NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL OCEAN SERVICE

Hydrographic Single Beam & 100% Sidescan

VERTICAL AND HORIZONTAL CONTROL REPORT

Type of Survey:

Project No. : S-J977-KR-CC

Registry Nos. : H11616, H11617, H11618, H11619, H11620, H11638

LOCALITY

State: Mississippi

General Locality: Mississippi Sound

2007

CHIEF OF PARTY
Joseph Burke

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DATE:

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBERS: H11616 H11617 H11618 H11619 H11620 H11638

VERTICAL AND HORIZONTAL CONTROL REPORT TITLE SHEET

State: Mississippi

General Locality: Mississippi Sound

Project Number: S-J977-KR-CC

Vessels: Arlen, Beach Surveyor, High Roller, Hydro Surveyor, and Inland Surveyor

Chiefs of Party: Scott Croft and Joseph Burke

	Survey Dates	Vessel	SOW Date	Party Chief
H11616	12/2006 - 03/2007	High Roller Hydro Surveyor	Sep-06	Burke
H11617	07/2006 - 06/2007	Arlen Beach Surveyor High Roller Hydro Surveyor	Sep-06	Burke
H11618	10/2006 - 03/2007	High Roller Hydro Surveyor Inland Surveyor	Sep-06	Burke
H11619	09/2006 - 04/2007	Arlen Beach Surveyor High Roller Hydro Surveyor	Sep-06	Burke
H11620	02/2007 - 04/2007	High Roller Hydro Surveyor	Sep-06	Burke
H11638	01/2007 - 04/2007	Arlen Beach Surveyor Hydro Surveyor	Sep-06	Burke

TABLE OF CONTENTS

A. Vertical Control

C&C Technologies did not establish any additional tidal gauges in the field during the collection of the survey data associated with this project.

All vertical tidal correctors applied to data collected during this survey were taken from the NOAA CO-OPS website. The website existed in various locations during the time period that this survey was conducted, and no record was kept of the different Internet addresses.

All data was collected in local time.

Vertical correctors were applied to all accepted bathymetric data within Caris Hips and Sips 6.1.

The original zone definition file did not cover all of Bay St. Louis. Therefore, an additional tide zone was applied to project H11617 called CGM 600. This zone applied a zero time and range correction.

In order to cover Biloxi Bay, five tidal zones were added to project H11619 for a total of eight tidal zones, CGM 66, 68, 507, 523, 524, 525, 526, and 542.

Tidal data from the Gulfport Harbor (8745557) were used to process all of the tidal data. A tidal correction error exists between the dates of October 2nd through October 25th. This error is most likely due to local meteorological events. In an attempt to correct this error a tide zone file applying Gulfport tide readings to the entire survey area was supplied to C&C Technologies by CO-Ops. This tide zone file was only applied to survey H11619. It is called J977KR2007CC_CORP_Analysis_CC.zdf and can be found within the tide folder of the Caris project submitted in conjunction with this report.

No tidal zones were applied to project H11638, however tidal data from Gulfport Harbor (8745557) were used to process all data. This applied a zero time and range correction.

No benchmark surveys were conducted by C&C Technologies in support of this survey.

B. Horizontal Control

No horizontal control field stations were established by C&C Technologies in support of this survey.

Multiple DGPS receivers collected horizontal positioning throughout the survey on all ships used during the collection of this survey. Following the collection of

every survey line, navigation statistics comparing the position of these multiple antennas were analyzed. Any apparent error in position resulted in a rerun of the line.

LETTER OF APPROVAL

Vertical and Horizontal Control Report
S-J977-KR-CC

This report is respectfully submitted.

Field operations contributing to the accomplishment of this survey were conducted under my direct supervision between the dates of September 2006 – June 2007 with frequent personal checks of progress and adequacy. This report has been closely reviewed and is considered complete and adequate as per the Statement of Work.

Joseph Burke
Chief of Party
C&C Technologies
June 2007