National Transportation Safety Board
Washington, DC

NTSB Staff Comment Letter and Fax Submissions from
Attorney's re: Aid Positioning Records

Hong Kong Flag Container Ship New Delhi Express Grounding
Bayonne, New Jersey
April 15, 2006

DCA06MF013

No. of pages - 13 (not including cover sheet)

Date: July 6, 2007

To: Dr. Jack Spencer
Director, Office of Marine Safety

From: Captain Rob Jones
IIC—*New Delhi Express* investigation (DCA06MF013)

Subject: Staff Comments Regarding Attorney Submissions on Aid Positioning Records (faxes)

On May 29, 2007, the day before the Board meeting on the *New Delhi Express* accident, staff received faxes regarding the APRs (aid positioning records) for the buoys in the vicinity of Bergen Point. The faxes came from the lawyers representing one of the pilots involved in the accident and the vessel owners.

The faxed Coast Guard position reports show that buoy 14 was checked before the grounding of the *New Delhi Express* on April 15, 2006. The first report, dated March 11, 2006, states that the buoy was checked because of a report from a passing RFV (recreational fishing vessel) that the "aid was found discrepant in passing." The Coast Guard investigated the report and determined that the buoy was "on station" (the aid positioning record reported that the buoy was in 38.0 feet of water). In a subsequent report, dated March 17, 2006, the buoy was serviced due to a "missing flasher and changer." The Coast Guard determined the buoy to be on station, and the flasher and changer were replaced. (The measured depth of the buoy in this instance was 28.0 feet.)

Both Coast Guard reports state that the buoy was "on station." The Safety Board's accident brief discusses the buoy location, noting that buoy 14, which was intended to be placed in 50 feet of water, had been moved numerous times before the accident and that during one of those moves, erroneous data had been entered into the Coast Guard's database. Thus, vessels tending the buoy were verifying its position against erroneous data. The Board issued a recommendation to the Coast Guard (M-07-2) to use this accident as a "lesson learned" regarding the need to verify all buoy positioning data during routine position checks and buoy redeployments. Therefore, future discrepancies in buoy data, including but not limited to differences between assigned and observed chain length, water depth, latitude or longitude, should be observed and reported to supervisory officials.

Buoy 14 was classed as a B-accuracy buoy. According to Coast Guard information, an accuracy classification is "The area that forms a circle around an aid's assigned position within which the aid is considered on station." The Coast Guard-assigned tolerance for a B-accuracy buoy is 50 yards. After the accident, buoy 14's sinker was found to be off position by approximately 25 yards to the north. However, the buoy still could have been floating within the tolerance of its correct position, even with the current, wind, tide, and 90-foot chain.

The *New Delhi Express* accident brief states that buoys or floating aids to navigation should not be solely relied upon when other fixed and stationary navigational references can be used. As stated in Bowditch, "Buoys cannot be relied on to maintain their charted positions consistently. They are subject to a variety of hazards including severe weather, collision, mooring casualties and electrical failure. . . . For these reasons and others, a mariner must not rely completely upon the position or operation of buoys, but should navigate using bearings of charted features, structures, and aids to navigation on shore. Further, a vessel attempting to pass too close aboard a buoy risks a collision with the buoy or the obstruction it marks."

CHALOS, O'CONNOR & DUFFY

TELECOPIER MESSAGE

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Port Washington, New York 11050
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E-Mail: ofd@codus-law.com

May 29, 2007

National Transportation Safety Board

Attn: Captain James Scheffer

Telefax Number: 202 314 6454

Re: M/V NEW DELHI EXPRESS
Grounding off Bergen Point on April 15, 2006

From: **Owen F. Duffy**

Total Number of Pages being sent, including cover sheet: 1 + 3 = 4

Dear Captain.

Pursuant to your discussions with James Mercante, Esq., I attach herewith copies of Aid Positioning Records for buoy 14 off Bergen Point.

Best Regards, Owen F. Duffy

[redacted]

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Copy for

[redacted]

[redacted]

id Positioning Record - GPS

4/6/2006 18:41

Aid Name: Kill Van Kull Channel Lighted Buoy 15
Latitude: 40-38-24.798N
Longitude: 074-08-52.720W
Unit/Vessel: CGC KATHERINE WALKER WLM 552
Work Area: 15518KVK

Aid Number: 31777
LLNR: 37330 Aid Sub-type: Floating
Accuracy Class: B 50 yd
Chart Number: 12333 Ed: 34
Chart Panel (KAPP): 2239
Geodetic Datum: NAD 83
Serial #:

GPS Rcvr Type:
DGPS Rcvr Type: MX420 Serial #: 805851

FOUND DGPS MEASUREMENTS Antenna Position: 40-38-24.720N 074-08-51.960W HDOP: 1.2

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$GPVTG,020.2,T,034.1,M,00.23,N,00.43,K*4E
```

FOUND DATA USING GPS				SET DATA USING GPS
Date/Time: 4/6/2006 4:30:18 PM				
By: CGC KATHERINE WALKER				
Measured Depth:			47.0 ft	
Tide Corr:			-1.0 ft	
Draft:	8.0 ft	Chain:	90.0 ft	
Datum:	54.0 ft	WCR:	24.00 yds	
Est. Wind		296 T	16.0 KT	
Est. Current:		149 T	0.2 KT	
Corrected Heading:			88 T	
Observer Offset:		28 R	16.25 yds	
Shortstay: Y Excursion		0 T	0.00 yds	
MPP Lat:			40-38-24.508N	
MPP Long:			074-08-51.392W	
AP To MPP:		106 T	35.49 yds	
2DRMS:			6.56 yds	
Buoy Station Dim.:			24.88 yds	
AP To MPP + BSD:			60.37 yds	
FOUND Station:			OFF	

REMARK

09APR06: VISTED AID FOR RELOCATION AND DOWN SIZE OF SINKER AND BUOY. SET 6X11 HULL W/ 6' OF 1" CHAIN, AND 4K SINKER. SET NEW HULL APPROX 310 YDS NE OF AP. REQUEST MPP BECOME TEMPORARY AP DUE TO DREDGING PROJECT.

Prepared by (Signature): [redacted] Date: 06 APR 06
CO/OINC(Signature): [redacted] Date: 4/6/06
DISTRICT REVIEW (Signature): Date:
Comments:

Aid Positioning Record - GPS

4/18/2006 1:13

Aid Name:	Kill Van Kull Channel Lighted Buoy 15	Aid Number:	31777
Latitude:	40-38-29.710N	LLNR:	37330 Aid Sub-type: Floating
Longitude:	074-08-42.270W	Accuracy Class:	B - 50 yd
Unit/Vessel:	CG ANT NEW YORK TANB 233502	Chart Number:	12333 Ed: 34
Work Area:	15518KVK	Chart Panel (KAPF):	2239
		Geodetic Datum:	NAD 83
GPS Rcvr Type:		Serial #:	
DGPS Rcvr Type:	NT200CG	Serial #:	5340000718

FOUND DGPS MEASUREMENTS Antenna Position: 40-38-29.604N 074-08-42.288W HDOP: 2.0

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$GPGSA,M,3,02,04,10,05,13,30,,,,,,,03.0,02.0,02.2
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$GPVHW,088.5,T,102.5,M,00.00,N,00.00,K*41
$GPVTG,020.2,T,034.1,M,00.23,N,00.43,K*4E

FOUND DATA USING GPS			SET DATA USING GPS
Date/Time: 4/15/2006 12:29:05 PM			
By: CG ANT NEW YORK			
Measured Depth:		58.0 ft	
Tide Corr:		+3.9 ft	
Draft: 1.0 ft	Chain:	105.0 ft	
Datum: 55.1 ft	WCR:	29.79 yds	
Est. Wind	270 T	5.0 KTS	
Est. Current:	90 T	0.5 KTS	
Corrected Heading:		230 T	
Observer Offset:	146 R	3.61 yds	
Shortstay: N Excursion	90 T	29.00 yds	
CWC Lat:		40-38-29.707N	
CWC Long:		074-08-42.249W	
AP To CWC:	102 T	0.56 yds	
2DRMS:		10.77 yds	
Buoy Station Dim.:		31.68 yds	
AP To CWC + BSD:		32.24 yds	
FOUND Station:		ON	

REMARK

RFV 04/15/2006: ATON VERIFICATION SUBSEQUENT TO THE GROUNDING OF THE M/V DELHI EXPRESS.
AID FOUND ON STA WATCHING PROPERLY.
VERIFIED CHARTS, L/L, C/F AND I-ATONIS.
METHOD OF EXCURSION: H-METHOD.
AID LWP.

FAX

Prepared by (Signature): [redacted] Date: 18 APR 06
CO/OINC(Signature): [redacted] Date: 4/18/06
DISTRICT REVIEW (Signature): Date:
Comments:

Joseph J. Hazelwood

From: Charles.B.Cobb@uscg.mil on behalf of Cobb, Charles LT [Charles.B.Cobb@uscg.mil]
Sent: Monday, April 24, 2006 3:42 PM
To: Joseph J. Hazelwood
Subject: FW: SAFETY BROADCAST, P 202135Z APR 06 COMCOGARD SECTOR NEW YORK NY//CC//

Mr. Hazelwood,

Here is a copy of the Safety Broadcast. Please let me know if you have any more questions

//Chuck

LT Charles Cobb
Sector New York Prevention Department
Investigations Division
Bus: 718-354-4227
Cell: 917-902-9750

P 202135Z APR 06 ZUI ASN-A01110000088
FM COMCOGARD SECTOR NEW YORK NY//CC//
TO AIG 11909

UNCLAS //N16502//
SUBJ: SAFETY BROADCAST
1. THE FOLLOWING NON-SCHEDULED BROADCAST HAS BEEN INITIATED: NEW YORK NEW JERSEY - BERGEN POINT - KILL VAN KULL CH LB 14 (LLNR 37325) IS CURRENTLY APPROXIMATELY 25 YDS AT 015 DEGREES TRUE FROM IT'S CHARTED POSITION AS DEPICTED ON NOAA CHART 12333, 34TH EDITION, PUBLISHED IN DECEMBER 2005. AS A RESULT, THE CHANNEL PROJECT DEPTH OF 45 FEET IS NOT AVAILABLE AT THE BUOY'S CURRENT LOCATION. MARINER'S ARE ADVISED TO MAINTAIN A SAFE DISTANCE WHEN PASSING LB 14 AND REMAIN WITHIN THE CHANNEL LIMITS WHERE NOAA SOUNDINGS INDICATE WATER DEPTHS MEET OR EXCEED THE 45 FT PROJECT DEPTH.
2. SECNY BROADCAST UPON RECEIPT AND EVERY SCHED BROADCAST UNTIL CANX.
BT
NNNN

FACSIMILE TRANSMISSION

RUBIN, FIORELLA & FRIEDMAN LLP

292 Madison Avenue
New York, New York 10017
Telephone: 1-212-953-2381
Facsimile: 1-212-953-2462

To: CAPT. JAMES SCHEFFER (NTSB)

Date: 5/29/07

From: JAMES MERCANTE

Attn:

No. of Pages: Header + 6

Fax No.: 202-314-6090
(Include country and city codes)

Our File:

Operator Name:

Re:

Extension:

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3/11/2006 12:04

Aid Positioning Record - GPS

Aid Name: Bergen Point Lighted Buoy 14
Latitude: 40-38-34.900N
Longitude: 074-08-40.900W
Unit/Vessel: CG ANT NEW YORK BUSL49 49405
Work Area: 41920

GPS Rcvr Type:
DGPS Rcvr Type: MX-240

Aid Number: 200100579042
LLNR: 37325 Aid Sub-type: Floating
Accuracy Class B - 50 yd
Chart Number: 12333 Ed: 34
Chart Panel (KAPP): 2239
Geodetic Datum: NAD 83
Serial #:
Serial #: 00805570

FOUND DGPS MEASUREMENTS Antenna Position: 40-38-34.770N 074-08-40.218W HDOP: 1.1

```
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$GPGST,160146.00,000.8,000.7,000.5,343.7,000.7,000.5,001.3
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FOUND DATA USING GPS

Date/Time: 3/11/2006 11:01:45 AM
By: CG ANT NEW YORK

Measured Depth:			38.0 ft
Tide Corr:			-1.5 ft
Draft:	2.5 ft	Chain:	90.0 ft
Datum:	39.0 ft	WCR:	27.04 yds
Est. Wind		0 T	5.0 KTS
Est. Current:		295 T	0.1 KTS
Corrected Heading:			95 T
Observer Offset:		175 R	12.04 yds
Shortstay: Y Excursion		0 T	0.00 yds
MPP Lat:			40-38-34.771N
MPP Long:			074-08-40.687W
AP To MPP:		128 T	6.99 yds
2DRMS:			6.01 yds
Buoy Station Dim.:			27.70 yds
AP To MPP + BSD:			34.69 yds
FOUND Station:			ON

SET DATA USING GPS

MARCH 06

REMARK

RFV 03/11/06: AID FOUND DISCREPANT IN PASSING.
AID FOUND ON STATION.
UNIT TRIED TO RELOCATE AID DUE TO CLOSE VICINITY OF MOORED BARGE, BUT WAS UNABLE.
VERIFIED CHARTS, L/L, C/P & I-ATONIS.
LWP.

Prepared by (Signature) [redacted] Date: 3/11/06
CO/OINC(Signature): [redacted] Date: 3/14/06
DISTRICT REVIEW (Signature): [redacted] Date: 4-21-06
Comments: CGC KATHERINE WALKER PRIMARY

CURRENTS

Search

Station Information

Tide / Water Data

Tide Predictions

Current Data

Meteorological Observations

Conductivity

PORTS

Operational Forecast System

Bench Mark Sheets

Datums

Harmonic Constituents

Sea Level Trends

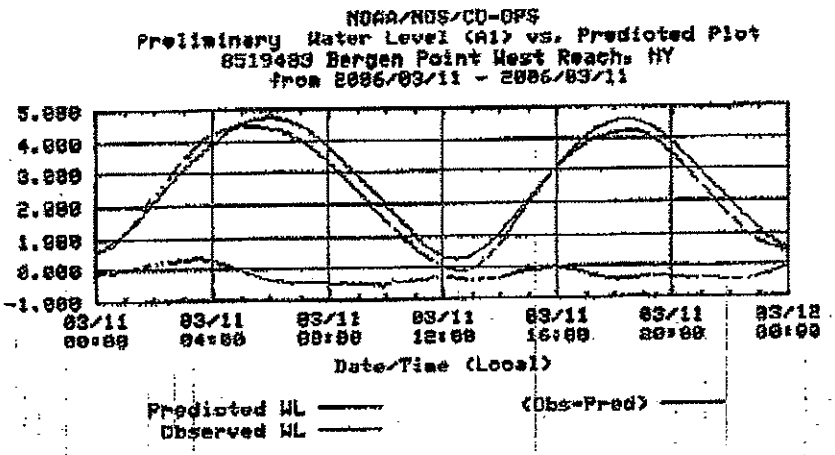
Bergen Point West Reach, NY

Station ID: 8519483

Bergen Point West Reach, NY: Data Inventory

Page Help

Tide Data



Nearby Stations

- Bayonne Bridge Air
- The Battery, NY
- Sandy Hook, NJ
- Kings Point, NY
- Newbold, PA
- Eatons Neck, NY
- Burlington, Delaware
- Tacony-Palmyra Bri
- Bridgeport, CT
- Philadelphia, PA
- Atlantic City, NJ
- New Haven, CT
- Marcus Hook, PA

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Begin Date: Mar 11 2006

End Date: Mar 11 2006

Datum: MLLW

Data Units: Feet / Meters

Time Zone: Local (LST/LDT) / GMT / LST

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3/22/2006 13:23

Aid Positioning Record - GPS

Aid Name: Bergen Point Lighted Buoy 14
Latitude: 40-38-34.900N
Longitude: 074-08-40.900W
Unit/Vessel: CG ANT NEW YORK TANB 233502
Work Area: 41920

Aid Number: 200100579042
LLNR: 37325 Aid Sub-type: Floating
Accuracy Class B - 50 yd
Chart Number: 12333 Ed: 34
Chart Panel (KAPP): 2239
Geodetic Datum: NAD 83
Serial #:
Serial #: 5340000718

GPS Rcvr Type:
DGPS Rcvr Type: NT200CG

FOUND DGPS MEASUREMENTS Antenna Position: 40-38-34.560N 074-08-40.464W HDOP: 1.6

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$GPVHW,095.0,T,109.0,M,00.00,N,00.00,K
$GPVTG,325.1,T,336.1,M,00.05,N,00.10,K

FOUND DATA USING GPS

Date/Time: 3/17/2006 11:01:26 AM
By: CG ANT NEW YORK

Measured Depth:			28.0 ft
Tide Corr:			-1.5 ft
Draft:	1.0 ft	Chain:	90.0 ft
Datum:	29.0 ft	WCR:	28.40 yds
Est. Wind		0 T	15.0 KTS
Est. Current:		180 T	1.5 KTS
Corrected Heading:			0 T
Observer Offset:		189 R	3.04 yds
Shortstay: N Excursion		0 T	14.20 yds
CWC Lat:			40-38-34.583N
CWC Long:			074-08-40.579W
AP To CWC:		142 T	13.52 yds
2DRMS:			8.53 yds
Buoy Station Dim.:			29.65 yds
AP To CWC + BSD:			43.17 yds
FOUND Station:			ON

SET DATA USING GPS

REMARK

RFV 03/17/06: AID FOUND EXT. DUE TO MISSING FLASHER AND CHANGER.
AID FOUND ON STATION.
UNIT REPLACED FLASHER AND CHANGER.
EXCURSION METHOD: 1/2 WCR.
VERIFIED CHARTS, L/L. C/P & I-ATONIS.
LWP.

Prepared by (Signature): [redacted] Date: 22 Mar 06
CO/OINC(Signature): [redacted] Date: 5/23/06
DISTRICT REVIEW (Signature): [redacted] Date: 4-21-06
Comments:

CURRENTS

Search

Station Information
Tide / Water Data
Tide Predictions
Current Data
Meteorological Observations
Conductivity
PORTS
Operational Forecast System
Bench Mark Sheets
Datums
Harmonic Constituents
Sea Level Trends

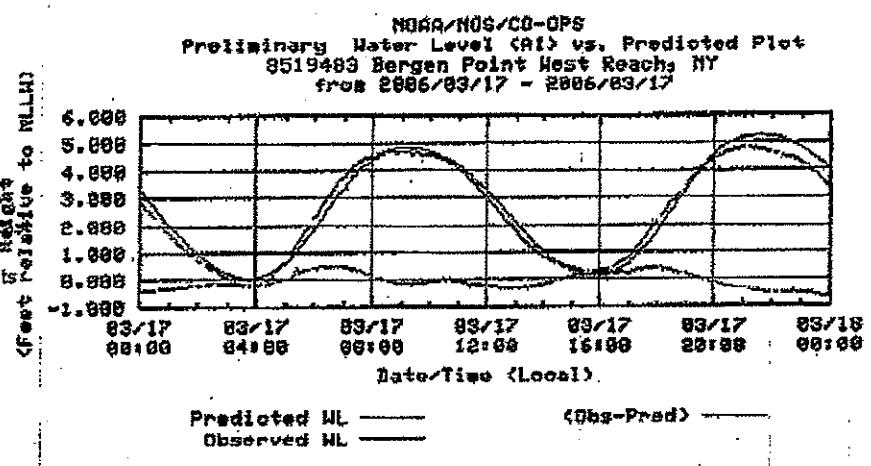
Bergen Point West Reach, NY

Station ID: 8519483

Bergen Point West Reach, NY: Data Inventory

Page Help

Tide Data



Nearby Stations

Bayonne Bridge Air
The Battery, NY
Sandy Hook, NJ
Kings Point, NY
Newbold, PA
Eatons Neck, NY
Burlington, Delaware
Tacony-Palmyra Br
Bridgeport, CT
Philadelphia, PA
Atlantic City, NJ
New Haven, CT
Marcus Hook, PA

Click here for larger plot

Check to plot backup data (if available)

Begin Date: Mar 17 2006

End Date: Mar 17 2006

Datum: MLLW

Data Units: Feet / Meters

Time Zone: Local (LST/LDT) / GMT / LST

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4/18/2006 11:34

Aid Positioning Record - GPS

Aid Name: Bergen Point Lighted Buoy 14
Latitude: 40-38-34.900N
Longitude: 074-08-40.900W
Unit/Vessel: CG ANT NEW YORK TANB 233502
Work Area: 41920

Aid Number: 200100579042
LLNR: 37325 Aid Sub-type: Floating
Accuracy Class B - 50 yd
Chart Number: 12333 Ed: 34
Chart Panel (KAPP): 2239
Geodetic Datum: NAD 83
Serial #:
Serial #: 5340000718

GPS Rcvr Type:
DGPS Rcvr Type: NT200CG

FOUND DGPS MEASUREMENTS Antenna Position: 40-38-34.848 N 074-08-41.040W HDOP: 1.3

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$GPGST,161331,00.93,00.51,00.24,039.14,00.37,00.42,00.60

FOUND DATA USING GPS

Date/Time: 4/15/2006 12:14:39 PM
By: CG ANT NEW YORK

Measured Depth:			27.0 ft
Tide Corr:			-3.9 ft
Draft:	1.0 ft	Chain:	90.0 ft
Datum:	28.0 ft	WCR:	28.51 yds
Est. Wind		270 T	5.0 KTS
Est. Current:		90 T	1.0 KTS
Corrected Heading:			47 T
Observer Offset:		313 R	0.00 yds
Shortstay: N Excursion		90 T	14.30 yds
CWC Lat:			40-38-34.848N
CWC Long:			074-08-41.040W
AP To CWC:		244 T	4.00 yds
2DRMS:			7.11 yds
Buoy Station Dim.:			29.38 yds
AP To CWC + BSD:			33.38 yds
FOUND Station:			ON

SET DATA USING GPS

REMARK

RFV 04/15/2006: ATON VERIFICATION SUBSEQUENT TO THE GROUNDING OF THE [redacted]V DELHI EXPRESS.
AID FOUND ON STA WATCHING PROPERLY.
VERIFIED CHARTS, LL, C/P AND I-ATONIS.
METHOD OF EXCURSION: FRAC WCR 1/2.
AID LWP.

FAXED

Prepared by (Signature): [redacted] Date: [illegible]
CO/OINC(Signature): [redacted] Date: 4/18/06
DISTRICT REVIEW ([redacted] Date: 4-19-06
Comments:

Joseph J. Hazelwood

From: Charles.B.Cobb@uscg.mil on behalf of Cobb, Charles LT [Charles.B.Cobb@uscg.mil]
Sent: Monday, April 24, 2006 3:42 PM
To: Joseph J. Hazelwood
Subject: FW: SAFETY BROADCAST, P 202135Z APR 06 COMCOGARD SECTOR NEW YORK NY//CC//

Mr. Hazelwood,

Here is a copy of the Safety Broadcast. Please let me know if you have any more questions

//Chuck

LT Charles Cobb
Sector New York Prevention Department
Investigations Division
Bus: 718-354-4227
Cell: 917-902-9750

P 202135Z APR 06 ZUI ASN-A01110000088
FM COMCOGARD SECTOR NEW YORK NY//CC//
TO AIG 11909
BT
UNCLAS //N16502//
SUBJ: SAFETY BROADCAST
1. THE FOLLOWING NON-SCHEDULED BROADCAST HAS BEEN INITIATED: NEW YORK NEW JERSEY - BERGEN POINT - KILL VAN KULL CH LB 14 (LLNR 37325) IS CURRENTLY APPROXIMATELY 25 YDS AT 015 DEGREES TRUE FROM IT'S CHARTED POSITION AS DEPICTED ON NOAA CHART 12333, 34TH EDITION, PUBLISHED IN DECEMBER 2005. AS A RESULT, THE CHANNEL PROJECT DEPTH OF 45 FEET IS NOT AVAILABLE AT THE BUOY'S CURRENT LOCATION. MARINER'S ARE ADVISED TO MAINTAIN A SAFE DISTANCE WHEN PASSING LB 14 AND REMAIN WITHIN THE CHANNEL LIMITS WHERE NOAA SOUNDINGS INDICATE WATER DEPTHS MEET OR EXCEED THE 45 FT PROJECT DEPTH.
2. SECNY BROADCAST UPON RECEIPT AND EVERY SCHED BROADCAST UNTIL CANX.
BT
NNNN

4/6/2006 18:41

Aid Positioning Record - GPS

Aid Name: Kill Van Kull Channel Lighted Buoy 13
Latitude: 40-38-24.798N
Longitude: 074-08-52.720W
Unit/Vessel: CGC KATHERINE WALKER WLM 552
Work Area: 15518KVK

GPS Rcvr Type:
DGPS Rcvr Type: MX420

Aid Number: 31777
LLNR: 37530 Aid Sub-type: Floating
Accuracy Class: B 50 yd.
Chart Number: 12353 Ed: 34
Chart Panel (KAPP): 2239
Geodetic Datum: NAD 83
Serial #:
Serial #: 805851

FOUND DGPS MEASUREMENTS Antenna Position: 40-38-24.720N 074-08-51.960W HDOP: 1.2

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$GPVHW,038.5,T,102.5,M,00.00,N,00.00,K*41
$GPVTG,020,2,T,034.1,M,00.23,N,00.43,K*4E
```

FOUND DATA USING GPS

Date/Time: 4/6/2006 4:30:18 PM
By: CGC KATHERINE WALKER

Measured Depth:			47.0 ft
Tide Corr:			-1.0 ft
Draft:	8.0 ft	Chain:	90.0 ft
Datum:	54.0 ft	WCR:	24.00 yds
Est. Wind		296 T	16.0 KT
Est. Current:		149 T	0.2 KT
Corrected Heading:			88 T
Observer Offset:		28 R	16.25 yds
Shortstay: Y Excursion		0 T	0.00 yds
MPP Lat:			40-38-24.508N
MPP Long:			074-08-51.392W
AP To MPP:		106 T	35.49 yds
2DRMS:			6.55 yds
Buoy Station Dim.:			24.88 yds
AP To MPP + BSD:			60.37 yds
FOUND Station:			OFF

SET DATA USING GPS

REMARK

06APR06: VISTED AID FOR RELOCATION AND DOWN SIZE OF SINKER AND BUOY, SET 6X11 HULL, 1/2 OF 1" CHAIN, AND 4K SINKER. SET NEW HULL APPROX 310 YDS NE OF AP. REQUEST MPP BECOME TEMPORARY AP DUE TO DREDGING PROJECT.

Prepared by (Signature) [redacted] Date: 06 APR 06
CO/OINC(Signature): [redacted] Date: 5/4/06
DISTRICT REVIEW ([redacted]): Date:
Comments: