

**Industry Survey Report Series  
Coastal Tank Barges  
2002**

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For

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## Introduction and Methodology

The U.S. Maritime Administration (MARAD) has undertaken a new program of attitudinal research, surveying the major carriers in marine transportation market 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 was a survey of the coastal tank barge segment. The top ten companies of the 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.

This report describes the aggregated results of the survey. 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 respondents trade along the US coast and account for about 51 percent of the coastal tank barge capacity.

Sixty-four percent of the respondents' barges have a capacity less than 110,000 barrels (Figure 1).

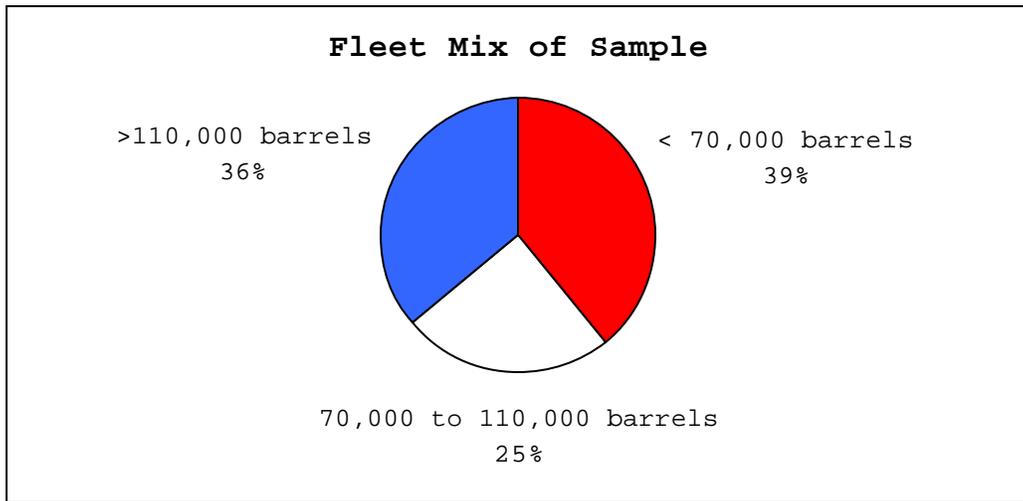


Figure 1

Twenty-two percent of the respondents' fleet consisted of articulated tug/barge (ATB) units. Eighty-four percent of those ATBs had a capacity of more than 110,000 barrels. A breakdown of the size of the ATBs follows:

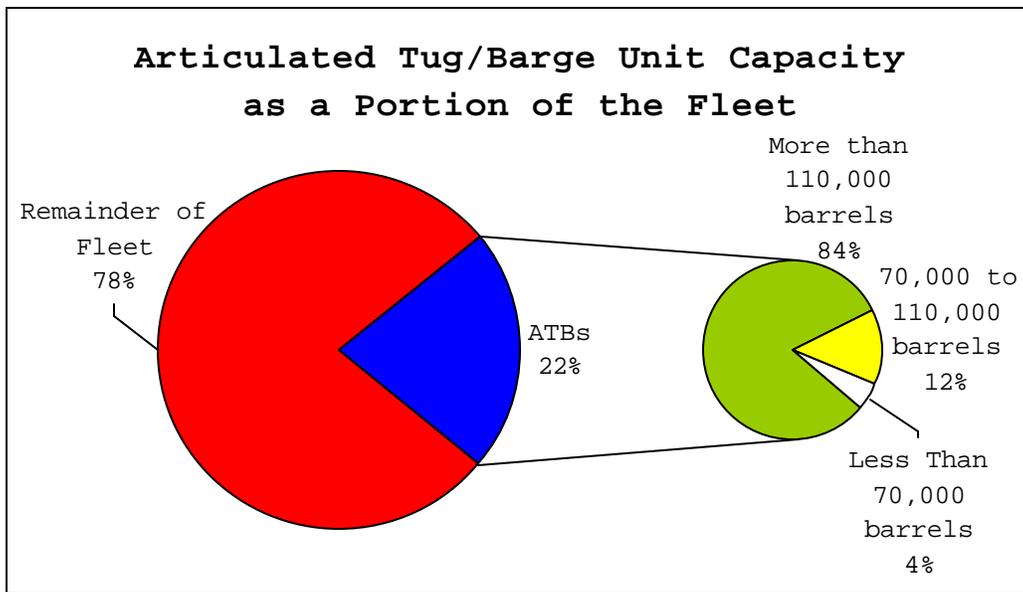


Figure 2

### Respondents Attitudes and Perceptions

Fifty percent of the respondents expect the average size of the barges in their fleet to remain the same over the next three years. Thirty percent expect the average size to decrease, while 20 percent expect the size of their barges to increase.

The respondents were asked to estimate how much of their existing fleet operated in each of three route mileage groups (Figure 3). Forty-four percent of their fleet operated on routes greater than 500 miles. Ninety percent of the respondents expect the average length of haul to remain the same over the next three years, while 10 percent expect it to increase.

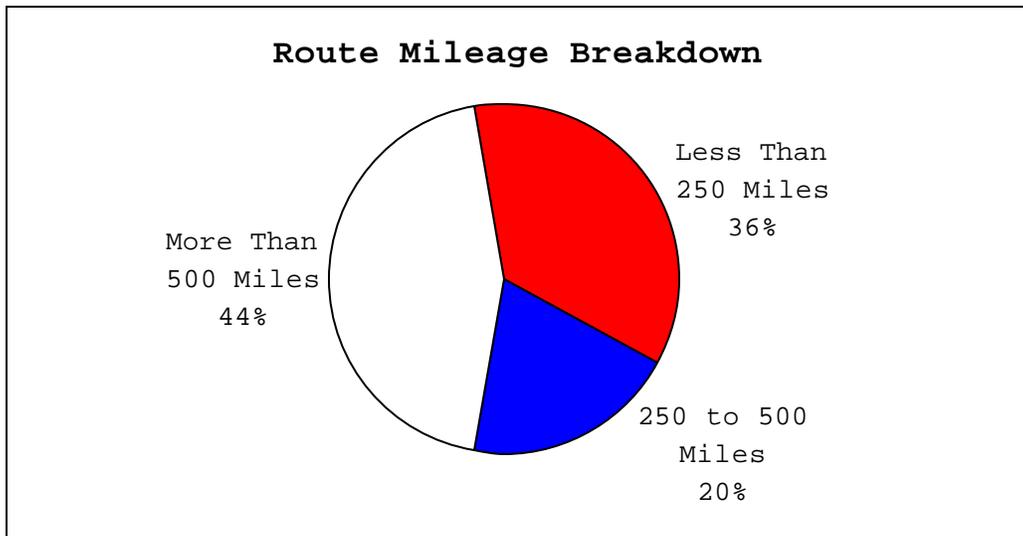


Figure 3

With respect to the total traffic moved by product tankers or coastal tank barges, 70 percent of the respondents expect the coastal tank barge share to increase over the next three years. The other 30 percent expect this share to remain the same.

The respondents indicated that 57 percent of their revenues came from the carriage of clean products. Seventy percent of respondents expect this relationship to remain the same over the next three years, while the other 30 percent expect an increase.

The respondents were asked to estimate the distribution of their 2001 shipping revenue between term contracts (contracts of affreightment and time charters), and spot contracts. Seventy-four percent of the respondents' tank barge revenues were from term contracts (Figure 4).

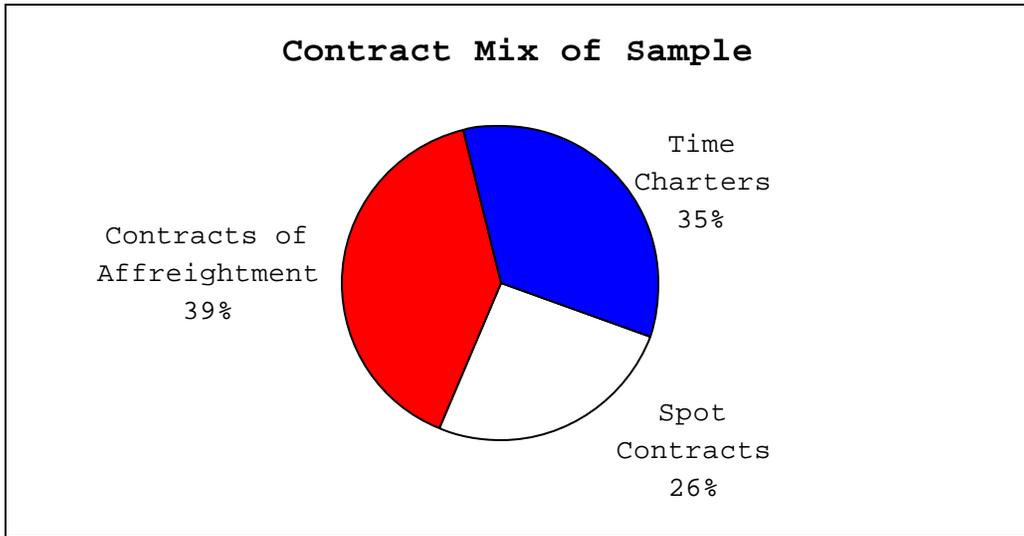


Figure 4

Of the respondents' revenues derived from contracts of affreightment, only 6 percent came from part cargoes.

The respondents' views as to the ideal mix of revenue derived from the three types of contracts are displayed in figure 5. The respondents would prefer that 86 percent of their revenues come from term agreements, somewhat higher than the current 74 percent share.

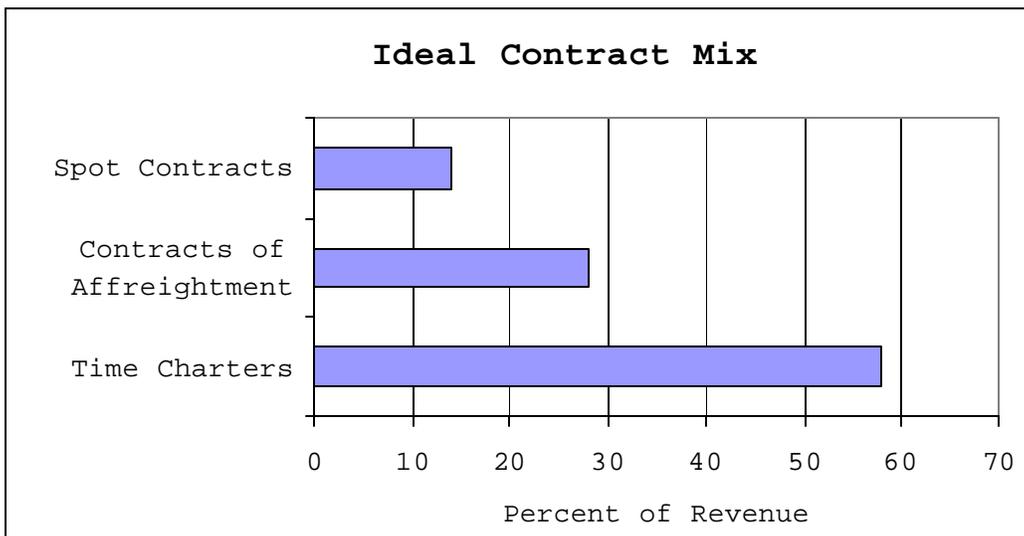


Figure 5

Respondents were asked to describe the movement of contract rates (in terms of dollars per ton or dollars per day) over the past three years. More than 50 percent of respondents experienced an increase for contracts of affreightment and time charters, while only one respondent experienced an increase in spot rates (Table 1).

<b>Three-Year Rate History By Contract Type</b>				
<u>Types of Contracts</u>	<u>No. Use*</u>	<u>Increase</u>	<u>Decrease</u>	<u>Same</u>
Spot Contracts	9	1	4	4
Contract of Affreightment	9	5	1	3
Time Charters	9	6	1	2
*Number of respondents indicating use of each type of contract				

Table 1

The respondents were asked to identify the most important regulatory issues facing coastal tank barge operators. While there were a large number of issues raised, the Oil Pollution Act of 1990, which requires operators to remove single skin barges from service, was the only issue raised by more than 10 percent of the respondents.

Seventy percent of the respondents anticipate ordering new barges sometime 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 and features that customers want in new barges. The most frequent responses were that the new barges will be ATB's and built in accordance with environmental regulations. Feedback through sales calls was the means most often cited for determining customer requirements (Figure 6).

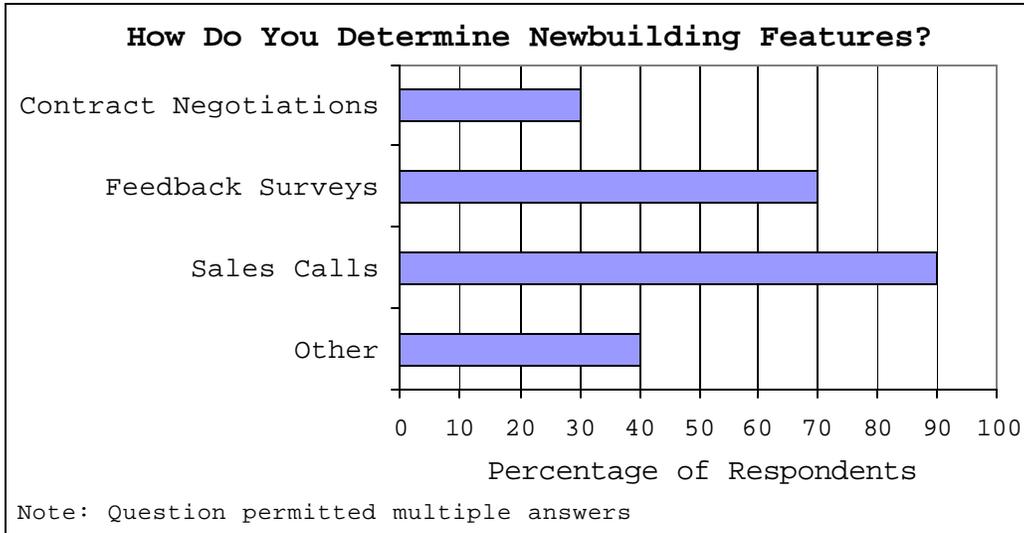


Figure 6

On a scale of 1 (poor) to 5 (excellent), the respondents as a group rated US shipyards at 2 on price, 3 on meeting delivery schedules, and nearly 4 on quality (Figure 7).

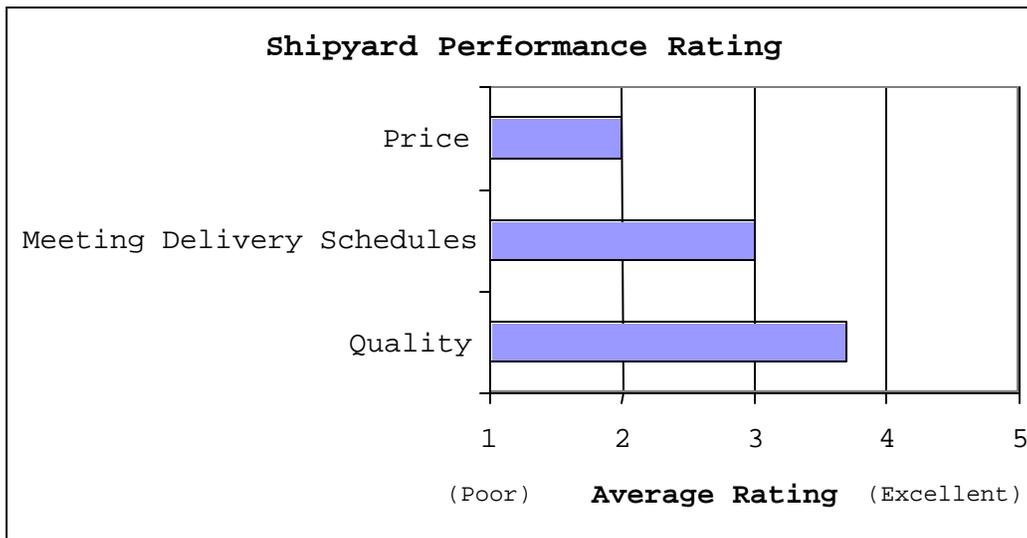


Figure 7

Respondents were asked to indicate how they determine customer satisfaction. All three of the methods described to the respondents are widely used (Figure 8).

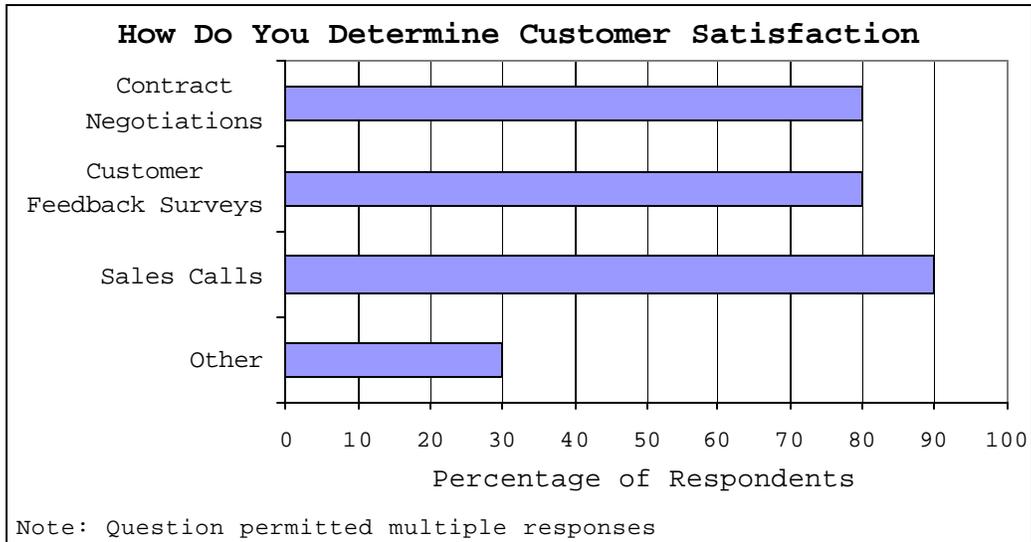


Figure 8

To estimate market growth, 70 percent of respondents use empirical data, and 50 percent use customer surveys (Figure 9).

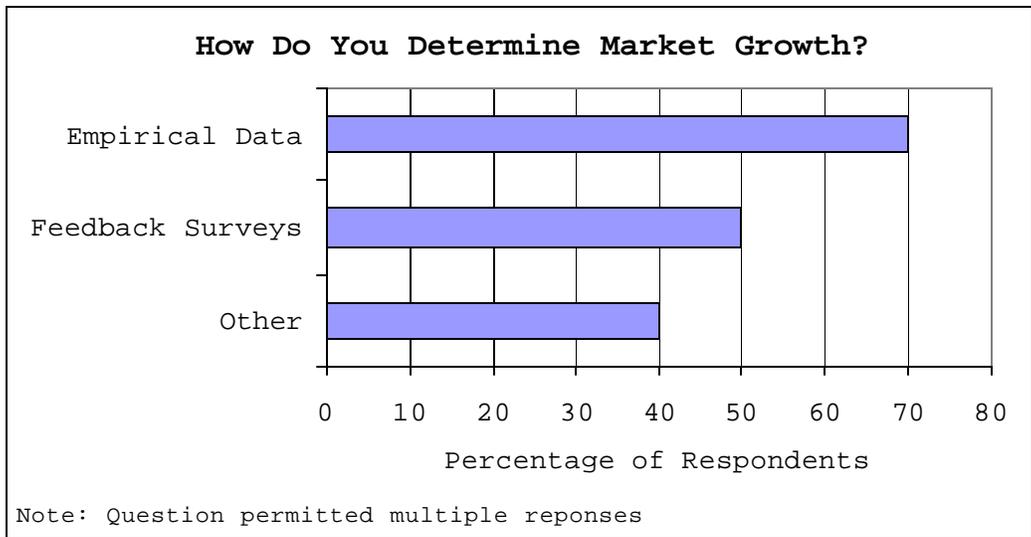


Figure 9

On a scale of 1(poor) to 5(excellent), 80 percent of respondents rated the quality and availability of existing general market indicators as 3 or less.

Seventy percent of respondents expressed interest in participating in a forum for developing and improving market indicators specifically for the coastal tank barge industry.

Appendix

**Coastal Tank Barge Survey Instrument**

1.) Based on your total number of coastal tank barges, about what percent of your fleet is in each of the following capacity groups? 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.

- a) Less than 70,000 barrels \_\_\_\_\_
- b) 70,000 to 110,000 barrels \_\_\_\_\_
- c) More than 110,000 barrels \_\_\_\_\_

2.) About what percent of your fleet consists of articulated tug/barge units? \_\_\_\_\_

3.) About what percent of your articulated tug/barge units are in each of the following capacity groups?

- a) Less than 70,000 barrels \_\_\_\_\_
- b) 70,000 to 110,000 barrels \_\_\_\_\_
- c) More than 110,000 barrels \_\_\_\_\_

4.) Over the next three years, do you expect the average size of your coastal tank barges to increase, decrease or remain about the same?

- Increase [ ]
- Decrease [ ]
- Same [ ]

5.) About what percent of your coastal tank barge fleet is employed in each of the following route mileage groups?

- Less than 250 miles \_\_\_\_\_
- 250 to 500 miles \_\_\_\_\_
- More than 500 miles \_\_\_\_\_

6.) Over the next three years, do you expect the average length of haul to increase, decrease or remain the same?

Increase [ ]  
Decrease [ ]  
Same [ ]

7.) Over the next three years, of the total traffic moved by product tankers and coastal tank barges, do you expect the share moved by coastal tank barges to increase, decrease or remain the same?

Increase [ ]  
Decrease [ ]  
Same [ ]

8.) About what percent of your revenue comes from the carriage of "clean" products?

\_\_\_\_\_

9.) Over the next three years, do you expect this percentage to increase, decrease or remain the same?

Increase [ ]  
Decrease [ ]  
Same [ ]

10.) For 2001, what percent of your annual shipping revenue was from:

- a) Spot contracts \_\_\_\_\_
- b) Contracts of affreightment \_\_\_\_\_
- c) Time charters \_\_\_\_\_

11.) Of your contracts of affreightment, what percent of your revenue comes from part cargoes?

\_\_\_\_\_

12.) In percentage terms what would be your ideal mix of revenue from the three types of contracts...

- a) Spot contracts \_\_\_\_\_
- b) Contracts of affreightment \_\_\_\_\_
- c) Time charters \_\_\_\_\_

13.) Over the last three years have contract rates in terms of dollars per ton or dollars per day for each of the following increased, decreased, or remained the same.

	Increased	Decreased	Remained the Same
Spot contracts	_____	_____	_____
Contracts of affreightment	_____	_____	_____
Time charters	_____	_____	_____

14.) What are the most important regulatory issues facing your market segment?

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

Yes [ ]

No [ ]

16.) How will the newbuildings be different from the older barges in your fleet? For example, in dimensions, pumps, tanks, coils, coatings, ATB's, etc.

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17.) 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...

	<b>poor</b>				<b>excellent</b>
	1	2	3	4	5
Price	_____	_____	_____	_____	_____
Meeting delivery schedules	_____	_____	_____	_____	_____
Quality	_____	_____	_____	_____	_____

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

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

19.) 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) _____	_____	_____

20.) 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) _____	_____	_____

21.) 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?

\_\_\_\_\_

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

Yes [ ]  
No [ ]