to              | 220 cm        | 4     | 100     | 2        | 100     | 2        | 100     |       |
|                        | <b>Totals</b> | 59586 | 100%    | 25803    | 43.30%  | 30926    | 51.90%  | 2857  |
|                        |               |       |         |          |         |          |         | 4.79% |

Details of 152 selected nadir or near-nadir crossings in different areas of H11241 are included in the Separates to this report. The comparisons, comprising more than 1% of the crossings in the survey, were randomly selected for spatial and temporal distribution over the entire survey area.

Table B-4 depicts the junction analysis using all comparisons in the common area between H11198 and H11241. These comparisons show 99.61% are within 35 centimeters and over 99.99% are within 50 centimeters. The table illustrates that 100% of the comparisons are within 60 centimeters.

**Table B-4. Junction Analysis, H11198 vs. H11241 (all comparisons)**

| Depth Difference Range |               | All   |         | Positive |         | Negative |         | Zero  |
|------------------------|---------------|-------|---------|----------|---------|----------|---------|-------|
|                        |               | Count | Percent | Count    | Percent | Count    | Percent | Count |
| 0 cm to                | 5 cm          | 6294  | 40.56   | 2971     | 35.07   | 2700     | 42.03   | 623   |
| 5 cm to                | 10 cm         | 4304  | 68.29   | 2357     | 62.89   | 1947     | 72.34   |       |
| 10 cm to               | 15 cm         | 2104  | 81.85   | 1246     | 77.6    | 858      | 85.69   |       |
| 15 cm to               | 20 cm         | 1491  | 91.46   | 980      | 89.16   | 511      | 93.65   |       |
| 20 cm to               | 25 cm         | 769   | 96.41   | 506      | 95.14   | 263      | 97.74   |       |
| 25 cm to               | 30 cm         | 362   | 98.74   | 253      | 98.12   | 109      | 99.44   |       |
| 30 cm to               | 35 cm         | 135   | 99.61   | 104      | 99.35   | 31       | 99.92   |       |
| 35 cm to               | 40 cm         | 31    | 99.81   | 27       | 99.67   | 4        | 99.98   |       |
| 40 cm to               | 45 cm         | 24    | 99.97   | 23       | 99.94   | 1        | 100     |       |
| 45 cm to               | 50 cm         | 4     | 99.99   | 4        | 99.99   | 0        | 100     |       |
| 50 cm to               | 60 cm         | 1     | 100     | 1        | 100     | 0        | 100     |       |
|                        | <b>Totals</b> | 15519 | 100%    | 8472     | 54.59%  | 6424     | 41.39%  | 623   |
|                        |               |       |         |          |         |          |         | 4.01% |

### B.3 CORRECTIONS TO ECHO SOUNDINGS

Please refer to the Data Acquisition and Processing Report for a description of all corrections applied to echo soundings. There were no deviations from the corrections described therein.

### C. VERTICAL AND HORIZONTAL CONTROL

NOAA tide station 8534720 Atlantic City, NJ was the source of verified water level heights for determining correctors to soundings. The primary means for analyzing the adequacy of zoning was observing zone boundary crossings in the navigated swath editor, SAIC's **Multi View Editor**. In addition the sun illuminated coverage plots were examined on screen for adequacy of zoning. Cross line comparisons were also used to analyze zoning for the influence of wind and weather. A detailed description of tide zoning analysis is included in the Vertical and Horizontal Control Report. The analysis indicated that the NOAA zoning for this sheet was adequate and therefore the NOAA zoning parameters were used to develop the water level correctors for soundings on sheet H11241. The zoning parameters applied on sheet H11241 are presented in Table C-1.

**Table C-1. Water Level Zoning Parameters Applied on Sheet H11197**

| <b>Zone</b> | <b>Time Corrector (mins)</b> | <b>Range Ratio</b> | <b>Reference Station</b> |
|-------------|------------------------------|--------------------|--------------------------|
| SA17        | 0                            | 1.00               | 8534720                  |
| SA18        | +12                          | 0.95               | 8534720                  |
| SA21        | 0                            | 0.95               | 8534720                  |

These survey data were collected in horizontal datum NAD-83, using the UTM-18 projection. The following equipment was used for positioning on the *R/V OceanExplorer*:

- TSS POS/MV, Serial Number 314
- Trimble 7400 DSi GPS Receiver, Serial Number 3815A22469

Differential correctors were from the U.S. Coast Guard Stations at Moriches, NY and Sandy Hook, NJ. Daily position confidence checks were established using an independent Trimble DGPS system. A real-time monitor raised an alarm when the two DGPS positions differed by more than 10 meters horizontally. Positioning confidence checks were well within an inverse distance of 5 meters.

Please refer to the Vertical and Horizontal Control Report OPR-C303-KR-03 for detailed descriptions of the procedures and systems used to attain hydrographic positioning. There were no variations from the procedures described therein.

## D. RESULTS AND RECOMMENDATIONS

### D.1 CHART COMPARISON

H11241 was compared to:

- Chart 13003, 47<sup>th</sup> Edition, 1 June 2003, at scale 1:1,200,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections; Corrected through LNM 2 March 2004.
- Chart 12300, 43<sup>rd</sup> Edition, 1 March 2003, at scale 1:400,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections; Corrected through LNM 2 March 2004.
- Chart 12318, 41<sup>st</sup> Edition, 1 December 2002, at scales 1:80,000 & 1:20,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections; Corrected through LNM 2 March 2004.
- Chart 12316, 29<sup>th</sup> Edition, 1 November 2003, at scale 1:40,000 & 1:20,000; Corrected through LNM 2 March 2004.
- Chart 12323, 23<sup>rd</sup> Edition, 11 March 2000, at scale 1:80,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections.

Recommend reconstruction of the common areas of all charts using data from this survey. The following discrepancies were noted during chart comparisons:

#### Chart 12323 (See Chartlet 1 in Separates)

**1.01** The charted depth of 22 feet MLLW in 39° 31' 11.28"N 074° 14' 36.08"W (NAD83) is in depths of 27 feet MLLW. **Concur**

**1.02** The charted depth of 31 feet MLLW in 39° 30' 42.69"N 074° 14' 09.00"W (NAD83) is in depths of 37 feet MLLW. **Concur**

**1.03** The charted depth of 64 feet MLLW in 39° 30' 10"N 074° 08' 56"W (NAD83) is in depths of 61 feet MLLW. **Concur**

**1.04** The charted dangerous wreck (45 ft rep) PA in 39° 31' 00.80"N 074° 10' 58.81"W (NAD83) was not located in this survey. See AWOIS #11200. **Concur – retain as charted.**

**1.05** The charted dangerous wreck PA cleared to 46 feet MLLW in 39° 30' 49.04"N 074° 11' 07.17"W (NAD83) was not located in this survey. See AWOIS #1375. **Concur**

**1.06** The charted dangerous wreck in 39° 29' 35.09"N 074° 08' 58.86"W (NAD83) was not located in its charted position. A submerged wreck was located at 39° 29' 47.86"N 074° 07' 55.51"W (NAD83). See AWOIS #11201. **Concur**

**1.07** The charted 54 feet MLLW obstruction in 39° 29' 57.07"N 074° 09' 28.43"W (NAD83) was located ~~as charted~~. See Danger to Navigation Report in Appendix 1. **Concur Chart 54 ft obstruction w/danger curve in present survey location. (this item is not charted on 12323)**

**1.08** The charted depth of 18 feet MLLW in 39° 31' 04.14"N 074° 15' 07.34"W (NAD83) is in depths of 19 feet MLLW. **Concur**

**1.09** The 30 feet MLLW depth curve charted in the NW corner of the survey area, approximately 39° 30' 05"N 074° 15' 21"W (NAD83) has shifted southward and offshore. **Concur**

**1.10** The charted obstruction cleared to 24 feet MLLW in 39° 29' ~~24.83~~ **22.42**"N 074° 15' ~~29.04~~ **30.51**"W (NAD83) was located 250 meters NW in 39° 29' 28.45"N 074° 15' 37.59"W. See AWOIS #2755. **Concur**

**1.11** The Y "OPT" buoy charted in 39° 28' 46.82"N 074° 12' 46.30"W (NAD83) was not present during this survey. **Retain buoy as charted until further investigation by MCD in Silver Spring**

**1.12** A Y "OPT" buoy located in 39° 27' 41.65"N 074° 15' 43.41"W (NAD83) was observed during the survey within the charted area of "Numerous Research Buoys". **Concur**

**1.13** The charted Obstrn cleared to 48 feet MLLW in approximately 39° 28' 13.87"N 074° 11' 37.28"W (NAD83) was found to have a depth of 51 feet MLLW. See AWOIS #1369. **Concur**

**1.14** The charted Obstruction Fish Haven (auth min depth 50 feet) in approximately 39° 28' 32.44"N 074° 10' 58.54"W (NAD83) had ~~20~~ **18** features less than 50 feet MLLW and numerous other features. See AWOIS #11212. **Concur**

**1.15** The 18 feet MLLW depth curve charted in approximately 39° 27' 42"N 074° 16' 45"W (NAD83) has shifted inshore. **Concur**

**1.16** The 12 feet MLLW depth curve charted in approximately 39° 28' 07.18"N 074° 17' 27.24"W (NAD83) has shifted offshore. **Concur**

**1.17** The 30 feet MLLW depth curve identifying a charted shoal in approximately 39° 28' 12"N 074° 15' 05"W (NAD83) has shifted southward. **Concur**

**1.18** The charted obstruction cleared to 28 feet MLLW in 39° 27' 25.7"N 074° 16' 04.32"W (NAD83) was not observed during this survey. See AWOIS #1364. **Concur**

**1.19** The charted dangerous wreck cleared to 36 feet MLLW in 39° 27' 01.57"N 074° 12' 54.23"W (NAD83) was located 250 meters WNW of the charted position. See AWOIS #1361. **Concur**

#### **Chart 12318 (See Chartlet 2 in Separates)**

**1.20** The charted dangerous wreck (45 ft rep) PA in 39° 31' 00.80"N 074° 10' 58.81"W (NAD83) was not located in this survey. See AWOIS #11200. **Concur**

**1.21** The charted dangerous wreck PA cleared to 46 feet MLLW in 39° 30' 49.04"N 074° 11' 07.17"W (NAD83) was not located in this survey. See AWOIS #1375. **Concur**

**1.22** The charted dangerous wreck in 39° 29' 35.09"N 074° 08' 58.86"W (NAD83) was not located in its charted position. A submerged wreck was located at 39° 29' 47.86"N 074° 07' 55.51"W (NAD83). See AWOIS #11201. **Concur**

**1.23** The charted 54 feet MLLW obstruction in 39° 29' 57.07"N 074° 09' 28.43"W (NAD83) was located as charted. See Danger to Navigation Report in Appendix 1. **Concur Chart 54 ft obstruction w/danger curve**

**1.24.** The 30 feet MLLW depth curve charted in the NW corner of the survey area, approximately 39° 30' 05"N 074° 15' 21"W (NAD83) has shifted southward and offshore. **Concur**

**1.25** The charted obstruction cleared to 24 feet MLLW in 39° 29' 21.83"N 074° 15' 29.01"W (NAD83) was located 250 meters NW in 39° 29' 28.45"N 074° 15' 37.59"W. See AWOIS #2755. **Concur**

**1.26** The Y "OPT" buoy charted in 39° 28' 46.82"N 074° 12' 46.30"W (NAD83) was not present during this survey. **Concur**

**1.27** A Y "OPT" buoy located in 39° 27' 41.65"N 074° 15' 43.41"W (NAD83) was observed during the survey within the charted area of "Numerous Research Buoys". **Concur**

**1.28** The charted Obstn cleared to 48 feet MLLW in approximately 39° 28' 13.87"N 074° 11' 37.28"W (NAD83) was found to have a depth of 51 feet MLLW. See AWOIS #1369. **Concur See also E&A report.**

**1.29** The charted Obstruction Fish Haven (auth min depth 50 feet) in approximately 39° 28' 32.44"N 074° 10' 58.54"W (NAD83) had ~~20~~ **18** features less than 50 feet MLLW and numerous other features. See AWOIS #11212. **Concur**

**1.30** The 18 feet MLLW depth curve charted in approximately 39° 27' 42"N 074° 16' 45'W (NAD83) has shifted inshore. **Concur**



**1.31** The 12 feet MLLW depth curve charted in approximately 39° 28' 07.18"N 074° 17' 27.24"W (NAD83) has shifted offshore. **Concur**

**1.32** The 30 feet MLLW depth curve identifying a shoal charted in approximately 39° 28' 12"N 074° 15' 05"W (NAD83) has shifted south of its charted position. **Concur**

**1.33** The charted obstruction cleared to 28 feet MLLW in 39° 27' 27"N 074° 16' 06"W (NAD83) was not observed during this survey. See AWOIS #1364. **Concur**

**1.34** The charted dangerous wreck cleared to 36 feet MLLW in 39° 27' 01"N 074° 12' 55"W (NAD83) was located 250 meters WNW of the charted position. See AWOIS #1361. **Concur**

**1.35** Charted Obstn cleared to 43 feet MLLW in 39° 26' 48.50"N 074° 12' 47.80"W (NAD83) was not found during this survey. See AWOIS #1358 **Concur**

**1.36** The 30 feet MLLW shoal charted in approximately 39° 26' 04.80"N 074° 15' 34.00"W (NAD83) has split into two shoals located slightly southward. **Concur**

**1.37** Red buoy "WR2" charted in 39° 24' 49.71"N 074° 13' 46.74"W (NAD83) was located as charted. **Concur**

**1.38** Red white buoy "LE" charted in 39° 26' 48.07"N 074° 17' 21.92"W (NAD83) was located in 39° 26' 45"N 074° 17' 26"W, NAD83. **Concur**

**1.39** The 30 feet MLLW shoal charted in approximately 39° 26' 05"N 074° 16' 53"W (NAD83) has migrated slightly southward. **Concur**

**1.40** The charted depth of 68 feet MLLW in 39° 23' 56.48"N 074° 14' 30.83"W (NAD83) is in depths of 54 feet MLLW. **Concur**

**1.41** The charted depth of 38 feet MLLW in 39° 24' 33.55"N 074° 16' 04.09"W (NAD83) is in depths of 43 feet MLLW. **Concur**

#### **Chart 12316 (See Chartlet 3 in Separates)**

**1.42** The 30 feet MLLW depth curve charted in the NW corner of the survey area, approximately 39° 30' 05"N 074° 15' 21"W (NAD83) has shifted southward and offshore. **Concur**

**1.43** The 18 feet MLLW depth curve charted in approximately 39° 27' 42"N 074° 16' 45"W (NAD83) has shifted inshore. **Concur**

**1.44** The 12 feet MLLW depth curve charted in approximately 39° 28' 07.18"N 074° 17' 27.24"W (NAD83) has shifted offshore. **Concur**

**1.45** The charted depth of 41 feet MLLW in 39° 29' 18.98~~26.35~~<sup>29.34</sup>"N 074° 14' 11.892<sup>29.34</sup>"W (NAD83) is in depths of 45 feet MLLW. **Concur**

**1.46** The charted depth of 26 feet MLLW in 39° 27' 57.99"N 074° 16' 13.98"W (NAD83) is in depths of 32 feet MLLW. **Concur**

#### **Chart 12300 (See Chartlet 4 in Separates)**

**1.47** The charted dangerous wreck in approximately 39° 30' 49.04"N 074° 11' 07.17"W (NAD83) cleared to 7½ fathoms (MLLW) was not located. Recommend removal of the cleared to 7½ fathom sounding, danger curve, and label Wk. See AWOIS #1375. **Concur**

**1.48** The charted dangerous obstruction in approximately 39° 29' 57.07"N 074° 09' 28.43"W (NAD83) with a least depth of 9 fathoms is correctly charted. See Danger to Navigation Report in Appendix 1. **Concur**

**1.49** The charted dangerous wreck in approximately 39° 29' 35.09"N 074° 08' 58.86"W (NAD83) was located (feature 94). Recommend removal of the wreck symbol, dangerous curve, and label PA and charting an 9½ fathom (MLLW) sounding and dangerous wreck symbol in 39° 29' 47.86"N 074° 07' 55.51"W (NAD83). See AWOIS #11201. **Concur**

**1.50** The label "Obstn (8¼ fms)" adjacent to the fish haven should be changed to "Obstns 8 fms (from survey of 2003/2004)". See AWOIS #11212. **Concur**

**1.51** The charted dangerous obstruction in approximately 39° 28' 12"N 074° 11' 37"W (NAD83) cleared to 8 fathoms (MLLW) was located (feature 13). Recommend removal of the 8 fathom (MLLW) cleared sounding, danger curve and label Obstn and charting an 8½ fathom sounding and dangerous wreck symbol in 39° 28' 13.87"N 074° 11' 37.28"W (NAD83). See AWOIS #1369. **Concur**

**1.52** The charted dangerous obstruction in approximately 39° 29' 14.27"N 074° 14' 36.77"W (NAD83) cleared to 4 fathoms (MLLW) was located (feature 102). Recommend removal of the 4 fathom (MLLW) cleared sounding and danger circle and charting an 4¼ fathom sounding, danger circle and label Obstn in 39° 29' 28.45"N 074° 15' 37.59"W (NAD83). See AWOIS #2755. **Concur**

**1.53** The charted depth of 4½ fathoms (MLLW) in approximately 39° 28' 34.07"N 074° 14' 46.58"W (NAD83) and 6-fathom curve is in depths of 6 to 7½ fathoms (MLLW). This shoal is now located approximately 1100 meters to the southwest. **Concur**

**1.54** The charted dangerous wreck in approximately 39° 27' 14.53"N 074° 12' 54.50"W (NAD83) cleared to 6 fathoms (MLLW) was located (feature 4). Recommend removal of the 6 fathom (MLLW) cleared sounding, danger circle, and label Wk and

charting an 8 fathom sounding, dangerous wreck and label Wk in 39° 27' 07.58"N 074° 13' 04.03"W (NAD83). See AWOIS #1361. **Concur**

**1.55** The charted dangerous obstruction in approximately 39° 26' 45.52"N 074° 12' 41.37"W (NAD83) cleared to 7 fathoms (MLLW) was not located. Recommend removal of the 7 fathom (MLLW) cleared sounding, danger circle, and label Obstn. See AWOIS #1358. **Concur**

**1.56** The charted dangerous wreck in approximately 39° 26' 03.77"N 074° 12' 33.28"W (NAD83) was not located. Recommend removal of the wreck symbol and danger curve. See AWOIS #11213. **Concur**

**1.57** The charted dangerous wreck in approximately 39° 28' 17.00"N 074° 16' 00.88"W (NAD83) with labels PA and "(3½ fms rep)" with an arrow pointing to the wreck symbol was located (feature 104). Recommend removal of the labels PA and "(3½ fms rep)", the arrow, and the dangerous wreck symbol. Recommend charting a 4 fathom sounding, label Obstn, and danger circle in 39° 28' 14.17"N 074° 15' 59.18"W (NAD83). See AWOIS #11197. **Concur**

**1.58** The charted dangerous obstruction in approximately 39° 27' 52.54"N 074° 17' 14.58"W (NAD83) cleared to 1½ fathoms (MLLW) was located (features 83 and 106). Recommend removal of the 1½ fathom (MLLW) cleared sounding, danger circle, and label Obstns. Recommend charting a 2 fathom sounding and dangerous wreck symbol in 39° 27' 48.07"N 074° 17' 15.11"W (NAD83). See AWOIS #1366. **Concur**

**1.59** The charted dangerous obstruction in approximately 39° 27' 35.72"N 074° 16' 03.71"W (NAD83) cleared to 4½ fathoms (MLLW) was not located. Recommend removal of the 4½ fathom (MLLW) cleared sounding, danger circle, and label Obstns. See AWOIS #1364. **Concur**

**1.60** The fractional part of the 3 fathom sounding in approximately 39° 25' 36.59"N 074° 18' 08.41"W is incomplete and unreadable. Recommend updating the soundings in this area with the results from this survey. **Concur**

**1.61** The charted depth of 4¾ fathoms (MLLW) in approximately 39° 26' 13.07"N 074° 15' 38.35"W (NAD83) is in depths of 6½ fathoms (MLLW). **Concur**

**1.62** The charted dangerous wreck in approximately 39° 25' 48.72"N 074° 14' 18.69"W (NAD83) with a least depth of 4¾ fathoms (MLLW) was located (features 16 and 17). Recommend removal of the 4¾ fathom (MLLW) sounding, danger circle, and label Wk and charting a 5¼ fathom sounding and dangerous wreck symbol in 39° 25' 42.02"N 074° 14' 21.47"W (NAD83) (feature #17). See AWOIS #11211. **Concur**

**1.63** The charted dangerous obstruction in approximately 39° 25' 23.48"N 074° 13' 36.03"W (NAD83) cleared to 8¾ fathoms (MLLW) was located (feature 111 with a least

depth of 10 fathoms). Recommend removal of the 8¾ fathom (MLLW) sounding, danger circle, and label Obstn. See AWOIS #1353. **Concur**

**1.64** The charted dangerous wreck in approximately 39° 24' 46.32"N 074° 13' 59.87"W (NAD83) with a least depth of 4½ fathoms (MLLW) was located (feature 94). Recommend removal of the 4¾ fathom (MLLW) sounding, danger circle, and label Wk and charting a 4¾ fathom sounding and dangerous wreck symbol in 39° 24' 44.38"N 074° 14' 01.11"W (NAD83). See AWOIS #1351. **Concur**

### Chart 13003

No changes to chart 13003 are recommended based on the results of this survey.

### Navigational Aids

The following table lists the aids to navigation in H11241. The USCG Light List-Vol.II-Atlantic Coast (Toms River, New Jersey to Little River, South Carolina), 2003 was compared to the buoys identified in H11197. Private marker Y"OPT" charted in approximately 39° 28' 47"N 074° 12' 46"W (NAD83) was not present during this survey. A private marker Y"OPT" was located in 39° 27' 41.65"N 074° 15' 43.41"W within the charted area of "Numerous Research Buoys".

**Table D-1. Aids to Navigation**

| BUOY NAME | APPROXIMATE POSITION |                 | MB/SS FILE NAME               | CONFIRMED POSITION FROM MB/SS |                 |
|-----------|----------------------|-----------------|-------------------------------|-------------------------------|-----------------|
|           | LAT (N)              | LON (W)         |                               | LAT (N)                       | LON (W)         |
| R "WR2"   | 39° 24' 48.06"       | 074° 13' 45.03" | OEMBA04006.d01<br>3441102.xtf | 39° 24' 49.71"                | 074° 13' 46.74" |
| RW "LE"   | 39° 26' 43.62"       | 074° 17' 25.2." | OEMBA03321.d14<br>3212100.xtf | 39° 26' 45.44"                | 074° 17' 26.30" |
| Y "OPT"   | 39° 27' 43.93"       | 074° 15' 43.42" | OEMBA03316.d04<br>3161355.xtf | 39° 27' 41.65"                | 074° 15' 43.41" |
| Y "OPT"   | 39° 28' 48.61"       | 074° 12' 46.63" | N/A                           | N/A                           | N/A             |

### AWOIS Items, Wrecks and Obstructions

#### AWOIS Items

#### AWOIS #1351

Full search of the 250-meter radius with 200% side scan and resulting multibeam sonar coverage. The wreck of an apparent tow boat (feature #72) was found about 50 meters N. Recommend removal of the charted 25 Wk in 39° 24' 45.9"N 074° 14' 01.01"W

(NAD83) and recommend charting a 29 Wk in 39° 24' 44.39"N 074° 14' 01.12"W (NAD83), move the charted danger circle and blue tint to this position. **Concur**

**AWOIS #1353**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. The only feature within the radius was an obstruction (feature #111) about 300 meters NW. Recommend removal of the charted Obstn cleared to 53 feet MLLW, danger curve and blue tint in 39° 25' 18.42"N 074° 13' 30.50"W (NAD83). **Concur.**

**AWOIS #1355**

Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage **in 39° 25' 20.42"N 074° 15'31.5"W (NAD83)**. Within the search radius were found a 45 Obstn (feature #25) about 1200 meters SW, a 37 Obstn (feature #99) about 1670 meters W, and a 22 sounding on a sand wave about 900 meters W. **Item not presently charted, no change in charting recommended.**

**AWOIS #1358**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. No features were found within this radius. Recommend removal of the charted Obstn cleared to 43 feet MLLW, danger curve and blue tint in 39° 26' 48.5"N 074° 12' 47.8"W (NAD83). **Concur**

**AWOIS #1361**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. A wreck (feature #4) was found about 250 meters WNW. Recommend removal of the charted Wk cleared to 36 feet MLLW, danger curve and blue tint in 39° 27' 04.0"N 074° 12' 52.7"W (NAD83), and recommend charting a 49 Wk in 39° 27' 07.58"N 074° 13' 04.03"W (NAD83). **Concur**

**AWOIS #1364**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. No features were found within this radius. Recommend removal of the charted Obstn cleared to 28 feet MLLW, danger curve and blue tint in 39° 27' 25.7"N 074° 16' 04.32"W (NAD83). **Concur**

**AWOIS #1366**

Full search of the eastern portion of the 2000-meter radius to depths of about 10 feet MLLW on the west with 200% side scan and resulting multibeam sonar coverage. A wreck was found about 100 meters NW (features #83 and #106). The least depth of both features is 13 feet MLLW. Recommend removal of the charted Obstn cleared to 9 feet MLLW, danger curve and blue tint in 39° 27' 45.42"N 074° 17' 12.51"W (NAD83), and recommend charting a 13 Wk **with a danger curve in** 39° 27' 48.08"N 074° 17' 15.11"W (NAD83). **Concur**

**AWOIS #1369**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. The obstruction was found near the charted position with a least depth of 51 feet MLLW (feature #13). Recommend removal of the charted Obstn cleared to 48 feet MLLW, danger curve and blue tint in 39° 28' 13.42"N 074° 11' 35.49"W (NAD83) and recommend charting a 51 Obstn in 39° 28' 13.87"N 074° 11' 37.28"W (NAD83). This obstruction is within a fish haven with an authorized minimum depth of 50 feet MLLW (AWOIS 11212). **Do not concur, see E&A report, section D.1a.**

**AWOIS #1375**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. No wreck found within this radius. Five small obstructions were found within and just outside the radius (features #18, #19, #21, #23, #110). Shoalest depth is a 56 Obstn (feature #23) in 39° 30' 41.83"N 074° 10' 54.68"W (NAD83). Recommend removal of the charted Wk PA cleared to 46 feet MLLW, danger curve and blue tint in 39° 30' 49.04"N 074° 11' 07.17"W (NAD83). **Concur.**

**AWOIS #2754**

Full **Partial** search only in the eastern part of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage **in 39° 31' 30.42"N 074° 15' 40.50'W (NAD83)**. No coverage of the listed AWOIS position **which is not currently charted**. Recommend charting a 20 Wk in 39° 31' 19.13"N 074° 15' 25.50'W (NAD83) (feature #101). **Concur**

**AWOIS #2755**

Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. Three obstructions were found within the search radius (features #61, #102, #103). The shoalest feature, a 25 Obstn, (feature # 102) is about 250 meters NW. Recommend removal of the charted Obstn cleared to 24 feet MLLW, danger curve and blue tint in 39° 29' 22.42"N 074° 15' 30.51'W (NAD83) and recommend charting a 25 Obstn in 39° 29' 28.45"N 074° 15' 37.59'W (NAD83). **Concur**

**AWOIS #11195**

Full search of about the eastern third of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage **in 39° 31' 00.42"N 074° 15' 58.51'W (NAD83)**. . No coverage of the charted dangerous wreck PA. **Concur - No change in charting is recommended.**

**AWOIS #11196**

Full search of about the eastern third of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage **in 39° 30' 00.42"N 074° 16' 46.51'W (NAD83)**. No coverage of the charted dangerous wreck PA. **Concur - No change in charting is recommended**

**AWOIS #11197**

Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage except on the west side in depths less than 10 feet MLLW. Recommend removal of the charted dangerous wreck (22 ft rep) PA, danger curve and blue tint in 39° 28' 08.47"N 074° 15' 55.87"W (NAD83) and recommend charting a *dangerous* 23 Obstn in 39° 28' 14.18"N 074° 15' 59.19"W (NAD83) (feature #104). *Concur*

**AWOIS #11200**

Full search of about the southern third of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. This included the charted position *in 39° 31' 00.80"N 074° 10' 58.81"W*. No wreck was found. In addition to the 5 small obstructions discussed under AWOIS #1375 three more small obstructions were found within the search area (features #1, #26, and #129). *Retain item as charted.*

**AWOIS #11201**

Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. Within the search radius were found one wreck (feature #94 about 1500 meters ENE) and numerous obstructions. Recommend removal of the charted dangerous wreck PA, danger curve and blue tint in 39° 23~~29~~ ' 36.24 *35.09*"N 074° 08' 58.86"W (NAD83) and recommend charting a *dangerous* 57 Wk in 39° 29' 47.86"N 074° 07' 55.51"W (NAD83). *Concur*

**AWOIS #11211**

Full search of the 1500-meter radius with 200% side scan and resulting multibeam sonar coverage. A wreck (features #16 and #17) was found about 100 meters south. Recommend removal of the charted 29 Wk, danger curve and blue tint in 39° 25' 45.5"N 074° 14' 18.1"W (NAD83) and recommend charting a *dangerous* 32 Wk in 39° 25' 42.02"N 074° 14' 21.48"W (NAD83) (feature #17). *Concur*

**AWOIS #11212**

Full search of the fish haven and more than 250 meters beyond its limits with 200% side scan and resulting multibeam sonar coverage *centered in 39° 28' 31.72"N 074° 11' 00.07"W*. Numerous wrecks and obstructions were found within the fish haven. Least depth is a 47 Obstn (feature #65) in 39° 28' 50.15"N 074° 10' 20.65"W (NAD83). There are four wrecks and ~~sixteen~~ *fourteen* obstructions shoaler than 50 feet MLLW within this fish haven. Recommend charting the depths and features from this survey, and recommend changing the label to "Fish Haven (auth min 50 ft) (depths from survey of 2003/2004)". *Concur w/clarification, see E&A report, section D.1b.*

**AWOIS #11213**

Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. Within the search radius were found a 47 Obstn (feature #54) about 1000 meters NW, and a 57 Obstn (feature #67) about 1000 meters WSW. Recommend removal of the charted dangerous wreck and blue tint charted in 39° 26' 03.8"N 074° 12' 26.3"W (NAD83). *Concur*

### Uncharted Wrecks and Obstructions

Table D-2 lists uncharted wrecks and obstructions found in H11241 that are recommended for charting and are not noted elsewhere in this report.

**Table D-2. Uncharted Wrecks and Obstructions**

| Feature Number | Feature Position (NAD83) |                   | Least Depth (Feet) | Charting Recommendations                |
|----------------|--------------------------|-------------------|--------------------|---|
|                | Latitude (N)             | Longitude (W)     |                    |   |
| 7              | 39° 28' 29.9160"         | 074° 11' 38.4480" | 48.56              | WRECK Plot sounding and symbol Wk *     |
| 10             | 39° 28' 44.9580"         | 074° 11' 17.9460" | 47.67              | WRECK Plot sounding and symbol Wk *     |
| 11             | 39° 27' 20.9460"         | 074° 12' 31.4040" | 52.62              | WRECK Plot sounding and symbol Wk *     |
| 14             | 39° 29' 34.6800"         | 074° 10' 23.8920" | 54.1               | OBSTR Plot sounding and symbol Obstn *  |
| 15             | 39° 28' 20.7540"         | 074° 11' 44.5320" | 48.56              | WRECK Plot sounding and symbol Wk *     |
| 20             | 39° 29' 31.5720"         | 074° 14' 23.7120" | 45.44              | OBSTR Plot sounding and symbol Obstn *  |
| 22             | 39° 28' 47.2260"         | 074° 12' 47.4060" | 53.64              | OBSTR Plot sounding and symbol Obstn *  |
| 24             | 39° 27' 14.2800"         | 074° 12' 33.2880" | 52.69              | OBSTR Plot sounding and symbol Obstn ** |
| 27             | 39° 29' 11.3520"         | 074° 15' 03.4260" | 39.53              | OBSTR non plot <i>Concur</i>            |
| 28             | 39° 29' 11.9340"         | 074° 15' 01.9980" | 39.24              | OBSTRS Plot sounding and symbol Obstn * |
| 29             | 39° 28' 21.0240"         | 074° 15' 08.8680" | 36.16              | OBSTR Plot sounding and symbol Obstn ** |
| 30             | 39° 28' 24.1680"         | 074° 09' 49.8000" | 57.55              | OBSTR non plot <i>Concur</i>            |
| 31             | 39° 28' 36.0360"         | 074° 10' 11.3460" | 48.36              | OBSTR Plot sounding and symbol Obstn *  |
| 32             | 39° 28' 43.0080"         | 074° 10' 29.2260" | 48.75              | OBSTR Plot sounding and symbol Obstn *  |
| 34             | 39° 26' 36.2400"         | 074° 13' 48.3120" | 47.28              | WRECK Plot sounding and symbol Wk *     |
| 37             | 39° 28' 38.2080"         | 074° 11' 04.4580" | 47.64              | OBSTR Plot sounding and symbol Obstn *  |
| 38             | 39° 28' 42.6480"         | 074° 11' 09.8520" | 48.75              | OBSTR Plot sounding and symbol Obstn ** |
| 42             | 39° 28' 38.4600"         | 074° 10' 58.0800" | 48.1               | OBSTR Plot sounding and symbol Obstn ** |
| 46             | 39° 29' 03.8460"         | 074° 10' 22.6980" | 55.97              | OBSTR non plot <i>Concur</i>            |
| 47             | 39° 27' 39.9780"         | 074° 11' 37.7460" | 56.99              | OBSTR non plot <i>Concur</i>            |
| 48             | 39° 29' 57.0720"         | 074° 09' 28.4400" | 54.07              | OBSTR Plot sounding and symbol Obstn *  |
| 50             | 39° 27' 41.4780"         | 074° 11' 48.9900" | 54.82              | OBSTR non plot <i>Concur</i>            |
| 53             | 39° 28' 42.5220"         | 074° 10' 57.3120" | 47.87              | OBSTR Plot sounding and symbol Obstn ** |
| 55             | 39° 28' 22.0380"         | 074° 10' 55.4580" | 48.59              | WRECK Plot sounding and symbol Wk **    |
| 57             | 39° 28' 14.6340"         | 074° 10' 59.3760" | 48.85              | OBSTR Plot sounding and symbol Obstn ** |
| 58             | 39° 26' 05.070"          | 074° 16' 52.1460" | 36.52              | OBSTR Plot sounding and symbol Obstn *  |
| 59             | 39° 27' 35.5920"         | 074° 16' 48.7140" | 23.06              | OBSTR Plot sounding and symbol Obstn *  |
| 60             | 39° 27' 27.2220"         | 074° 16' 57.3360" | 23.88              | OBSTR Plot sounding and symbol Obstn ** |
| 62             | 39° 26' 00.0660"         | 074° 17' 43.8120" | 24.34              | OBSTR non plot <i>Concur</i>            |
| 63             | 39° 28' 13.4580"         | 074° 10' 57.7800" | 49.28              | OBSTR Plot sounding and symbol Obstn ** |
| 67             | 39° 25' 52.6800"         | 074° 13' 04.3020" | 56.92              | OBSTR Plot sounding and symbol Obstn *  |
| 68             | 39° 28' 10.8780"         | 074° 10' 54.6900" | 48.62*             | OBSTR Plot sounding and symbol Obstn *  |
| 69             | 39° 28' 43.6920"         | 074° 10' 24.6840" | 49.24              | OBSTR Plot sounding and symbol Obstn ** |
| 73             | 39° 24' 45.5520"         | 074° 13' 55.8540" | 49.7               | OBSTR Plot sounding and symbol Obstn ** |
| 74             | 39° 29' 30.5700"         | 074° 09' 33.1980" | 56.59              | OBSTR Plot sounding and symbol Obstn *  |



| Feature Number | Feature Position (NAD83) |                   | Least Depth (Feet)     | Charting Recommendations                            |
|----------------|--------------------------|-------------------|------------------------|---|
|                | Latitude (N)             | Longitude (W)     |                        |   |
| 77             | 39° 28' 24.6300"         | 074° 10' 19.5840" | 49.28* <b>48</b>       | OBSTR Plot sounding and symbol Obstrn *             |
| 78             | 39° 28' 56.8680"         | 074° 09' 45.2580" | 54.69                  | OBSTR Plot sounding and symbol Obstrn *             |
| 80             | 39° 29' 03.2280"         | 074° 09' 34.3020" | 56.04                  | OBSTR Plot sounding and symbol Obstrn **            |
| 81             | 39° 29' 19.6140"         | 074° 15' 09.6360" | 38.32 <b>not on ss</b> | OBSTR Plot sounding and symbol Obstrn **            |
| 82             | 39° 30' 27.19.348.1"     | 074° 17' 14.7900" | 13.26                  | OBSTR non plot <b>Do not concur See AWOIS #1366</b> |
| 84             | 39° 31' 38.8500"         | 074° 15' 01.7340" | 24.21                  | OBSTR Plot sounding and symbol Obstrn <b>Concur</b> |
| 85             | 39° 25' 08.8330"         | 074° 17' 26.7720" | 35.14                  | OBSTR non plot <b>Concur</b>                        |
| 86             | 39° 28' 26.2200"         | 074° 10' 20.4660" | 48.59                  | OBSTR Plot sounding and symbol Obstrn *             |
| 87             | 39° 29' 04.3860"         | 074° 09' 44.7000" | 55.71                  | OBSTR Plot sounding and symbol Obstrn **            |
| 89             | 39° 28' 09.6900"         | 074° 08' 37.1880" | 57.02                  | OBSTR non plot <b>Concur **</b>                     |
| 90             | 39° 23' 39.9060"         | 074° 14' 44.5920" | 58.76                  | OBSTR Plot sounding and symbol Obstrn **            |
| 91             | 39° 28' 17.9400"         | 074° 10' 23.1540" | 49.51                  | OBSTR Plot sounding and symbol Obstrn **            |
| 92             | 39° 24' 35.2620"         | 074° 13' 47.7840" | 45.11                  | OBSTR Plot sounding and symbol Obstrn **            |
| 95             | 39° 26' 59.8200"         | 074° 11' 24.5220" | 54.72                  | OBSTR Plot sounding and symbol Obstrn *             |
| 97             | 39° 29' 02.6940"         | 074° 09' 30.0000" | 54.92                  | OBSTR Plot sounding and symbol Obstrn **            |
| 98             | 39° 26' 52.0680"         | 074° 11' 28.2360" | 57.19                  | OBSTR Plot sounding and symbol Obstrn **            |
| 99             | 39° 25' 24.0840"         | 074° 16' 41.1780" | 37.66                  | OBSTR Plot sounding and symbol Obstrn **            |
| 100            | 39° 30' 44.3340"         | 074° 14' 36.5700" | 33.4                   | OBSTR Plot sounding and symbol Obstrn *             |
| 105            | 39° 27' 45.4140"         | 074° 16' 37.0560" | 25.03                  | OBSTR Plot sounding and symbol Obstrn **            |
| 107            | 39° 28' 02.2500"         | 074° 08' 43.9800" | 55.51                  | OBSTR Plot sounding and symbol Obstrn *             |
| 108            | 39° 29' 29.8080"         | 074° 07' 34.9500" | 55.61                  | OBSTR Plot sounding and symbol Obstrn *             |
| 112            | 39° 29' 08.4540"         | 074° 09' 17.2020" | 53.64                  | OBSTR Plot sounding and symbol Obstrn *             |
| 113            | 39° 28' 10.1760"         | 074° 10' 11.9100" | 48.85                  | OBSTR Plot sounding and symbol Obstrn *             |
| 114            | 39° 23' 58.7100"         | 074° 14' 03.2280" | 59.12                  | OBSTR non plot <b>Concur</b>                        |
| 115            | 39° 29' 29.8620"         | 074° 08' 38.1960" | 56.17                  | OBSTR non plot **                                   |
| 116            | 39° 29' 46.1880"         | 074° 08' 10.2420" | 57.74                  | OBSTR non plot **                                   |
| 117            | 39° 29' 07.2000"         | 074° 08' 48.9000" | 52.76                  | OBSTR Plot sounding and symbol Obstrn *             |
| 127            | 39° 29' 16.6440"         | 074° 08' 37.1280" | 56.37                  | OBSTR Plot sounding and symbol Obstrn **            |
| 128            | 39° 30' 04.9440"         | 074° 07' 47.8320" | 55.25                  | OBSTR Plot sounding and symbol Obstrn *             |
| 130            | 39° 27' 24.7620"         | 074° 14' 45.0180" | 39.11                  | OBSTR Plot sounding and symbol Obstrn *             |

\* **Chart feature w/ least depth & danger curve**

\*\* **Do not chart See E&A report**

### Bottom Composition

There were 15 bottom samples taken to verify the bottom types charted for H11241. Table D-3 compares information for each sample collected to the charted bottom type.

**Table D-3. H11241 Bottom Sample Characteristics**

| Bottom Sample Position (NAD83) |                 | Depth of Bottom Sample (ft) | Observed Bottom Type | Charted Bottom Type | Chart 12300 | Chart 12318 | Chart 13003 | Chart 12323 | Chart 12316 |
|--------------------------------|-----------------|-----------------------------|----------------------|---------------------|-------------|-------------|-------------|-------------|-------------|
| Latitude (N)                   | Longitude (W)   |                             |                      |                     |             |             |             |             |             |
| 39° 23' 56.57"                 | 074° 15' 37.56" | 33.99                       | S                    | S                   |             | X           |             |             |             |
| 39° 25' 16.71"                 | 074° 16' 28.21" | 26.28                       | S                    | S                   |             | X           |             |             |             |
| 39° 26' 02.25"                 | 074° 14' 10.18" | 45.70                       | S, Sh                | S                   |             | X           |             |             |             |
| 39° 27' 04.65"                 | 074° 15' 51.17" | 41.63                       | S                    | S                   |             | X           |             | X           |             |
| 39° 27' 34.79"                 | 074° 17' 04.90" | 20.90                       | h S                  | h S                 |             | X           |             | X           | X           |
| 39° 28' 03.32"                 | 074° 16' 11.10" | 31.96                       | S, Sh                | S                   |             | X           |             | X           |             |
| 39° 27' 41.82"                 | 074° 12' 48.55" | 57.25                       | S, G, Sh             | S                   |             | X           |             | X           |             |
| 39° 28' 04.84"                 | 074° 09' 00.89" | 56.43                       | S                    | S                   |             | X           |             | X           |             |
| 39° 30' 16.83"                 | 074° 10' 33.27" | 53.05                       | S, Sh,               | G                   |             | X           |             | X           |             |
| 39° 29' 10.06"                 | 074° 11' 27.75" | 58.99                       | S                    | S                   |             | X           |             | X           |             |
| 39° 28' 35.73"                 | 074° 13' 17.10" | 52.56                       | M, G                 | S                   |             | X           |             | X           |             |
| 39° 29' 39.79"                 | 074° 14' 35.91" | 42.98                       | fne S                | S                   |             | X           |             | X           | X           |
| 39° 29' 05.28"                 | 074° 16' 20.61" | 21.92                       | fne S, Silt          | S                   |             | X           |             | X           |             |
| 39° 30' 16.09"                 | 074° 15' 34.83" | 26.51                       | fne S                | S                   |             | X           |             | X           | X           |
| 39° 31' 12.38"                 | 074° 14' 06.76" | 35.14                       | fne S, Sh            | S                   |             |             |             | X           | X           |

It is recommended that the bottom type charted be updated where necessary based on the information collected during the latest survey.

## D.2 ADDITIONAL RESULTS

Shoreline verification was not required for this survey. Comparison with prior surveys was not required under this contract. See Section D.1 Chart Comparison for comparison to the nautical charts.

### Aids to Navigation (*See Also Evaluation Report*)

Private marker Y"OPT" charted in approximately 39° 28' 47"N 074° 12' 46"W (NAD83) was not present during this survey. A private marker Y"OPT" was located in 39° 27' 41.65"N 074° 15' 43.41"W within the charted area of "Numerous Research Buoys". All other buoys charted serve their intended purpose.

**APPENDIX I. DANGER TO NAVIGATION REPORTS****Danger to Navigation Report**

Hydrographic Survey Registry Number: H11241

State: New Jersey

Locality: Atlantic Ocean

Sublocality: Approaches to Little Egg and Brigantine Inlets

Project Number: OPR\_C303-KR-03

Survey Date: November 21, 2003 and on going

Depths are reduced to Mean Lower Low Water using verified tides based on preliminary zoning. Positions are based on NAD-83. Positions were obtained using DGPS from a US Coast Guard Station.

## Charts affected:

- 12300\_1 43<sup>rd</sup> Edition 1:400,000 scale NTM Revision Date:  
12/06/2003
- 12318\_1 41<sup>st</sup> Edition 1:80,000 scale NTM Revision Date:  
12/06/2003
- 13003\_1 47<sup>th</sup> Edition 1:1,200,000 scale NTM Revision Date:  
12/06/2003
- 12323\_1 23<sup>rd</sup> Edition 1:80,000 scale NTM Revision Date:  
12/06/2003
- 12316\_1 29<sup>th</sup> Edition 1:40,000 scale NTM Revision Date:  
11/15/2003

The following item was found during hydrographic survey operations:

| <u>FEATURE</u> | <u>DEPTH (FT)</u> | <u>LATITUDE (N)</u>              | <u>LONGITUDE (W)</u>              |
|----------------|-------------------|----------------------------------|-----------------------------------|
| 1. Obstruction | 54                | 39° 29.95124' N<br><b>57.07'</b> | 074° 09.47402' W<br><b>28.44'</b> |

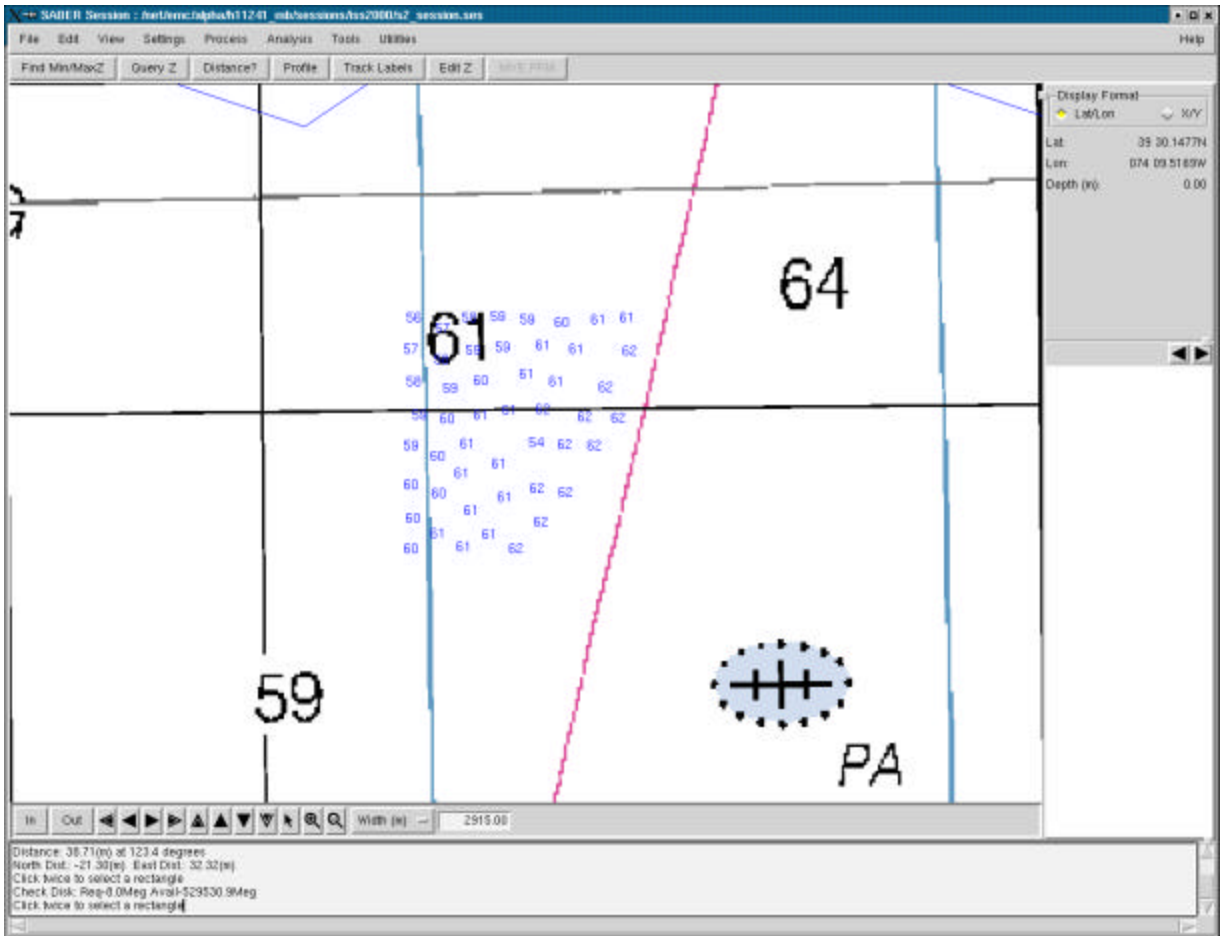


Figure App. I-1. Chart 12318 Showing Obstruction and Selected Soundings.

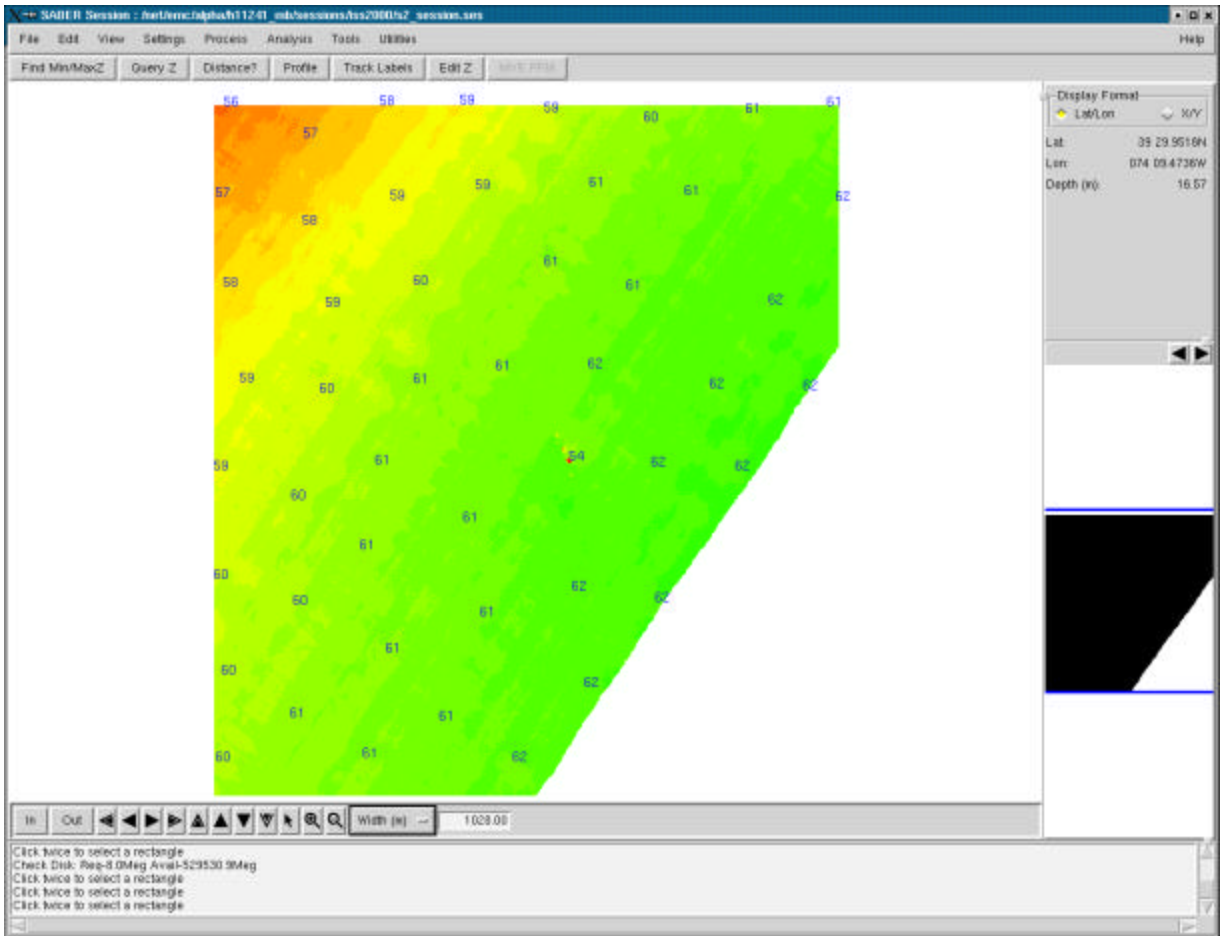


Figure App. I-2. Color Coded Depth Grid and Selected Soundings Showing Obstruction, H1 1241

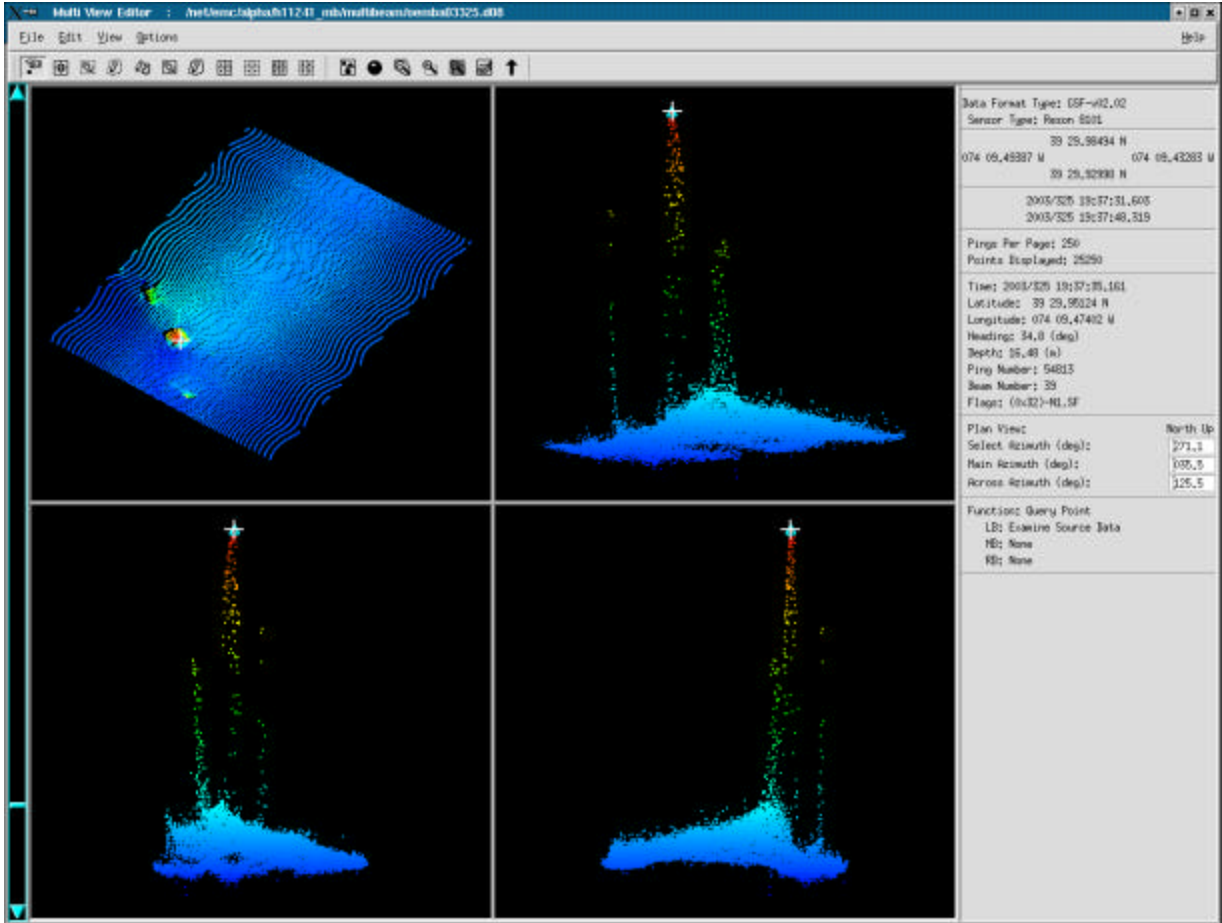


Figure App. I-3. Multibeam File Showing Obstruction

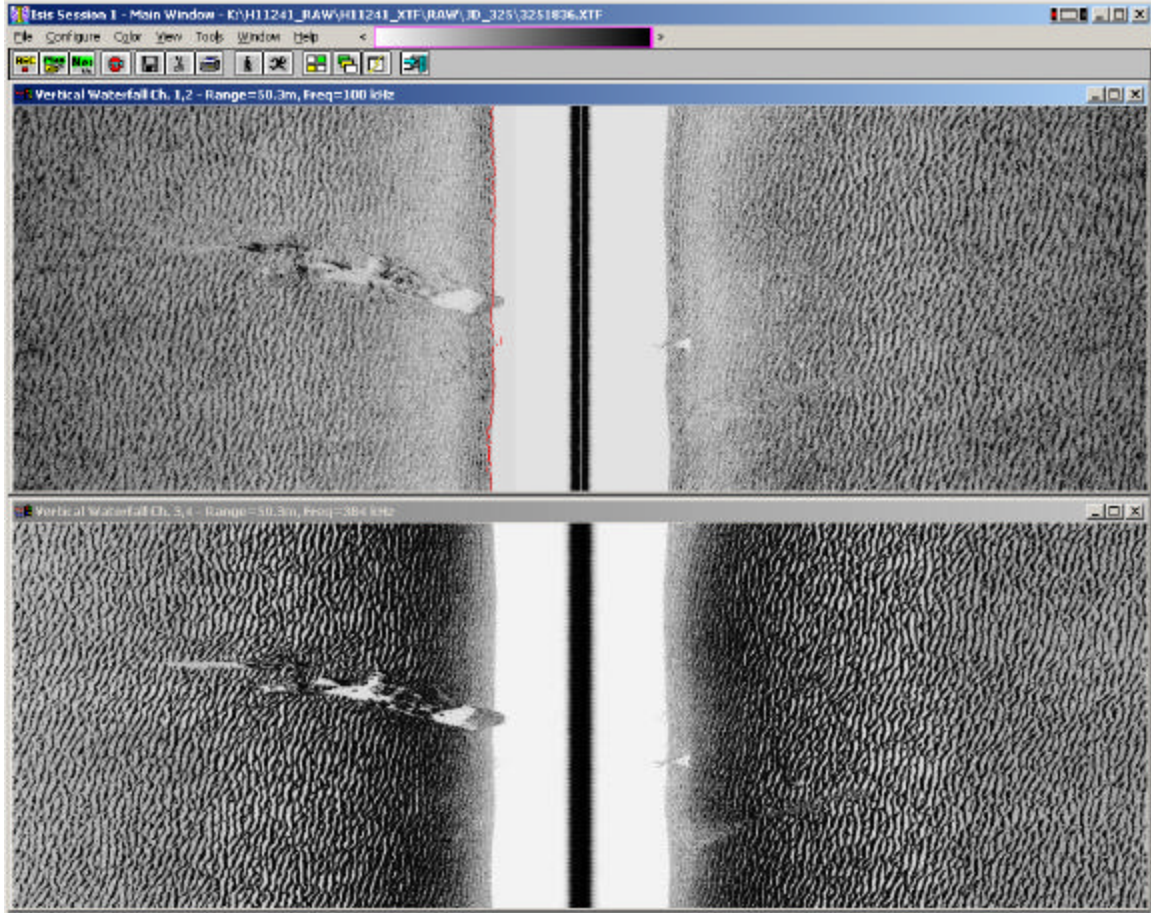


Figure App. I-4. Sidescan Image Showing Obstruction

Recommend Charting with 54 feet MLLW sounding, dotted blue tinted dangerous submerged obstruction circle symbol, and label "Obstn"  $39^{\circ} 29.95124$  **57.07'** N  $074^{\circ} 09.47402$  **28.44'** W (NAD 83). **Concur**

**APPENDIX IV. TIDES AND WATER LEVELS**

The on-line times for acquisition of valid hydrographic data are presented in Table App. IV-1. Abstract of Times of Hydrography, H11241.

**Project:** OPR-C303-KR-03.

**Registry No.:** H11241

**Contractor Name:** Science Applications International Corp.

**Date:** 25 January 2004

**Sheet Letter:** F

**Inclusive Dates:** 28 October 2003 – 25 January 2004

Field work is complete.

**Table App. IV-1. Abstract Times of Hydrography, H11241**

| Year | Julian Day | Begin Time | End Time | Year | Julian Day | Begin Time | End Time |
|------|------------|------------|----------|------|------------|------------|----------|
| 2003 | 301        | 18:17:50   | 20:51:31 | 2003 | 338        | 11:54:11   | 22:11:41 |
| 2003 | 303        | 17:58:40   | 21:08:00 | 2003 | 342        | 12:01:17   | 22:19:01 |
| 2003 | 305        | 11:40:20   | 21:17:14 | 2003 | 343        | 11:59:13   | 21:56:18 |
| 2003 | 306        | 11:26:03   | 21:00:20 | 2003 | 344        | 11:08:08   | 18:57:35 |
| 2003 | 307        | 11:26:44   | 21:24:42 | 2003 | 346        | 13:54:51   | 21:53:28 |
| 2003 | 308        | 11:26:35   | 21:20:59 | 2003 | 347        | 12:06:57   | 21:51:04 |
| 2003 | 309        | 17:45:32   | 20:49:40 | 2003 | 350        | 12:13:54   | 21:59:37 |
| 2003 | 310        | 11:39:42   | 21:20:22 | 2004 | 006        | 12:02:20   | 19:15:47 |
| 2003 | 311        | 11:54:44   | 21:34:11 | 2004 | 008        | 11:59:37   | 21:50:27 |
| 2003 | 312        | 11:29:02   | 19:07:30 | 2004 | 009        | 12:02:32   | 16:05:03 |
| 2003 | 313        | 11:46:10   | 13:38:11 | 2004 | 011        | 12:02:47   | 21:27:05 |
| 2003 | 314        | 17:54:36   | 21:59:54 | 2004 | 013        | 12:01:29   | 19:16:34 |
| 2003 | 315        | 11:29:48   | 19:15:41 | 2004 | 014        | 11:58:02   | 21:43:27 |
| 2003 | 316        | 11:27:27   | 16:55:16 | 2004 | 017        | 16:16:38   | 23:26:28 |
| 2003 | 319        | 15:53:00   | 17:49:06 | 2004 | 018        | 16:19:04   | 22:39:24 |
| 2003 | 320        | 14:31:56   | 18:35:35 | 2004 | 020        | 12:34:18   | 15:50:25 |
| 2003 | 321        | 11:24:38   | 21:25:47 | 2004 | 021        | 17:07:16   | 23:43:46 |
| 2003 | 322        | 11:25:43   | 20:42:36 | 2004 | 022        | 12:04:05   | 17:05:35 |
| 2003 | 325        | 11:43:03   | 21:23:39 | 2004 | 024        | 12:23:29   | 22:07:26 |
| 2003 | 326        | 11:28:50   | 21:15:36 | 2004 | 025        | 12:21:25   | 17:57:11 |



**E. APPROVAL SHEET**

7 April 2004

**LETTER OF APPROVAL**

REGISTRY NUMBER H11241

This report and the accompanying smooth sheet and digital data are respectfully submitted.

Field operations contributing to the accomplishment of survey H11241 were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and smooth sheet have been closely reviewed and are considered complete and adequate as per the Statement of Work.

Reports submitted previously to and concurrently with this descriptive report to NOAA for this project include:

| <u>Report</u>                          | <u>Submission Date</u> |
|--|------------------------|
| Data Acquisition and Processing Report | 1 April 2004           |
| Descriptive Report for Sheet C, H11197 | 1 April 2004           |
| Descriptive Report for Sheet D, H11198 | 1 April 2004           |
| Vertical and Horizontal Control Report | 7 April 2004           |

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Paul L. Donaldson  
Hydrographer  
Science Applications International Corp.  
Wednesday, 7 April 2004

**LETTER TRANSMITTING DATA**

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check)

ORDINARY MAIL

AIR MAIL

REGISTERED MAIL

EXPRESS

GBL (Give number) \_\_\_\_\_

DATE FORWARDED

06/01/2005

NUMBER OF PACKAGES

1

**TO:**

CHIEF, DATA ACQUISITION AND CONTROL  
NOAA, NOS, OCS, HSD  
1315 EAST-WEST HIGHWAY  
SSMC3, STATION 6704,  
SILVER SPRING, MARYLAND 20910-3282

**NOTE:** A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H11241

NEW JERSEY, ATLANTIC OCEAN, APPROACHES TO LITTLE EGG AND BRIGANTINE INLETS

ONE TUBE CONTAINING THE FOLLOWING:

- 1 CONTRACT ORIGINAL MYLAR SMOOTH SHEET
- 1 H-DRAWING ON MYLAR FOR NOS CHART 12316
- 1 H-DRAWING ON MYLAR FOR NOS CHART 12318
- 1 H-DRAWING ON MYLAR FOR NOS CHART 12323

FROM: (Signature)

*Deborah A. Blane*

**RECEIVED THE ABOVE**

(Name, Division, Date)

**Return receipted copy to:**

NOAA \ NATIONAL OCEAN SERVICE  
ATLANTIC HYDROGRAPHIC BRANCH N/CS33  
439 WEST YORK STREET  
NORFOLK, VA. 23510-1114

**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H11241 (2003)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report and required revisions on the contractor Preliminary Smooth Sheet (PSS). Sections in this report refer to the corresponding sections of the Descriptive Report.

**B. DATA ACQUISITION AND PROCESSING**

The following software was used to process and review data at Atlantic Hydrographic Branch:

AutoCAD, release 14  
CARIS HIPS/SIPS version 5.3  
MapInfo, version 6.5  
Microstation J, version 07.01.04.16  
I/RAS B, version 07.01.000.18

The Preliminary Smooth Sheet was plotted by the contractor. No revisions were made to the Preliminary Smooth Sheet during office processing.

**C. VERTICAL AND HORIZONTAL CONTROL**

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values.

**D. RESULTS AND RECOMMENDATIONS**

|                                    |   |
|------------------------------------|---|
| <b>D.1 <u>CHART COMPARISON</u></b> | <b><u>12316 30<sup>th</sup> Edition, Nov 01/03</u></b>  |
| <hr/>                              | <b><u>Corrected through NM Nov 15/03</u></b>            |
|                                    | <b><u>Corrected through LNM Nov 04/03</u></b>           |
|                                    | <b><u>12318 42<sup>st</sup> Edition, May/04</u></b>     |
|                                    | <b><u>Corrected through NM May 29/04</u></b>            |
|                                    | <b><u>Corrected through LNM May 18/04</u></b>           |
| <hr/>                              | <b><u>12323 23<sup>st</sup> Edition, Mar. 11/04</u></b> |
| <hr/>                              |   |

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in Section D of the Descriptive Report. Attention is directed to the following:

a. Automated Wreck and Obstruction Information System (AWOIS) Item #1369, a charted "48 ft Obstruction with danger curve and wire drag basket", in Latitude 39°28'13.42"N,

Longitude 74°11'35.49"W, originates with Chart Letter 416 of 1950. The hydrographer located an obstruction with a least depth of 51 feet in Latitude 39°28'13.87"N, Longitude 74°11'37.28"W, which is within the limits of a charted Obstruction Fish Haven. Due to the revised least depth on this feature, it is no longer in conflict with the authorized minimum depth of 50 feet. It is recommended that the 48 ft Obstruction with danger curve and wire drag basket no longer be charted. See also AWOIS #11212.

b. AWOIS Item #11212, a charted "Obstruction Fish Haven with an authorized minimum depth of 50ft", in the vicinity of Latitude 39°28'50.15"N, Longitude 74°10'20.65"W, originates with Chart Letter 11 of 1993. The present survey located numerous wrecks and obstructions within the limits of the fish haven. The least depth on eighteen of the features found was shoaler than the authorized minimum depth of 50 ft. Considering chart scale, it is recommended that only the ten dangerous shoal features listed below and located within the Obstruction Fish Haven be charted.

| <u>Features</u>  | <u>Latitude</u> | <u>Longitude</u> |
|------------------|-----------------|------------------|
| _____ 48ft Wk    | 39°28'20.75"N   | 74°11'44.53"W    |
| _____ 48ft Wk    | 39°28'29.92"N   | 74°11'38.45"W    |
| _____ 47ft Wk    | 39°28'44.96"N   | 74°11'17.95"W    |
| _____ 47ft Obstn | 39°28'38.21"N   | 74°11'04.46"W    |
| _____ 47ft Obstn | 39°28'50.15"N   | 74°10'20.65"W    |
| _____ 49ft Obstn | 39°28'43.01"N   | 74°10'29.23"W    |
| _____ 48ft Obstn | 39°28'36.04"N   | 74°10'11.35"W    |
| _____ 48ft Obstn | 39°28'26.22"N   | 74°10'20.47"W    |
| _____ 49ft Obstn | 39°28'10.18"N   | 74°10'11.91"W    |
| _____ 48ft Obstn | 39°28'10.88"N   | 74°10'54.69"W    |

4. The following features were located by the present survey and are shown on the smooth sheet:

| <u>Features</u> | <u>Latitude</u> | <u>Longitude</u> |
|-----------------|-----------------|------------------|
| _____ 52 Obstn  | 39°27'14.28"N   | 74°12'33.29"W    |
| _____ 36 Obstn  | 39°28'21.02"N   | 74°15'08.87"W    |
| _____ 49 Obstn  | 39°24'45.55"N   | 74°13'55.85"W    |
| _____ 52 Obstn  | 39°29'03.23"N   | 74°09'34.30"W    |
| _____ 38 Obstn  | 39°29'19.61"N   | 74°15'09.64"W    |
| _____ 55 Obstn  | 39°29'04.39"N   | 74°09'44.70"W    |
| _____ 57 Obstn  | 39°23'39.91"N   | 74°14'44.59"W    |
| _____ 45 Obstn  | 39°24'35.26"N   | 74°13'47.78"W    |

|    |       |               |               |
|----|-------|---------------|---------------|
| 55 | Obstn | 39°29'02.69"N | 74°09'30.00"W |
| 57 | Obstn | 39°26'52.07"N | 74°11'28.24"W |
| 37 | Obstn | 39°25'24.08"N | 74°16'41.18"W |
| 56 | Obstn | 39°29'29.86"N | 74°08'38.20"W |
| 57 | Obstn | 39°29'46.19"N | 74°08'10.24"W |
| 56 | Obstn | 39°29'16.64"N | 74°08'37.13"W |
| 47 | Obstn | 39°26'24.50"N | 74°12'56.70"W |
| 58 | Obstn | 39°29'37.10"N | 74°07'50.60"W |
| 53 | Obstn | 39°30'23.90"N | 74°10'41.20"W |
| 59 | Obstn | 39°30'22.80"N | 74°11'26.60"W |
| 57 | Obstn | 39°30'43.10"N | 74°12'00.40"W |
| 24 | Obstn | 39°31'38.70"N | 74°15'01.70"W |
| 29 | Obstn | 39°29'28.69"N | 74°15'28.90"W |
| 29 | Obstn | 39°29'36.15"N | 74°15'31.02"W |
| 24 | Obstn | 39°31'38.70"N | 74°15'01.70"W |

Due to the close proximity of shoaler features or depths in the common areas, it is recommended that the above noted features not be charted.

5. The following obstructions were located by the present survey and are shown on the smooth sheet:

|    |       |               |               |
|----|-------|---------------|---------------|
| 24 | Obstn | 39°27'27.22"N | 74°16'57.34"W |
| 24 | Obstn | 39°31'38.85"N | 74°15'01.73"W |
| 29 | Obstn | 39°29'35.01"N | 74°15'32.34"W |
| 29 | Obstn | 39°29'27.53"N | 74°15'30.35"W |
| 25 | Obstn | 39°27'45.41"N | 74°16'37.06"W |

These features will also be shown on NOS chart 12316 (1:40,000 scale); however, they will not be shown on NOS chart 12318 (1:80,000 scale), due to chart scale.

6. An uncharted dangerous obstruction with a least depth of 45 feet was found by the present survey in Latitude 39°24'53.64"N Longitude 74°16'09.6"W. It is recommended that a 45 foot dangerous obstruction be charted in the above location where chart scale permits.

Except as mentioned above, the present survey is adequate to supercede the charted hydrography within the common area.

### **JUNCTIONS**

H11198 (2003) to the southwest

A standard junction was effected between H11241(2003-2004)and H11198 (2003) with the present survey. There are no contemporary surveys to the east or northeast of the present survey.

Present survey depths are in harmony with the charted hydrography.

**ADEQUACY OF SURVEY**

The present survey is adequate to supersede the charted hydrography within the common area. No additional work is required.

**MISCELLANEOUS**

Chart compilation using the present survey data was done by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compiled data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

The following NOS charts were used for compilation of the present survey:

12316 31<sup>st</sup> Edition, May/04  
Corrected through NM May 29/04  
Corrected through LNM May 18/04  
12318 42<sup>st</sup> Edition, May/04  
Corrected through NM May 29/04  
Corrected through LNM May 18/04  
12323 23<sup>rd</sup> Edition, Mar. 11/04

H11241

*Robert R. Hill, Jr.*

Robert R. Hill, Jr.

Cartographer

Verification of Field Data,

Evaluation and Analysis

APPROVAL SHEET  
H11241

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproof of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Robert R. Hill

Robert R. Hill  
Cartographer,  
Atlantic Hydrographic Branch

Date: 5/25/05

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Approved: P. Tod Schattgen

P. Tod Schattgen  
Lieutenant Commander, NOAA  
Chief, Atlantic Hydrographic Branch

Date: 5/25/05



## REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number: H11241

Survey Title:                    State:            New Jersey  
  Locality:       Atlantic Ocean  
  Sub-locality:  Approaches to Little Egg and Brigantine Inlets

Project Number:            OPR-C303-KR-03

Field Unit:                    Science Applications International Corporation (SAIC)  
  Survey Vessel *Ocean Explorer*

Survey Dates:                November 21, 2003 and On Going

Depths are reduced to Mean Lower Low Water using predicted tides and preliminary tidal zoning. Positions are referenced from USCG DGPS beacon and horizontal datum is North America Datum 83 (NAD83).

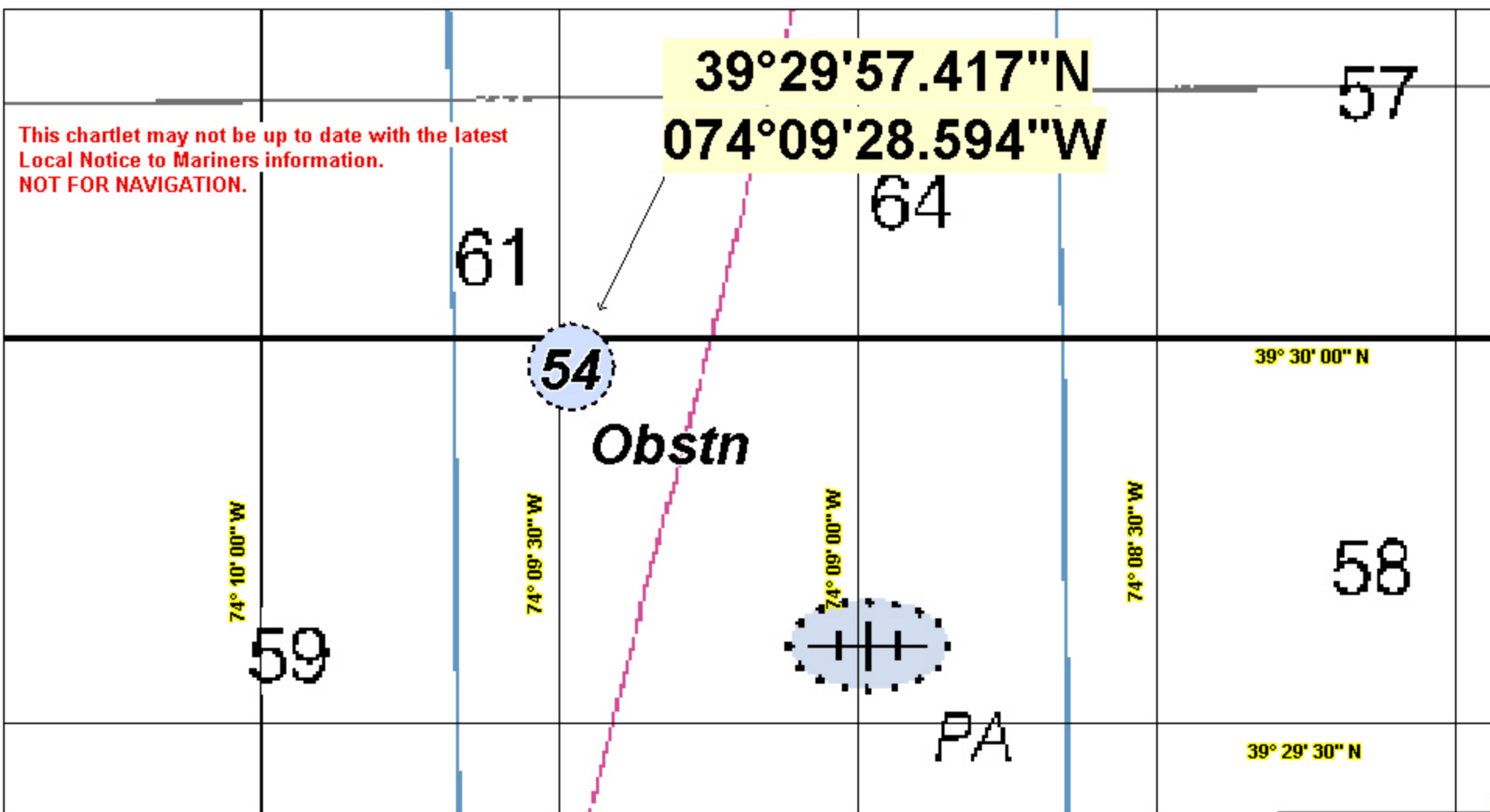
Charts affected:

|       |                          |                |                   |
|-------|--------------------------|----------------|-------------------|
| 12300 | 43 <sup>rd</sup> Edition | March, 2003    | 1:400,000 scale   |
| 12318 | 41 <sup>st</sup> Edition | December, 2002 | 1:80,000 scale    |
| 13003 | 47 <sup>th</sup> Edition | June, 2000     | 1:1,200,000 scale |
| 12323 | 23 <sup>rd</sup> Edition | March, 2000    | 1:80,000 scale    |

### DANGERS TO NAVIGATION

|    | <u>Feature</u> | <u>Depth (FT)</u> | <u>Latitude (N)</u> | <u>Longitude (W)</u> |
|----|----------------|-------------------|---------------------|----------------------|
| 1. | Obstruction    | 54                | 39°29'57.417"       | 074°09'28.594"       |

Questions concerning this report should be directed to the Chief, Atlantic Hydrographic Branch at (757) 441-6746.



**Chartlet 1 of 1**

Chart 12318, 41st Edition, December, 2002 Scale 1:80,000  
 Chart 12323, 23rd Edition, March, 2000, Scale 1:80,000  
 Chart 12300, 43rd Edition, March, 2003, Scale 1:400,000  
 Chart 13003, 47th Edition, June, 2000, Scale 1:1,200,000



NATIONAL OCEANIC AND  
 ATMOSPHERIC ADMINISTRATION  
 NATIONAL OCEAN SERVICE

Project: OPR-C303-KR-03  
 Survey: H12241  
 State: New Jersey  
 Locality: Atlantic Ocean  
 Sub-locality: Approaches to Little Egg and  
 Brigantine Inlets  
 Survey Scale: 1:20,000

Sounding Units: Feet  
 Sounding Datum: MLLW  
 Horizontal Datum: NAD 83  
 Projection: UTM 18  
 Central Meridian: 075° 00 00  
 Scale Factor: 0.9996

**SAIC**  
**S/V Ocean Explorer**  
 November 21, 2003  
 and Ongoing

