

F00528

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey: **Special Project**

Field No.: **NRT4**

Registry Number: **F00528**

LOCALITY

State: Michigan

General Locality: St Marys and St Clair
Rivers

Sub-locality: Sault Locks to Detour
Village and Port Huron

2006

CHIEF OF PARTY

Lucy Massimillo, Team Leader

LIBRARY & ARCHIVES

DATE:

NOAA FORM 77-28 U.S. DEPARTMENT OF COMMERCE (11-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION HYDROGRAPHIC TITLE SHEET	REGISTRY NUMBER: <i>F00528</i>
INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.	FIELD NUMBER: N/A
<p>State/Territory: Michigan</p> <p>General Locality: St Marys and St Clair Rivers</p> <p>Sub-Locality: Sault Locks to Detour <i>Village</i> and Port Huron</p> <p>Scale: N/A Date of Survey: May 12 - 15, 2006</p> <p>Instructions Dated: August 2, 2005 Project Number: <i>OPR-W408-NRT4-06</i></p> <p>Vessel: NOAA Launch 3001</p> <p>Chief of Party: Lucy Massimillo, Team Leader, Navigation Response Team 4</p> <p>Surveyed by: Lucy Massimillo, Sarah Borakove, & Brian Link</p> <p>Soundings by: Single Beam Echosounder</p> <p>Graphic record scaled by: N/A</p> <p>Graphic record checked by: N/A</p> <p>Protracted by: N/A Automated Plot: N/A</p> <p>Verification by: Lucy Massimillo <i>Atlantic Hydrographic Branch Personnel</i></p> <p>Soundings in: <i>Feet at Low Water Datum (LWD)</i></p> <p>Remarks: This special project was completed at the request of the Lake Carriers Association and CO-OPS. Soundings were collected along the centerline of the St Marys River from the Sault Locks to Detour, MI. Additionally four areas were developed with additional soundings. Three obstructions and a shoal were investigated in the St Clair River. Soundings were corrected for sound velocity and were reduced using TCARI generated water levels, provided by CO-OPS. All soundings are referred to Low Water Datum (LWD). <i>All Times are in UTC. UTM Zone 16&17.</i></p> <p><i>Red, Bold, Italic notes in the Descriptive Report were made during Office Processing.</i></p>	

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DESCRIPTIVE REPORT

to accompany
Special Projects in the
St Mary's & St. Clair Rivers

Scale of Survey N/A
Year of Survey: 2006
Navigation Response Team 4
NOAA Launch S3001
Lucy Massimillo - Team Leader

A. AREA SURVEYED

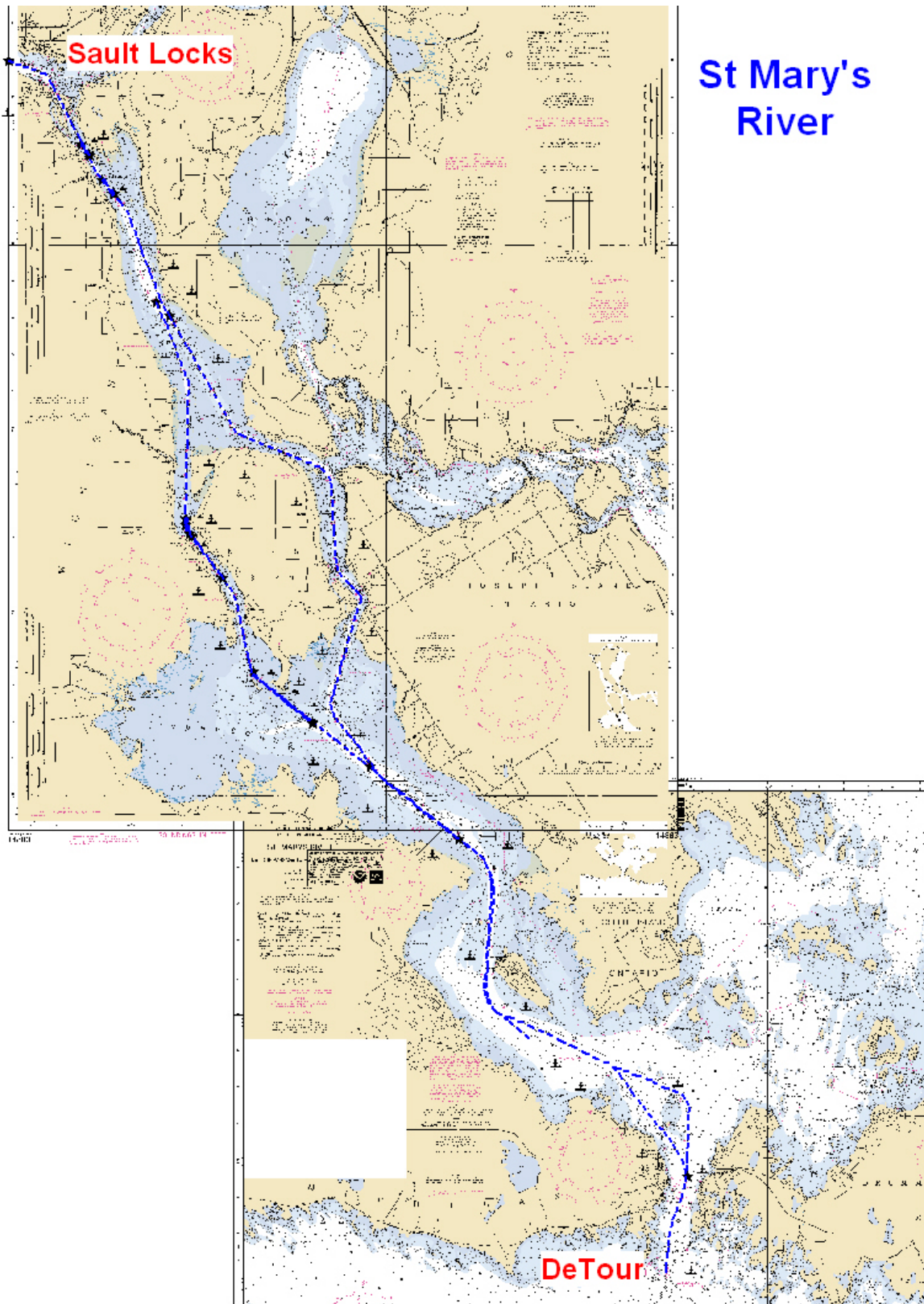
This special project was separated into two parts.

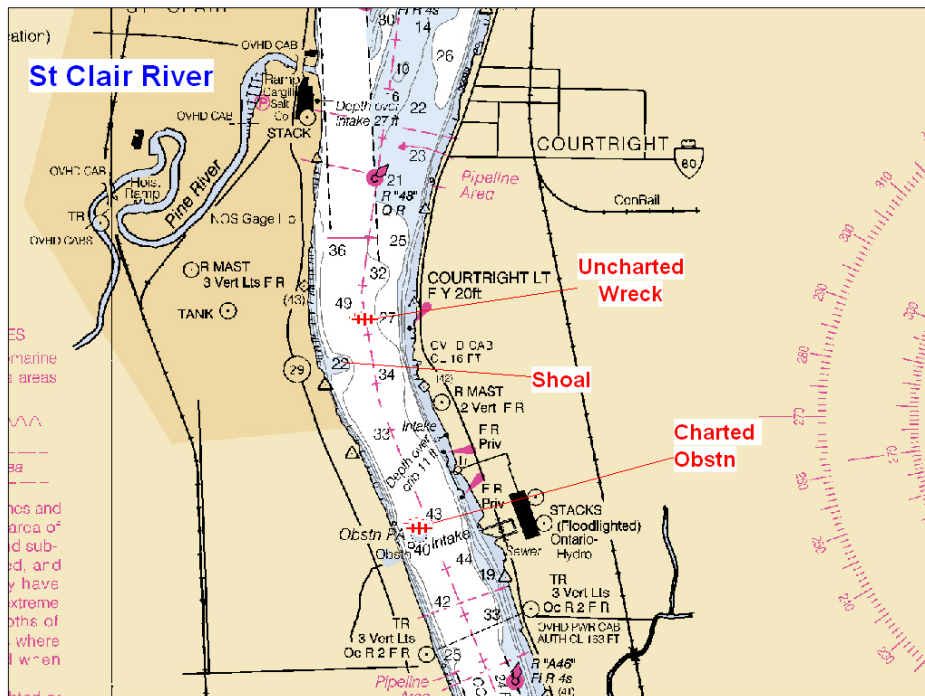
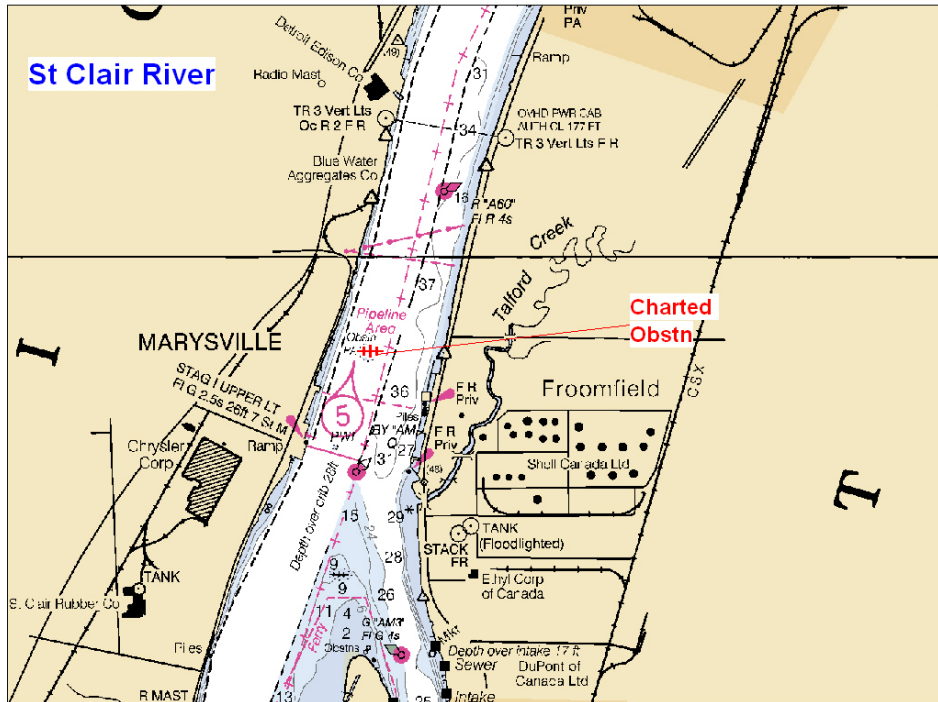
This first part consisted of a singlebeam echosounder (SBES) survey down the centerline of the St. Mary's River from the Sault Locks to DeTour. This effort was undertaken at the request of CO-OPS in order to update the step chart for the St. Mary's River. There were also four sections which were developed with additional soundings, at the request of the Lake Carriers Association. These included the areas around light 92, between lights 87 & 89, between lights 25 & 36, and between lights 5 & 10.

The second part consisted of sidescan sonar investigation of two charted Obstructions and a SBES investigation of a shoal in the St. Clair River, near Port Huron, Michigan. This was also requested by the Lake Carriers Association. While investigating one of the obstructions, the field party came upon an uncharted wreck, which was developed.

Survey Dates: St. Mary's River - May 12-13, 2006 (DN: 132 & 133)
St. Clair – May 15, 2006 (DN: 135) *Concur.*

Visual representation of the survey areas can be found on the following pages.





B. DATA ACQUISITION AND PROCESSING

B.1. EQUIPMENT

Data were acquired by Navigation Response Team 4 using Survey Launch 3001. The vessel was configured as described in the Data Acquisition and Processing Report* (DAPR) for this project. Major data acquisition systems are summarized below.

NOAA Survey Launch 3001 was used to acquire positions, soundings, imagery, and sound velocity data. Positions were acquired with a Trimble DSM212L Differential GPS (DGPS) beacon receiver. Soundings were acquired with an ODOM CVX2 single-beam echosounder (SBES) system. Imagery was acquired with a stern-towed KLEIN 3000 side scan sonar (SSS) system. Water column sound velocity data was acquired with an ODOM Digibar Pro DB1200 sound velocity profiler. *Concur.*

There were no unusual vessel configurations encountered during this project.

B.2. QUALITY CONTROL

Following the Field Procedures Manual v2.1, dated May, 2006, and the NOS Hydrographic Surveys Specifications and Deliverables Manual, dated June, 2006, has insured the integrity of the survey data for H11451. *Concur with clarification. Crosslines were not performed. See also Crosslines section on this page of the Descriptive Report.*

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey.

Side Scan Sonar Quality Control

The sidescan sonar data were acquired at frequencies of 100kHz and 500kHz. The recorder was set to 75 meter range scale outside the breakwater and 50 meter range scale inside the breakwater. There were no water depths greater than 15 meters in areas where side scan data was collected. *Concur.*

Crosslines

No crosslines were acquired for this project. *Concur with clarification. Due to the limited scope of the St. Mary's River centerline portion of this survey crosslines were not required. Sufficient crosslines were acquired for the St. Clair River.*

Junctions

No junctioning surveys were provided for comparison with this project. *Concur.*

**Filed with original field records.*

C. VERTICAL AND HORIZONTAL CONTROL

C.1. VERTICAL CONTROL

All soundings were reduced to Low Water Datum TCARI generated tides, provided by CO-OPS.

The operating National Water Level Observation Network (NWLON) stations at 9075099 – DeTour Village, 9076024 - Rock Cut, 9076028 – Lookout Station #4, 9076060 – U.S. Slip, and 9076070 – S.W. Pier were used to provide water level data for is project. *Concur.*

C.2. HORIZONTAL CONTROL

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 17. The control reference station used for this survey was the USCG DGPS Beacon in the auto-select mode.

Horizontal dilution of precision (HDOP) was monitored daily on Hypack. At no point did HDOP exceed 4.00, and adequate satellite coverage was maintained throughout the survey period.

All positioning equipment was operated in a manner consistent with the manufacturer requirements. There were no equipment malfunctions which affected the positional quality of the data. *Concur.*

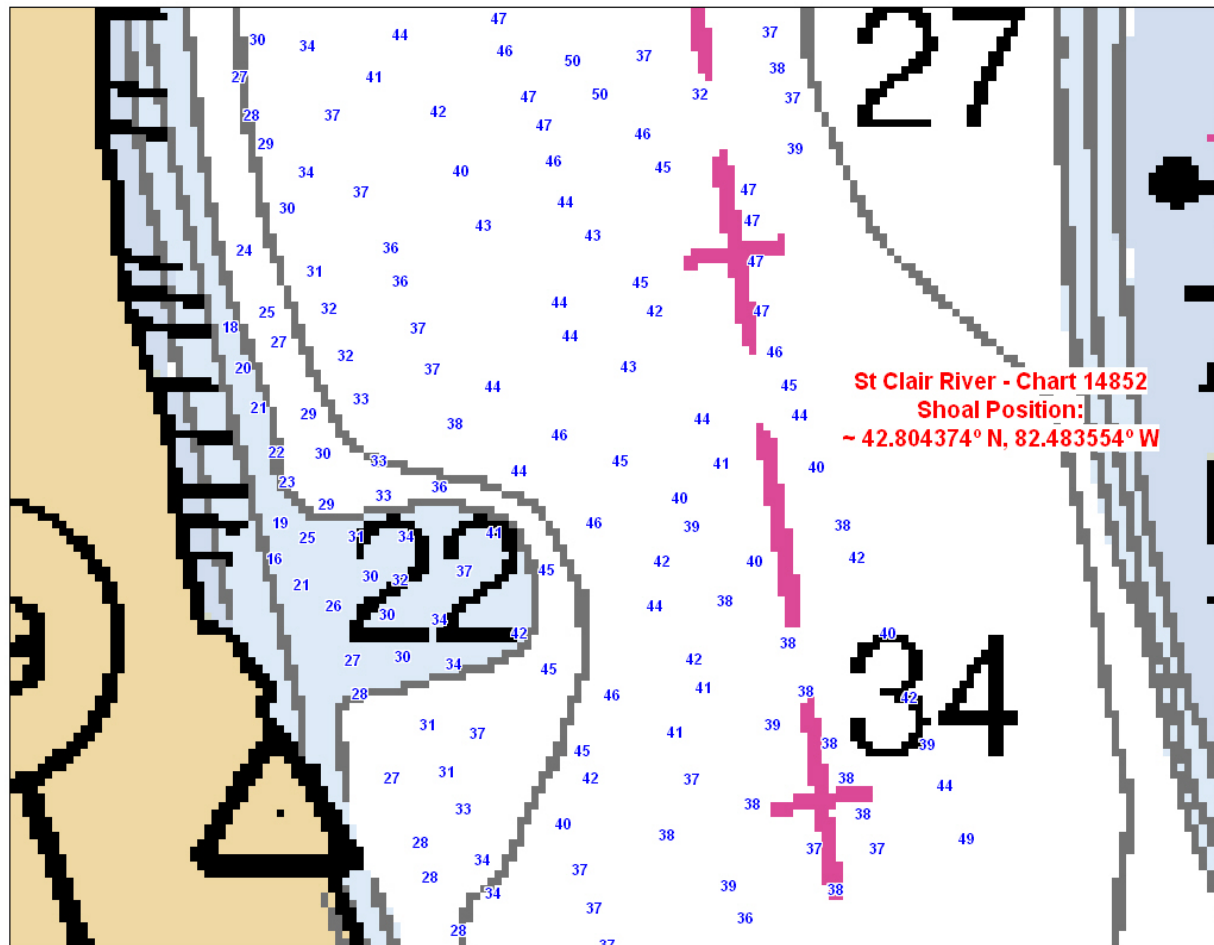
D. RESULTS AND RECOMMENDATIONS

D.1. CHART COMPARISON

General Agreement with Charted soundings

The field party investigated a 22 ft shoal located in the St. Clair River at approximately 42.804374° N, 82.483554° W. Several tightly spaced SBES were run over the area. No evidence of shoaling was found. *Concur with clarification. The 22 ft shoal has already been deleted from chart 14852. No charting action necessary.*

See the following for a graphical representation.



AWOIS Item Investigations

No AWOIS Items were assigned to the field party for this project. *Concur.*

Dangers to Navigation

A Danger to Navigation report was submitted to the Marine Charts Division on September 20, 2006. This involved an uncharted wreck located at 42°48'24.116"N, 082°28'54.131"W and had a least depth of 9.95 meters with a surrounding depth of 13.13 meters. Further information on this can be found in Appendix I of this report. *Concur with clarification. The dangerous wreck, least depth 32 ft and text "Wk" are shown on chart 14852 46th Ed., Jun. / 06. Retain as charted.*

Charted Feature Removals

Three Charted Feature Removal Requests were submitted to the Marine Charts Division. The first request was submitted on September 28, 2006 and regarded an Obstruction, charted at 42.794867°N, 82.478547°W and an Obstruction PA, charted at 42.795321°N, 82.477854°W. Neither of these items was located at their charted location. *Concur with clarification. Both dangerous obstructions PA mentioned have already been deleted from chart 14852. No charting action necessary.* The field party recommended removing both of these items. An Obstruction was located at 42.795574°N, 82.477852°W with a least depth of 9.93m. The field party recommended adding an Obstruction at this position. *Concur with clarification. The dangerous obstruction, least depth 32 ft and text "Wk" shown on chart 14852 46th Ed., Jun. / 06. Retain as charted.*

The second request was submitted on September 29, 2006 and regarded an Obstruction PA charted at 42°54'42.22"N, 82°27'41.58"W. This item was not identified in the SSS data so the field party recommended that it be removed from the chart. *Concur with clarification. The dangerous obstruction PA mentioned has been deleted from chart 14852. No charting action necessary.*

Further information on these requests can be found in Appendix I of this report.

D. 2. ADDITIONAL RESULTS

Aids to Navigation and Other Detached Positions

No Aids to Navigation were investigated by the field party. *Concur.*

Ferry Routes

No ferry routes were investigated by the field party. *Concur.*

Submarine Cables and Pipelines

No submarine cables or pipelines were investigated by the field party. *Concur.*

Bridges and Overhead Cables

No bridges or overhead cables were investigated by the field party. *Concur.*

APPROVAL SHEET

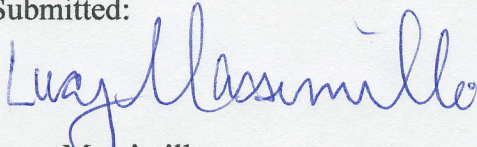
**Special Projects in the
St Mary's & St. Clair Rivers**

**Scale of Survey N/A
Year of Survey: 2006
Navigation Response Team 4
NOAA Launch S3001
Lucy Massimillo - Team Leader**

Field operations for special project were conducted under my daily supervision with frequent checks of progress and adequacy. All field sheets, this Descriptive Report, and all accompanying records and data are approved.

This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

Respectfully,
Submitted:



Lucy Massimillo
Team Leader, Navigation Response Team 4

APPENDIX I
DANGER TO NAVIGATION RECORDS

2 - Dangers to Navigation

2.1) Profile/Beam - 3380/1 from st_clair / 3001sb / 2006-135 / 020_1620

DANGER TO NAVIGATION

Survey Summary

Survey Position: 42° 48' 24.1" N, 082° 28' 54.1" W
Least Depth: 9.95 m (= 32.64 ft = 5.441 fm = 5 fm 2.64 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-135.16:24:00.500 (05/15/2006)
Survey Line: st_clair / 3001sb / 2006-135 / 020_1620
Profile/Beam: 3380/1
Charts Affected: 14853_42, 14853_43, 14852_1, 14820_1, 14500_1

Remarks:

SSS contact was investigated with SBES and a LD of 9.95m was found. This contact appears to be an uncharted wreck.

Feature Correlation

Address	Feature	Range	Azimuth	Status
st_clair/3001sb/2006-135/020_1620	3380/1	0.00	000.0	Primary
st_clair/3001sss500k/2006-135/sc060515121600	0001	12.35	109.3	Secondary
st_clair/3001sss500k/2006-135/sc060515124200	0001	22.32	116.7	Secondary

Hydrographer Recommendations

The Hydrographer recommends charting a submerged wreck at this location. This item was submitted as a DTon on 9/20/2006.

Cartographically-Rounded Depth (Affected Charts):

32ft (14853_42, 14853_43, 14852_1)

5 ½fm (14500_1)

10.0m (14820_1)

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck

CONVIS - 2:not visual conspicuous

HEIGHT - 3.18 m

PICREP - sc0605150001_s.tif

RECDAT - 5/15/2006

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 9.950 m

VERDAT - 13:Low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. The dangerous wreck, least depth 32 ft and text "Wk" shown on chart 14852 46th Ed., Jun. / 06. Retain as charted.

Feature Images



Figure 2.1.1

[Image file N:/Sault_and_St_Clair/PSS/Photos/020_1620.jpg does not exist.]

APPENDIX II
FEATURE REPORT

F00528 Feature Report

Registry Number: N/A
State:
Locality: St Clair River
Sub-locality: Port Huron
Project Number: N/A
Survey Dates: 05/15/2006 - 09/29/2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
14853	16th	07/01/2005	1:15,000 (14853_45) 1:15,000 (14853_43) 1:15,000 (14853_42)	[L]NTM: ?
14852	45th	02/01/2003	1:40,000 (14852_3) 1:40,000 (14852_1)	[L]NTM: ?
14820	21st	10/01/2005	1:400,000 (14820_1)	[L]NTM: ?
14860	36th	06/01/2005	1:500,000 (14860_1)	[L]NTM: ?
14500	27th	10/01/2002	1:1,500,000 (14500_1)	[L]NTM: ?

* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Obstn PA - found	Wreck	9.93 m	42° 47' 44.1" N	082° 28' 40.3" W	---
1.2	Obstn PA - disproved	Wreck	[None]	42° 54' 42.2" N	082° 27' 41.6" W	---
1.3	Obstn - disproved	GP	[None]	42° 47' 41.0" N	082° 28' 42.4" W	---
2.1	DTON-1 Uncharted Wk	Wreck	9.95 m	42° 48' 24.1" N	082° 28' 54.1" W	---

1 - Charted Features

1.1) Profile/Beam - 999/1 from st_clair / 3001sb / 2006-135 / 004_1450

Survey Summary

Survey Position: 42° 47' 44.1" N, 082° 28' 40.3" W
Least Depth: 9.93 m (= 32.58 ft = 5.430 fm = 5 fm 2.58 ft)
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-135.14:51:44.900 (05/15/2006)
Survey Line: st_clair / 3001sb / 2006-135 / 004_1450
Profile/Beam: 999/1
Charts Affected: 14853_42, 14852_1, 14820_1, 14500_1

Remarks:

Obstn PA was identified with SSS and investigated with SBES.

AWOIS #10705 is located approximately 120m N of this charted Obstn PA, where there is no Obstn charted. Field team believes that it is possible that this Obstn AWOIS item may be the same thing.

AWOIS Database states:

HISTORY LNM27/88--9TH CGD, 9/9/88; USACE HAS LOCATED A SUBMERGED OBJECT APPROX. 175 FT BY 75 FT WITH A CLEAR SWEEP DEPTH OF 27.4 FT REFERRED TO LWD, AND WITHIN THE FEDERAL NAVIGATION CHANNEL. THE OBJECT IS LOCATED ON THE U.S. SIDE OF THE CHANNEL IN APPROX. POS. 42 47 48N, 82 28 42W (NAD 27) OPPOSITE THE ONTARIO-HYDRO LAMBTON GENERATING STATION. ENTERED 7/00 MCR CL88/2000--REFERS TO THE APPLICATION OF TOPO COMPILATION GC10406, CRIT LISTING IDENTIFIES THIS AS A SOURCE TO MOVE OBSTRUCTION SYMBOL. GC10406/1996--SUBMERGED OBSTRUCTION SHOWN IN POS.42-47-41.52N 082-28-42.77W. CHARTED OBSTRUCTION MOVED, HOWEVER CHARTED POSITION DOES NOT AGREE WITH LNM27/88 POSITION OR THE TOPOGRAPHIC POSITION. ENTERED 8/00 MCR

Feature Correlation

Address	Feature	Range	Azimuth	Status
st_clair/3001sb/2006-135/004_1450	999/1	0.00	000.0	Primary
st_clair/3001sss500k/2006-135/sc060515130400	0001	5.84	136.9	Secondary
st_clair/3001sss500k/2006-135/sc060515130800	0001	9.82	163.4	Secondary
st_clair/3001sss500k/2006-135/sc060515125800	0001	27.98	155.1	Secondary

Hydrographer Recommendations

The Hydrographer recommends removing the currently charted Obstrn PA from the chart and adding a Subm Obstrn at the position of Least Depth.

Hydrographer also recommends updating AWOIS #10705 to reflect the survey findings.

This item was submitted to Steve Soherr for Fast Tracking on 9/21/2006.

Cartographically-Rounded Depth (Affected Charts):

32ft (14853_42, 14852_1)

5 ¼fm (14500_1)

9.9m (14820_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck
PICREP - sc0605150001_s.tif;004_1450.jpg
TECSOU - 1:found by echo-sounder
VALSOU - 9.930 m
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. AWOIS Item #10705 dangerous obstruction, least depth 32 ft and text "Wk" shown on chart 14852 46th Ed., Jun. / 06. Retain as charted. Update AWOIS database.

Feature Images

[Image file N:/Sault_and_St_Clair/PSS/Photos/004_1450.jpg does not exist.]

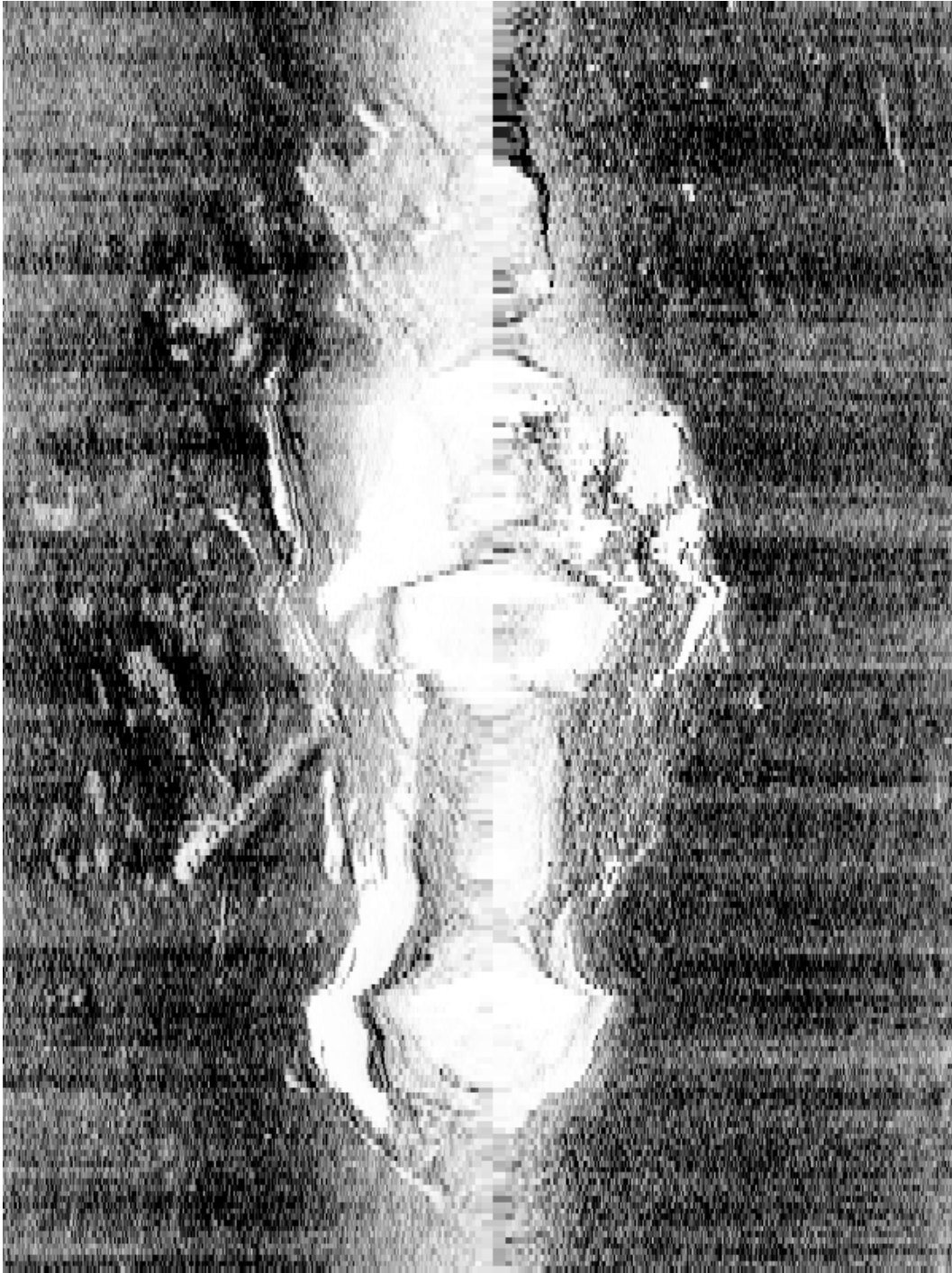


Figure 1.1.1

[Image file N:/Sault_and_St_Clair/PSS/ScreenShots/ObstnPA.jpg does not exist.]

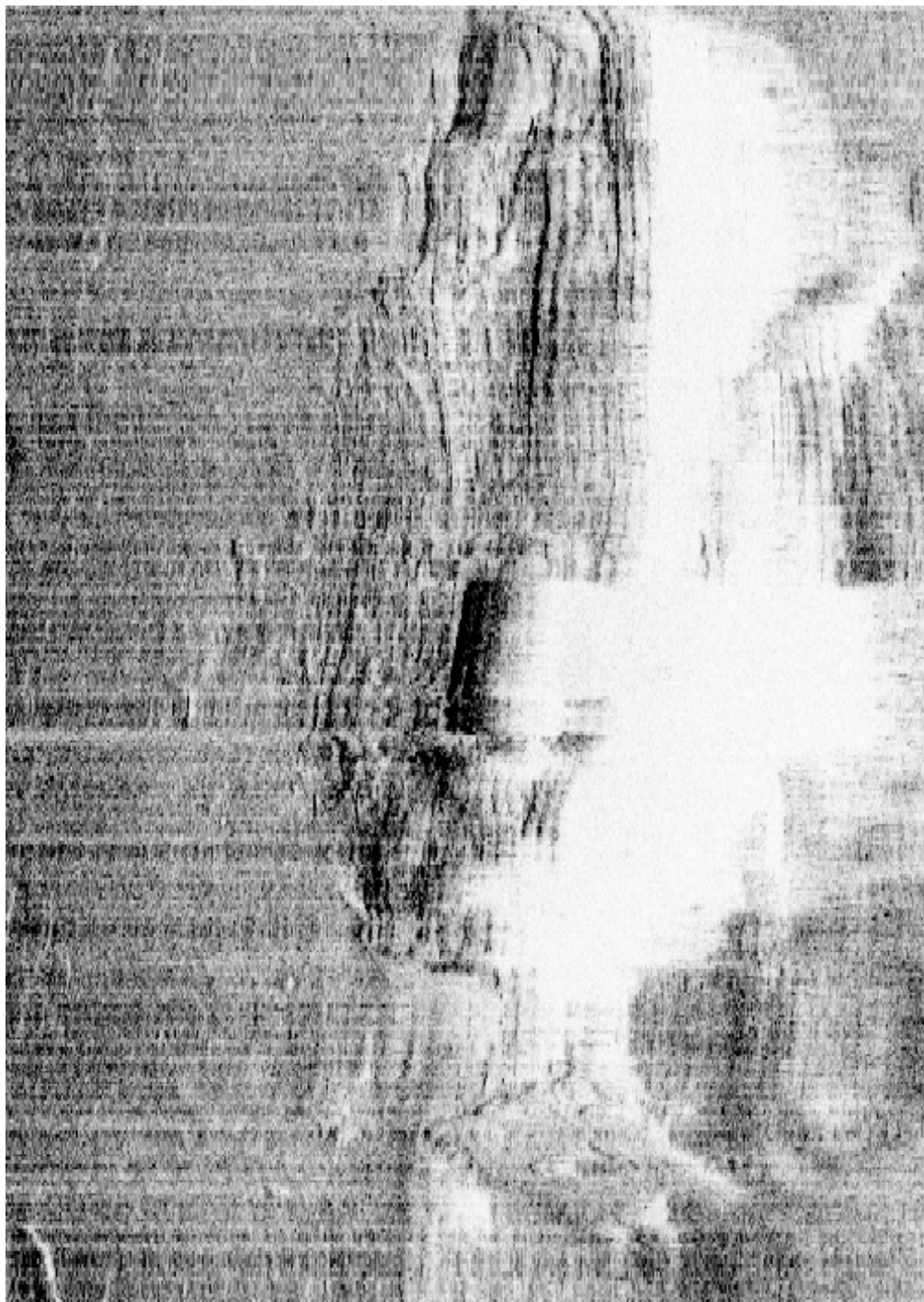


Figure 1.1.2

1.2) GP No. - 1 from ChartGPs - Digitized

Survey Summary

Survey Position: 42° 54' 42.2" N, 082° 27' 41.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-264.09:36:41 (09/21/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 1
Charts Affected: 14853_45, 14852_3, 14820_1, 14860_1, 14500_1

Remarks:

NRT4 was tasked with investigating this charted Obstn PA. 200% SSS coverage was obtained. The Subm Obstn was not identified in the SSS data.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	1	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends removing Subm Obstn PA from chart.

This item was submitted for fast tracking as an Anti-DTON to Steve Soherr on 9/21/2006.

S-57 Data

Geo object 1: Wreck (WRECKS)
Attributes: CATWRK - 2:dangerous wreck
 WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. The dangerous obstruction PA has been deleted from chart 14852. No charting action necessary.

Feature Images

[Image file N:/Sault_and_St_Clair/PSS/ScreenShots/Disproved_ObstnPA.JPG does not exist.]

1.3) GP No. - 3 from ChartGPs - Digitized

Survey Summary

Survey Position: 42° 47' 41.0" N, 082° 28' 42.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-272.12:40:49 (09/29/2006)
GP Dataset: ChartGPs - Digitized
GP No.: 3
Charts Affected: 14853_42, 14852_1, 14820_1, 14500_1

Remarks:

This Obstn was covered with 200% SSS, while NRT4 was investigating an Obstn PA approximately 75m NE. This Obstn was not identified in the SSS data.

Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	3	0.00	000.0	Primary

Hydrographer Recommendations

Field Party recommend removing Obstn from chart.

S-57 Data

[None]

Office Notes

Concur with clarification. The dangerous obstruction has been deleted from chart 14852. No charting action necessary.

APPENDIX V
SUPPLEMENTAL CORRESPONDENCE

Back in May, NRT4 was assigned to investigate a couple of charted obstructions in the St. Clair River. We were not assigned a Field Examination number for this special project. While we were there, the Great Lakes Navigation Manager asked us to investigate a charted shoal in the same area. We ran several SBES lines over the shoal and did not find any evidence of shoaling. Therefore, we would like to remove this shoal from the chart.

Rick Fletcher has instructed me to submit this to AHB for verification of the hydro over the shoal (the two obstructions were sent through Steve Soherr as Anti-DTONs). He has suggested that I send, "an accompanying cover letter expelling what you did, a DR condensed into 1 or 2 pages, for the supporting data and xml file." I have the Pydro PSS, a Pydro generated Feature report detailing the shoal, and a couple of chartlets illustrating the area.

Is this all that you would need for verification? If not, what else should I send you? Can I simply e-mail these files to you, or do you require hard copies? Is there anyway that this can be looked at quickly, since it is such a small area?

Thanks,
Lucy

--

Lucy Massimillo
National Oceanic & Atmospheric Administration
Team Leader, Navigation Response Team 4
(312) 923-9006 office
(312) 330-5074 cell
Lucy.Massimillo@noaa.gov

Jake & Rick,

Back in May, we were tasked with investigating a shoal in the St. Clair River. We collected SBES data over this area and did not find any evidence of shoaling. We would like to recommend that this shoal be removed from the chart. However, we are unsure how to go about this. Because this is hydro data, am I required to send this through AHB for verification? We were not assigned a Field Examination number for this project. Will AHB be able to review the data without one? Or can we bypass AHB and fast track the removal through Steve Soherr?

Thanks,
Lucy

--

Lucy Massimillo
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Team Leader, Navigation Response Team 4
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Lucy.Massimillo@noaa.gov

If it were a super critical anti-DTON we could fast track it through Soherr. But it doesn't sound like it so we should send the anti-DTON through the Branch for verification. Let's just make sure they understand to give it attention in fairly short order. It's ok if there isn't an FE number... this is what we used to call a Chart Letter. Just type up an accompanying cover letter expelling what you did, a DR condensed into 1 or 2 pages, for the supporting data and xml file and submit through AHB. If only all surveys could be that simple.

Lucy Massimillo wrote:

> Jake & Rick,
>
> Back in May, we were tasked with investigating a shoal in the St. Clair
> River. We collected SBES data over this area and did not find any
> evidence of shoaling. We would like to recommend that this shoal be
> removed from the chart. However, we are unsure how to go about this.
> Because this is hydro data, am I required to send this through AHB for
> verification? We were not assigned a Field Examination number for this
> project. Will AHB be able to review the data without one? Or can we
> bypass AHB and fast track the removal through Steve Soherr?
>
> Thanks,
> Lucy
>
> --
> Lucy Massimillo
> National Oceanic & Atmospheric Administration
> Team Leader, Navigation Response Team 4
> (312) 923-9006 office
> (312) 330-5074 cell
> Lucy.Massimillo@noaa.gov

--

LCDR Rick Fletcher, NOAA
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Silver Spring, MD 20910
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FAX: (301)713-9312
cell: (360)808-2463
<http://chartmaker.ncd.noaa.gov/nsd/Services.htm>

Barry and Lucy,

I ran DrawPSS on Lucy's file Sault.pss using Hydro_MI v6.3.1 and MapInfo 8.0.

I obtained the MapInfo files contained in Ruby_Sault.zip. The MapInfo PSS table in the zip contains 4833 records (same as in Lucy's results).

My graphical results are shown in the 2 gif files. First I obtained sault_overlap. Then when I used the Hydro_MI button to toggle overlapping, I obtained the other gif file.

Right now, I don't know why Lucy's display is so different.

Ruby

Barry Gallagher wrote:

> It looks like the data is all in the table but I'm not sure if we've
> tested HydroMI on MapInfo 8.0. I forwarded this to Wayne/Ruby to see
> if they can figure out why your display is weird. I expect you could
> do a create symbols and such to get the data to show up but you'd lose
> all the value added HydroMI functionality at that point (carto
> rounding symbols/soundings, units etc).
>
> bg
>
> Lucy.Massimillo@noaa.gov wrote:
>
>> Barry,
>>
>> Using MapInfo v 8.0 & HydroMI v6.31.
>>
>> I'll attach the table to this e-mail.
>>
>> Also, I am getting an error whenever I try to save a PSS with Hypack
>> DPs. I get message that states:
>>
>> Some DP "lines" were not written to HIPS data.
>> See the console window output for more details.
>>
>> The console window says:
>>
>> Skipping Dp P/V/D/L: *** DP VESSEL TYPE UNDEFINED ***
>> --Use Config...DP Vessels to define DP type for vessel

>> 3001DP_non_echosounder
>>
>> However, I had previously defined 3001DP_non_echosounder as Non-ES.
>> I did it again and got the same result.
>>
>> I opened an old PSS that I knew worked, tried to save it and got the
>> same message.
>>
>> I guess it's NRT4 Pydro question week. Any idea about this one.
>>
>> Thanks,
>> Lucy
>>
>>
>> ----- Original Message -----
>> From: Barry Gallagher <Barry.Gallagher@noaa.gov>
>> Date: Wednesday, May 24, 2006 4:06 pm
>> Subject: Re: Step functions for Niagara and St.Mary's River
>>
>>
>>
>>> DrawPSS worked for me. What is the HydroMI version you've got?
>>> What version of MapInfo?
>>> Would you send me the resulting tables from a DrawPSS (as opposed to
>>> the export mif/mid from pydro). I might be able to figure out what
>>> was exported from the table data itself.
>>>
>>> bg
>>>
>>> Lucy.Massimillo@noaa.gov wrote:
>>>
>>>
>>>
>>>> Barry,
>>>>
>>>> Thanks for fixing the trackline issue. I was wondering if you
>>>>
>>>> have
>>>>
>>>> had a chance to look at the DrawPSS problem yet?
>>>>
>>>> Also, we are not able to open more than on BSB chart at a time in
>>>> Pydro. In fact, in order to open a different chart, we first
>>>>
>>>> have to
>>>>

>>>> close the current chart. Can you check on this?
>>>>
>>>> Thanks Again,
>>>> Lucy
>>>>
>>>> ----- Original Message -----
>>>> From: Barry Gallagher <Barry.Gallagher@noaa.gov>
>>>> Date: Monday, May 22, 2006 9:56 pm
>>>> Subject: Re: Step functions for Niagara and St.Mary's River
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>
>>>>> Hi Lucy,
>>>>>
>>>>> The tracklines were only using two points. It was a bug related
>>>>> to the trackline simplification routine we added. I fixed the bug
>>>>> and ran your data and got the attached mif/mid. Take a look and
>>>>> make sure it matches what you expect (the linenames were failing
>>>>> since I didn't have your directory structure but the geo/time data
>>>>> should be ok). The
>>>>
>>>> fix
>>>>
>>>>> should be in 6.5.0.
>>>>>
>>>>> I haven't looked at the draw pss thing yet. You may notice that
>>>>> the mif/mids are either in Lat/Lon or have both Lat/Lon and
>>>>> Easting/Northing. Pydro only reads the lat/lon from Caris and
>>>>> uses that system internally. UTM should have no effect on DrawPSS
>>>>> or anything in Pydro, but who knows ;)
>>>>>
>>>>> Sorry for the inconvenience,
>>>>> bg
>>>>>
>>>>> Lucy.Massimillo@noaa.gov wrote:
>>>>>
>>>>>
>>>>>
>>>>>> Jack,
>>>>>>
>>>>>> Here is the PSS for the St. Mary's work.
>>>>>>
>>>>>> 1) The survey lines crossed from UTM zone 16 to UTM zone 17
>>>>>> 2) We collected the data in Zone 16, since that is where we

>>>>>
>>>>
>>>> started.
>>>>
>>>>
>>>>
>>>>
>>>>> 3) We imported the data in CARIS into zone 16.
>>>>>
>>>>> There are two problems:
>>>>>
>>>>> 1) The soundings are not showing up properly in MapInfo when we
>>>>>
>>>>>
>>>>> use
>>>>>
>>>>>
>>>>> the DrawPSS function.
>>>>>
>>>>> 2) The tracklines produced by the Tide Report function in Pydro
>>>>>
>>>>>
>>>>> only
>>>>>
>>>>>
>>>>> seem to include the start and endpoint of each line.
>>>>>
>>>>> I am also attaching a couple of JPEGs showing what we are seeing.
>>>>>
>>>>> Thanks,
>>>>> Lucy
>>>>> 312-330-5074
>>>>>

>

ATLANTIC HYDROGRAPHIC BRANCH EVALUATION REPORT FOR F00528 (2006)

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

B.1 DATA PROCESSING

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

HSTP PYDRO version 8.7 (r2537)
CARIS HIPS/SIPS version 6.1 SP2 HF 1
CARIS Bathy Editor version 2.1 HF 1-9

B.2 QUALITY CONTROL

The Atlantic Hydrographic Branch (AHB) has completed a SAR and evaluation of F00528 of OPR-W408-NRT4-06. Chart application to all applicable charts has already been completed by the submission of F00528 chart letters by NRT-4. **The review process of F00528 determined that all charting actions have been completed, therefore, H-Cell Compilation is not necessary.** Additionally, all Bathy source grids will be sent to the Bathy Warehouse.

B.2.1 H-CELL

Chart application has been completed for Survey F00528, therefore, H-Cell creation was not necessary.

C. VERTICAL AND HORIZONTAL CONTROL

Final vertical correction was completed by the field unit with no additional correction required by Atlantic Hydrographic Branch. All soundings were reduced to Low Water Datum TCARI generated tides, provided by CO-OPS.

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zones 16 & 17.

D. RESULTS AND RECOMMENDATIONS**D.1 CHART COMPARISON****14852 (46th Edition, May./08)**

Corrected through NM 10/21/2008

Corrected through LNM 10/25/2008

14882 (35th Edition, Sep./05)

Corrected through NM 10/21/2008

Corrected through LNM 10/25/2008

14883 (43rd Edition, Jan./04)

Corrected through NM 10/21/2008

Corrected through LNM 10/25/2008

14884 (49th Edition, Jan./05)

Corrected through NM 10/21/2008

Corrected through LNM 10/25/2008

ENC COMPARISON**US5MI33M***Saint Clair River Michigan B*

Edition 13

Application Date 2008-04-29

Issue Date 2008-06-06

Chart 14852

US5MI61M*St Marys River Lake Huron to Lake Munscong*

Edition 8

Application Date 2008-06-06

Issue Date 2008-11-07

Chart 14882

US5MI62M*St Marys River Lake Munscong to Sault Ste Marie*

Edition 9

Application Date 2008-09-12

Issue Date 2008-11-19

Chart 14883

US5MI63M*St Mays River Head of Lake Nicolet to Whitefish Bay*

Edition 8

Application Date 2008-03-24

Issue Date 2008-06-06

Chart 14884

D.1.1 Hydrography

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section "D" and Appendix 1&2 of the Descriptive Report. The survey did not reveal or detail Non-Skin-of-the-Earth (Group 2) features during data verification and product generation.

D.1.2 Junctions

No contemporary surveys exist for junctioning.

D.2 COMPARISON WITH PRIOR SURVEYS

A comparison with prior surveys was not done during office processing in accordance with section 4 of the memorandum titled "Changes to Hydrographic Survey Processing", dated May 24, 1995.

MISCELLANEOUS

Chart application to applicable charts has already been completed. Compilation was not necessary by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia.

D.3 ADEQUACY OF SURVEY

The present survey is adequate to supersede the charted bathymetry within the common area. Any features not specifically addressed by the Descriptive Report should be retained as charted. Refer to the Descriptive Report for further survey requirements recommended by the hydrographer.

APPROVAL SHEET
F00528

Initial Approvals:

The survey records and digital data comply with National Ocean Service and Office of Coast Survey requirements except where noted in the Descriptive Report and the Evaluation Report.

All data have undergone a comprehensive review per the Hydrographic surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

Edward A. Owens
Physical Scientist
Atlantic Hydrographic Branch

I have reviewed the reports and accompanying data. This survey and accompanying Marine Chart Division deliverables meet National Ocean Service requirements and standards for products in support of nautical charting except where noted.

Approved: _____
Shepard M. Smith
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Branch