

**Industry Survey Report Series  
Deck Barges  
2002**

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For

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## Table of Contents

Introduction and Methodology.....	1
Respondent Characteristics.....	2
Respondents Attitudes and Perceptions.....	4
Appendix.....	9

### **List of Figures:**

Figure 1: Areas of Operation.....	2
Figure 2: Fleet Mix of Sample.....	2
Figure 3: Portion of Revenue Derived from Applications.....	3
Figure 4: Length of Charters.....	3
Figure 5: How Do You Determine Newbuilding Features?.....	6
Figure 6: Shipyard Performance Rating.....	6
Figure 7: How Do You Determine Customer Satisfaction?.....	7
Figure 8: How Do You Estimate Market Growth?.....	7

### **List of Tables:**

Table 1: Three-Year Effective Rate History by Barge Size.....	4
Table 2: Expected Days Utilization in a Normal Year.....	5

## Introduction and Methodology

The U.S. Maritime Administration (MARAD) has undertaken a new program of attitudinal research, surveying the major carriers in marine transportation segments. The surveys focus on fleet characteristics and the respondents' attitudes and perceptions of the markets in which they operate.

MARAD's objective is to better understand the industry and the market challenges facing operators. The survey results are expected to demonstrate the utility of obtaining regular structured information from the industry on key issues. If performed on a regular basis, these surveys can track important industry attitudes and facilitate the sharing of important information that cannot be obtained from hard data.

Included in the pilot program were surveys of the inland and coastal deck barge segments. The top ten companies in each segment were targeted, with rankings based on fleet capacity derived from U.S. Army Corps of Engineers fleet files. Targeted companies unable to participate were replaced by the next company in order until a total of ten companies were represented in each segment.

This report describes the aggregated results of the two surveys. Separate surveys were initially drafted for each segment. However, it was later decided to use a single survey instrument because most of the deck barge companies operate in both inland and coastal service.

Answers to questions requiring a percentage as a response were weighted based on fleet capacity. Several questions allow for multiple responses, and the tabulation of those responses add to more than 100 percent of the respondents. The survey instrument is included as Appendix 1.

The survey work was begun in September 2002 and completed in mid-December. The surveys were conducted by Market Scope, Inc. using trained interviewers from Old Dominion University Graduate School of Business and Public Administration. All work was coordinated by MARAD's Office of Statistical and Economic Analysis, with direct staff participation.

MARAD is grateful to the respondents for their assistance.

## Respondent Characteristics

The operators surveyed in the two segments accounted for 43 percent of the total US deck barge fleet.

Eighty percent of the respondents operate to some extent on the US Gulf Coast (Figure 1).

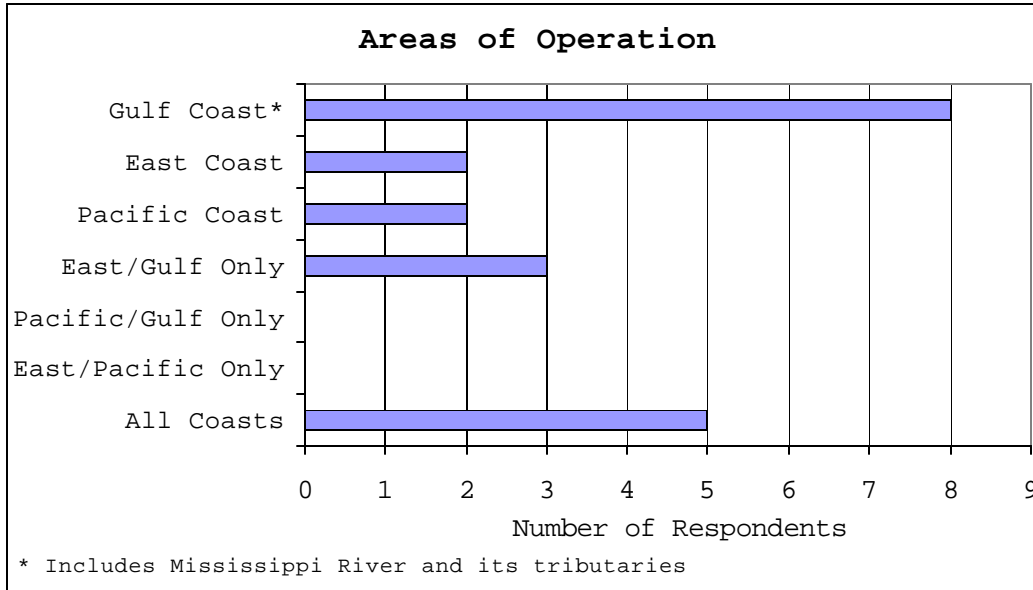


Figure 1

Thirty-eight percent of the respondents' deck barge fleet are inland barges. Thirteen percent of the barges owned by those surveyed are spud barges. The distribution by length is shown below.

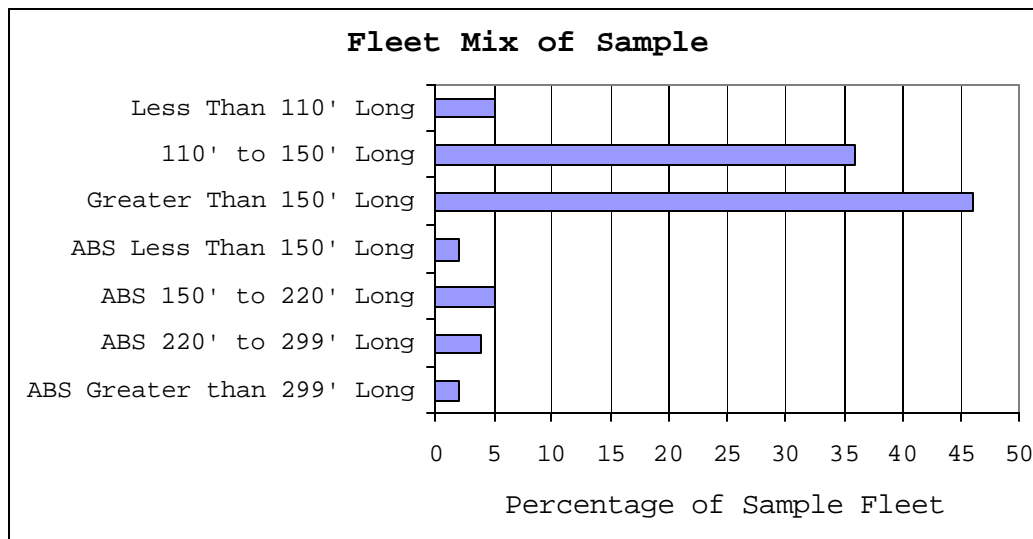


Figure 2

Respondents were asked to indicate the portion of their deck barge revenues derived from each of four applications: construction and dredging/bridge projects, carriage of bulk materials, carriage of manufactured products, and oil field service. The distribution of responses is shown below.

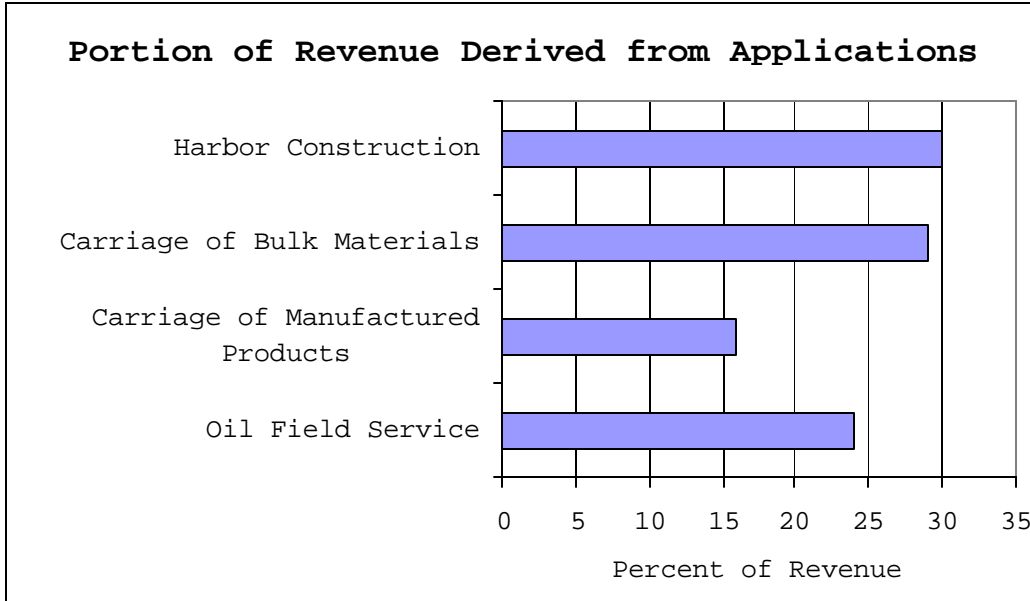


Figure 3

Fifty-six percent of the respondents' revenues are derived from transportation services, while 44 percent are derived from charter or "for hire" services. A breakdown of charters by length of term is shown below.

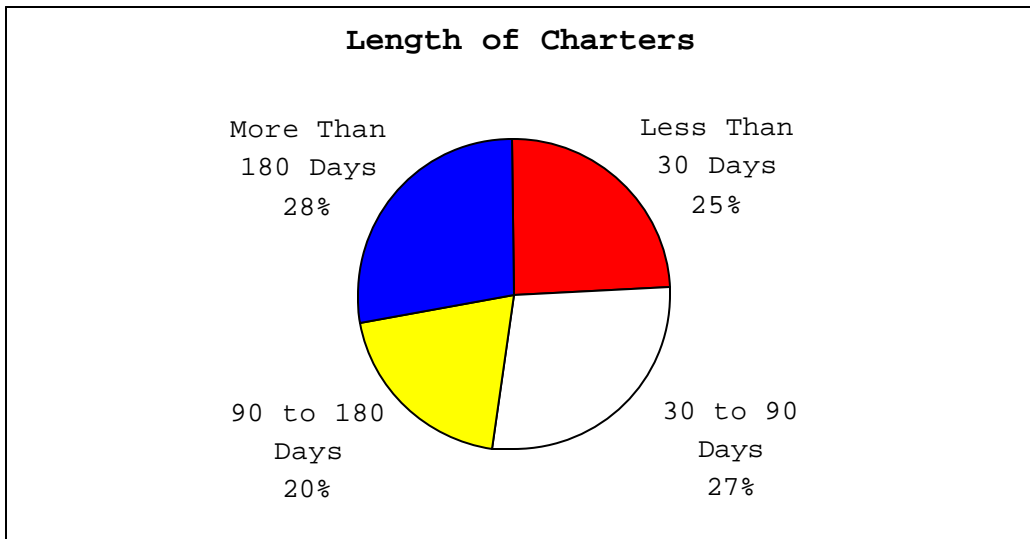


Figure 4

### Respondent Attitudes and Perceptions

Respondents were asked to indicate the movement of effective rates (charter rate x utilization) for various size categories, over the last three years. The majority of the respondents (65-90 percent depending upon the size category) experienced stable effective rates during the period (Table 1).

Twenty-five percent of the respondents indicated an increase in rates for inland barges greater than 150' long. Twenty percent of the respondents indicated a decrease in rates for ABS (coastal) deck barges in the 150'-299' long categories.

<u>Length of Barge</u>	<u>Increase</u>	<u>Decrease</u>	<u>Same</u>
<b>Inland</b>			
Less Than 110' Long	2	0	18
110' to 150' Long	4	2	14
Greater Than 150' Long	5	0	15
<b>ABS Classed</b>			
Less Than 150' Long	1	3	16
150' to 220' Long	2	4	14
220' to 299' Long	3	4	13
Greater Than 299' Long	2	0	18

Table 1

Respondents most often chose "180 to 270 days" as the expected utilization for their deck barges in a normal year. For larger inland barges 45 percent of respondents expect more than 270 days utilization (Table 2).

<b>Expected Days Utilization in a Normal Year</b>				
<b>Length of Barge</b>	<b>No. Own*</b>	<b>Less Than 180 Days</b>	<b>180 to 270 Days</b>	<b>More Than 270 Days</b>
<b>Inland</b>				
Less Than 110' Long	6	2	3	1
110' to 150' Long	13	1	6	6
Greater Than 150' Long	16	2	7	7
<b>ABS Classed</b>				
Less Than 150' Long	6	1	3	2
150' to 220' Long	7	1	5	1
220' to 299' Long	9	4	2	3
Greater Than 299' Long	5	1	3	1
*Number of respondents indicating ownership of barges in this category				

Table 2

Eighty percent of the respondents anticipate ordering new barges over the next three years.

Respondents who plan to order new barges were asked how the new barges would differ from their existing fleet and how they determine the characteristics/features that their customers want in new barges. The most frequent responses were that the new barges will be larger and have reinforced decks. Feedback through sales calls was the means most often cited for determining customer requirements (Figure 5).

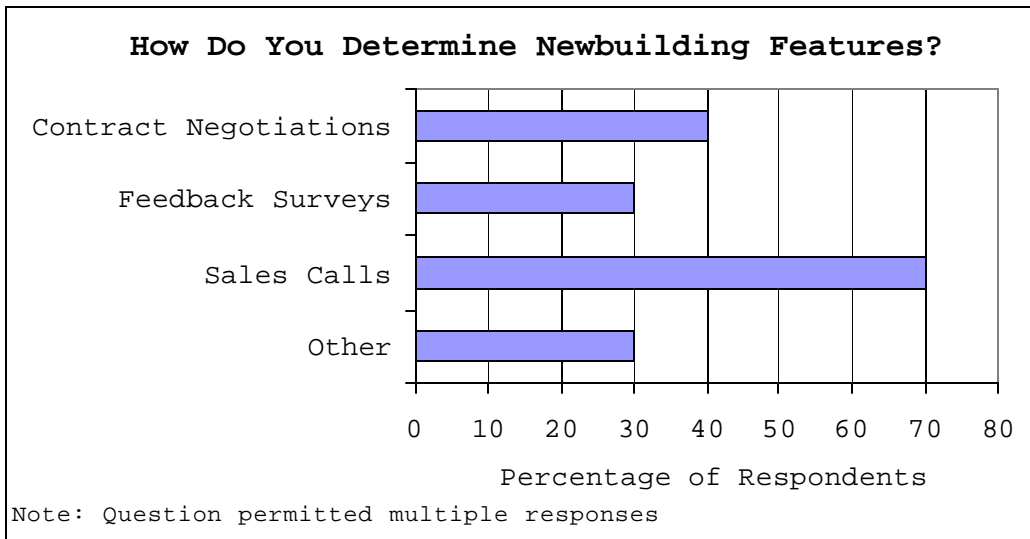


Figure 5

The respondents were asked to identify important regulatory issues facing deck barge operators. While there were a large number of issues identified, the Jones Act and environmental regulations were the only issues raised by more than 10 percent of the respondents.

On a scale of 1 (poor) to 5 (excellent), the respondents, as a group, rated US shipyards below 3 on price and slightly above 3 on quality and meeting delivery schedules (Figure 6).

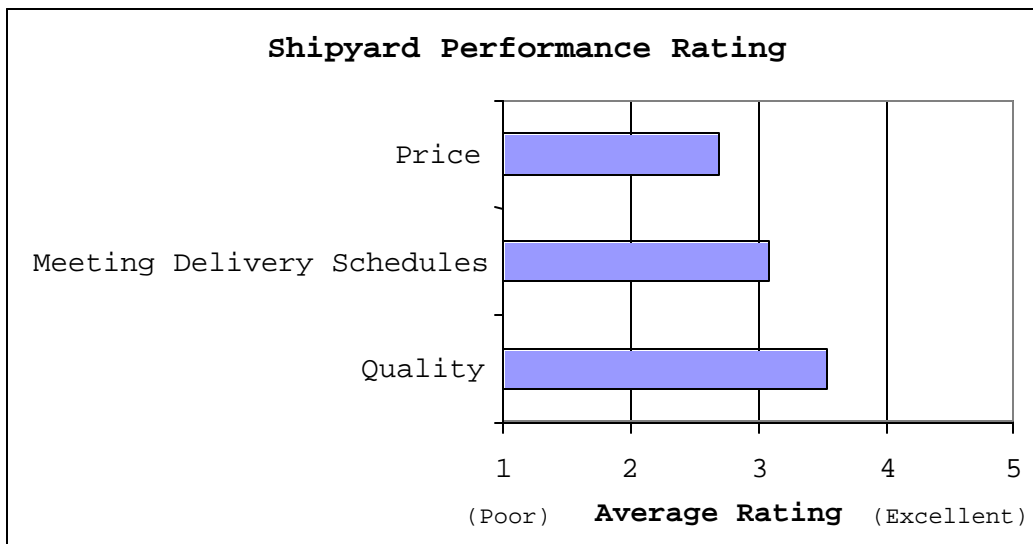


Figure 6



Respondents were asked to indicate how they determine customer satisfaction. Seventy-five percent of the respondents stated that they rely on sales calls as the principle means by which they determine customer satisfaction (Figure 7).

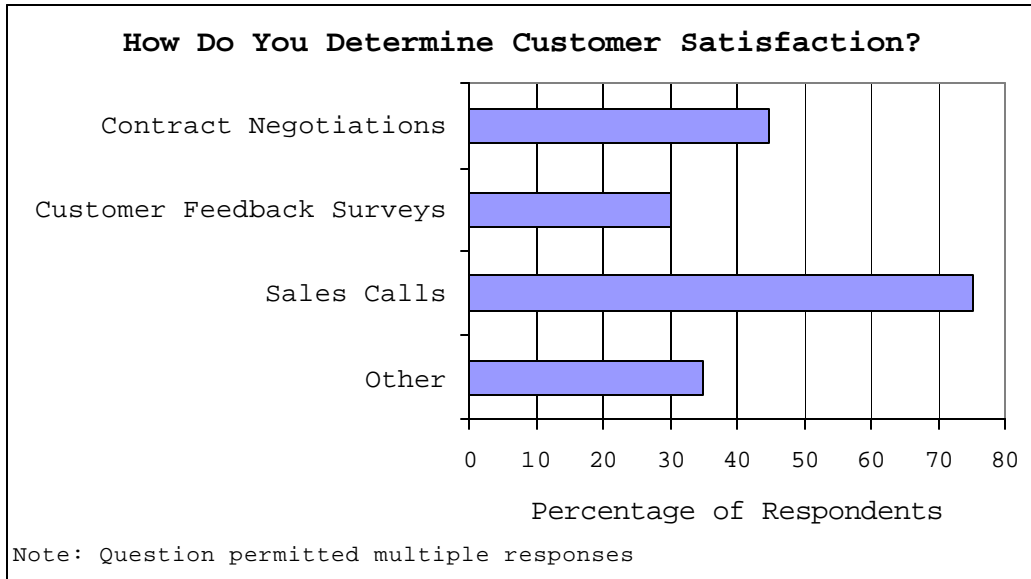


Figure 7

To estimate market growth, 90 percent of respondents use empirical data, while 40 percent use customer surveys (Figure 8).

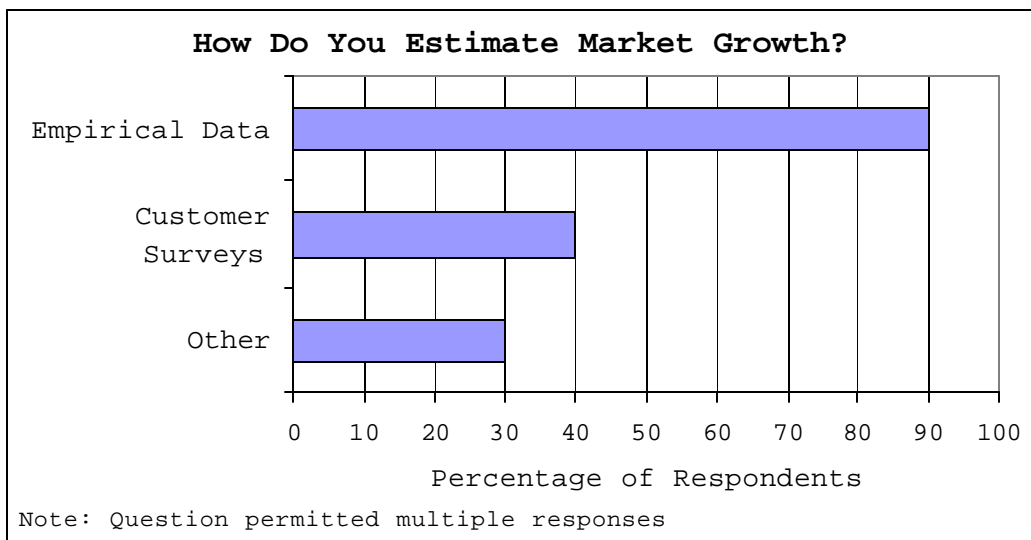


Figure 8

However, on a scale of 1(poor) to 5(excellent), 50 percent of respondents rated the quality and availability of existing general market indicators as poor or slightly better than poor.

Forty-five percent of the respondents expressed interest in participating in a forum for developing and improving market indicators, specifically for the deck barge segment of the industry. However, some additional respondents indicated a desire for more information about the concept.

## Appendix

### Deck Barge Survey

1.) In which of the following waterways and coastal areas do you operate deck barges ... you may choose as many as apply...

East Coast	yes [ ]	no [ ]
Gulf Coast including the Mississippi River and its tributaries	yes [ ]	no [ ]
Pacific Coast	yes [ ]	no [ ]

2.) About what percent of your deck barge fleet is in each of the following categories? In this survey, for all the answers in percents, please use percents that end in "0" or "5", such as 20%, 25% and so forth.

Inland Less than 110' long	_____
Inland 110' to 150' long	_____
Inland Greater than 150' long	_____
ABS Classed Less than 150' long	_____
ABS Classed 150' to 220' long	_____
ABS Classed 220' to 299' long	_____
ABS Greater than 299' long	_____

3.) Approximately what percent of your total deck barge fleet is Spud Barges? \_\_\_\_\_

4.) For 2001, approximately what percent of your deck barge revenues were from the following applications?

a. Harbor construction, dredging and bridge projects	_____
b. Carriage of bulk materials	_____
c. Carriage of manufactured products (including containers, refinery vessels and overdimensional cargoes)	_____
d. Oil field service	_____

- 5.) For 2001, about what percent of your deck barge revenues were derived from:
- a) transportation services \_\_\_\_\_
  - b) charter or "for hire" services \_\_\_\_\_
- 6.) Currently, about what percent of your charters are for the following terms?
- a) Less than 30 days \_\_\_\_\_
  - b) 30 to 90 days \_\_\_\_\_
  - c) 90 to 180 days \_\_\_\_\_
  - d) Greater than 180 days \_\_\_\_\_
- 7.) Generally, over the last 3 years, has the effective rate for the following size categories increased, decreased or remained the same?

	Increased	Decreased	Remained the Same
Inland	_____	_____	_____
Less than 110' long	_____	_____	_____
110' to 150' long	_____	_____	_____
Greater than 150' long	_____	_____	_____
ABS Classed			
Less than 150' long	_____	_____	_____
150' to 220' long	_____	_____	_____
220' to 299' long	_____	_____	_____
Greater than 299' long	_____	_____	_____

8.) We would like to know how many days utilization you expect for your deck barges in a normal year. For each of the categories I am going to read to you, tell me if it's less than 180 days, 180 to 270 days or more than 270 days:

	Less than 180 days	180 to 270 days	More than 270 days
<u>Inland</u>			
Less than 110' long	_____	_____	_____
110' to 150' long	_____	_____	_____
Greater than 150' long	_____	_____	_____
<u>ABS Classed</u>			
Less than 150' long	_____	_____	_____
150' to 220' long	_____	_____	_____
220' to 299' long	_____	_____	_____
Greater than 299' long	_____	_____	_____

9.) What are the most important regulatory issues facing deck barge operators?

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10.) Do you anticipate ordering new barges over the next three years?

Yes [ ]  
No [ ]

11.) How will the newbuildings be different from the older barges in your fleet? For example do you expect changes in dimensions, reinforced decks, etc.

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12.) On a scale of 1 to 5, 1 being poor and 5 being excellent, how do you rate U.S. shipyards in meeting your needs in terms of...

	poor				excellent
	1	2	3	4	5
Price	---	---	---	---	---
Meeting delivery schedules	---	---	---	---	---
Quality	---	---	---	---	---

13.) How do you determine customer satisfaction with your service?...Is it from...

	Yes	No
Contract negotiations	---	---
Customer feedback surveys	---	---
Sales calls	---	---
Other (specify) _____	---	---

14.) How do you determine the characteristics and features your customers want in your newbuildings? Is it from...

	Yes	No
Contract negotiations	___	___
Customer feedback surveys	___	___
Sales calls	___	___
Other (specify) _____	___	___

15.) How do you estimate the growth of your market? Do you use...

	Use	Do not use
Empirical data such as industry trends and company sales	___	___
Customer surveys	___	___
Other (specify) _____	___	___

16.) On a scale of 1 to 5, 1 being poor and 5 being excellent, how would you rate availability and quality of general market indicators such as orderbooks, rates and fleet statistics?

\_\_\_\_\_

17.) Would you be interested in participating in a forum for developing market information, with the goal of improving market indicators for the deck barge industry?

Yes [ ]  
No [ ]