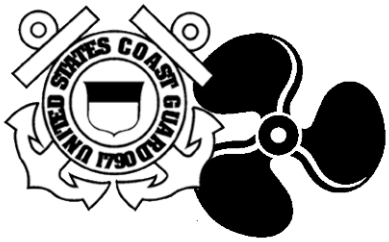


Towing Vessel Bridging Program (TVBP)

Towing Vessel Outreach, Orientation and Indoctrination Workbook

Developed by the Bridging and Implementation Team (BAIT)
Quality Action Team (QAT)

May 26, 2009

Goals:

1. Create an effective towing vessel industry orientation and indoctrination program for all new Coast Guard personnel assigned to Towing Vessel Examinations positions, and

2. Create an outreach program designed to effectively communicate the Towing Vessel Bridging Program to all members of the towing industry and Coast Guard.

Revision 11/09

Table of Contents

Introduction 3
Industry Background 5
A. Overview of Industry 5
B. Regulations 8
C. Background Documents for References 8
D. Vessel Familiarization 9
Time on Vessels: Familiarization with Industry Operations 15
A. Introduction 15
B. Information Forms 16
C. Vessel Familiarization Checklist 21
Time Shoreside: Familiarization with Office Practices 24
A. Introduction 24
B. Shoreside Checklist 25
Feedback on Program 28
TVBP Program Survey – Overall Program Effectiveness 28
TVBP Program Survey – Industry Background 31
TVBP Program Survey – Time on Vessels 34
TVBP Program Survey – Time Shoreside 37
TVBP Program Survey – Coast Guard Trainee Evaluation 40
Companies Hosting Coast Guard Examiners 42
Companies in First Coast Guard District 42
Companies in Fifth Coast Guard District 43
Companies in Seventh Coast Guard District 45
Companies in Eighth Coast Guard District 47
Companies in Ninth Coast Guard District 52
Companies in Eleventh Coast Guard District 53
Companies in Thirteenth Coast Guard District 54
Companies in Seventeenth Coast Guard District 55
Appendix A-Photographs of Vessels (Figures B1-B15) 56
Appendix B-Introduction to Responsible Carrier Program 72
Appendix C-Glossary of Marine Terms 78
Appendix D-Diagrams of Deck Fittings and their Uses 87
Appendix E-Additional Diagrams and Descriptions of Vessel Features 89
Appendix F-Declaration of Inspection 96

Introduction

The Towing Vessel Outreach, Orientation, and Indoctrination Workbook serves as an essential tool for training Coast Guard personnel during the execution of the Towing Vessel Bridging Program (TVBP), the period of transition from uninspected to inspected status. The completion of the indoctrination checklists and trainee surveys enclosed in this workbook are requirements for qualifying as a Coast Guard Towing Vessel Examiner. The workbook was developed by the Bridging and Implementation Team (BAIT) Quality Action Team (QAT), established by the National Quality Steering Committee of the Coast Guard-AWO Safety Partnership to facilitate the transition to towing vessel inspection and to generally improve safety and environmental compliance in the U.S. towing industry.

This workbook serves as a guide for familiarizing and indoctrinating Coast Guard personnel in tugboat, towboat and barge industry operations. It is essential that the Coast Guard professionals who will conduct towing vessel examinations, and who will oversee the implementation of the towing vessel inspection regulations, become familiar with the industry and its vessels in order to achieve the goals of safety, environmental compliance and security on the nation's waterways. Perhaps most importantly, this process will increase interaction between the Coast Guard and the industry to enhance the cooperation between the two parties that will be necessary for examinations and inspections to proceed efficiently.

Orientation and Indoctrination Duration

The length of the orientation and indoctrination (the period of time afforded to complete this workbook) is at the discretion of the local Captain of the Port (COTP)/Officer in Charge, Marine Inspection (OCMI). As a rule of thumb, the indoctrination period can be expected to take a minimum of two weeks for those who lack familiarity with the towing industry. However, the COTP/OCMI should consider the background and experience of each person when determining appropriate duration, including experience in the specific type of operation in the COTP's Area of Responsibility (AOR).

Workbook Organization

Background Information

The workbook is organized to optimize the learning experience and provide feedback for program improvements. It begins by providing background information, with an overview of the industry, recommendations for background and reference readings, descriptions of some of the aspects of vessels and an explanation of a safety management system, as well as other important information. The "preferred" and "additional" reading materials outlined in this section should serve as key references. There is no expectation that all will be read in their entirety; however, trainees should consult these references, as necessary, to seek answers to questions and to gain important background information and insight into industry operations.

Vessel and Shoreside Office Checklists

The second section includes shoreside office and vessel familiarization checklists, which will help guide trainees through industry orientation and indoctrination visits. This essential part of the training will afford trainees a unique opportunity to learn directly from industry representatives about towing vessel features and operations, including shoreside management. To maximize learning and outreach opportunities, Coast Guard examiners should seek to engage and observe underway and shoreside operations at a variety of towing vessel operations in their AOR. During vessel and shoreside visits, Coast Guard personnel should carry, in addition to this workbook, the U.S. Coast Guard Requirements for Uninspected Towing Vessels (UTV Guidebook, March 2009 Edition) and the UTV Examination Form, to serve as prompters for questions when visiting facilities and vessels.

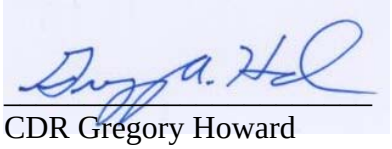
Trainees are expected to complete all checklist items that are applicable for their AOR. Once completed, these checklists are to be forwarded as part of a qualification package up the unit chain of command to the Training Officer.

Surveys

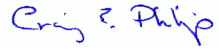
In order to ensure that the Outreach, Orientation, and Indoctrination program is as effective as possible, surveys have been created for both Coast Guard examiners and industry representatives who are involved in the training process. The completion of these forms will provide feedback to the Coast Guard and industry so that any weaknesses in structure and/or presentation can be addressed.

Trainees should keep in mind that as the industry is very diverse, not everything in the workbook will be applicable to all company visits. At the end of the orientation and indoctrination period, each trainee is highly encouraged to complete a survey, scan each survey into an Adobe format, and forward it as an email attachment through the chain of command to the Towing Vessel National Center of Expertise (TVNCOE), i.e., from unit command representative to TVNCOE, Attn: TVNCOE@uscg.mil, for consideration. The BAIT QAT will work with the TVNCOE to update and improve this program based on this feedback.

The partnership between the Coast Guard and the towing industry in creating both this workbook and the overall bridging program signals the strong commitment of both parties to making the future towing vessel inspection program a success for all. This partnership will continue to improve the safety, environmental stewardship and security of the industry, its vessels and the nation.



CDR Gregory Howard
U.S. Coast Guard
BAIT QAT Co-Chair



Mr. Craig Philip
Ingram Barge Company
BAIT QAT Co-Chair

Industry Background

A. Overview of Industry

i. Geography of Industry

- The tugboat, towboat and barge industry operates throughout the United States, including the Atlantic and Pacific Oceans, the Great Lakes, the Gulf of Mexico and the interior river system. Some companies make international voyages.

ii. Variation in Industry

- Vessels operating along the coasts are constructed for blue water and must be prepared for variable weather conditions, including hurricanes.
- Vessels operating along the inland waterways have to contend with variable weather conditions, strong currents and variation in depth of water.
- Vessels operating in the Great Lakes must be prepared for seagoing conditions, variable weather conditions, strong currents and variation in water levels.
- Depending on the region of the country, harbor vessels operate either 24 hours a day, or only as "day boats," also known as "lunch bucket boats" on the Western Rivers and the Gulf Intracoastal Waterway (GIWW).

iii. Importance of Industry to Nation

The industry is vital to the U.S. economy in a variety of ways:

- In the nation, nearly 4,000 tugboats and towboats and more than 27,000 barges move over 800 million tons of raw materials and finished goods every year.
- More than 33,000 mariners are employed aboard tugs and towboats.
- 30,000 people are employed by shipyards.
- Almost 500,000 individuals work in industries that rely on raw materials delivered by barge.
- The industry contributes over $5 billion a year to the nation's economy.
- The industry pays a combined yearly total of more than $750 million in payroll and corporate income taxes.
- In 2005, 176 million tons of coal, 100 million tons of crude materials and 75 million tons of petroleum were carried aboard vessels.
- While water carriage requires just 3% of the freight costs in the U.S. economy, it accounts for 13% of the ton-miles produced.

iv. Background and Status of Inspection Regulation

- The Maritime Transportation Act of 2004 (P.L. 108-293) added towing vessels to the list of vessels subject to Coast Guard inspection, and authorized the Secretary of Homeland Security to consider a safety management system as a key element of the new inspection regime.
- In September 2004, the Coast Guard tasked the Towing Safety Advisory Committee (TSAC) with assisting the agency in developing an inspection system for towing vessels. In October 2005, TSAC approved a comprehensive report that made recommendations to the Coast Guard on the content of a new inspection regime for towing vessels. TSAC issued updated recommendations

to the Coast Guard in September 2006, May 2007 and April 2008.

- In response to the 2004 law, the Coast Guard is in the process of constructing an inspection system for towing vessels that will guide the industry in the future.

v. Types of Vessels **(See Appendix A for Photographs of Vessels)**

- The Coast Guard defines a towing vessel as a "commercial vessel engaged in or intending to engage in the service of pulling, pushing, or hauling along side, or any combination of pulling, pushing, or hauling along side."
- A barge is a manned or unmanned vessel that can be loaded with various cargos. The size and cargo carrying capacity of barges vary greatly. Among the main types of inland and seagoing barges are the following:
  - Inland Dry Cargo Hopper Barges have a capacity of 1,400 to 2,000+ tons, are 195 to 200 feet long, 35 feet wide and 10 to 14 feet deep.
  - Seagoing Dry Cargo Barges range from 5,000 to 30,000+ tons and are 250 to 500+ feet long, up to 100+ feet wide and with drafts of up to 30+ feet.
  - Liquid Tank Barges have a capacity of 1,500 to 4,000 tons (with larger capacity vessels in construction), are 150 to 300 feet long, 35 to 54 feet wide and 10 to 13 feet deep. Tank Barges are subject to periodic inspection and certification. **(Figures B-1 & B-2)**
  - Seagoing Tank Barges have capacities up to 30,000+ tons, and are up to 500+ feet long with a draft of up to 30+ feet.
  - Deck Barges can be used as work platforms for individuals and equipment, and they serve as an extension of land. They often carry oil rigs, stacked containers, rail cars, oversized construction and military equipment, and spacecraft. There are approximately 4,000 deck barges that operate in the United States.
  - Sectional Barges are smaller barges that "pin" or lock together to make larger barges.
- A towboat is an Inland manned vessel that transports/pushes barges. There are several main groups of towboats, including: Linehaul Towboats, Locking River Towboats, Canal Towboats and Fleeting Towboats.
  - Linehaul Towboats operate throughout the river system, including locking rivers, and have a variable towing capacity. **(Figure B-3)**
  - Locking River Towboats operate in the Upper Ohio, Upper Mississippi, Tennessee and Illinois Rivers, and may have a towing capacity of 9 to 16 loaded barges. **(Figures B-4 & B-5)**
  - Canal Towboats operate in the GIWW and its tributaries, and may have a towing capacity of 2 to 5+ loaded barges. **(Figures B-6 & B-7)**
  - Fleeting Towboats facilitate the movement of barges within a defined fleeting location or limited geographic area.
- A tugboat generally has a model bow with propellers deep in the water. It is designed to operate safely in traditional blue water conditions, as it contains doors with high thresholds and openings that can be made water-tight.
  - Seagoing Tugs are vessels that tow their barges astern and are connected to them by either a tow hawser or a cable. **(Figures B-8 & B-9)**
    - Towing astern is the traditional method of ocean and coastwise towing.
    - Seagoing tugs are usually between 60 to140 feet long.

- The engines in hawser tugs have between 500 and 9,000 horsepower.

- Harbor Assist Tugs are vessels used primarily within a harbor environment to assist ships into and out of berths or anchorages and to shift various types of barges. These tugs do not typically have a tow wire, and primarily work with synthetic lines. They often work under the direction of a docking pilot in conjunction with other tugs. Propulsion systems may be conventional twin screw, Arneson Surface Drive (ASD) or Voith. **(Figure B-10)**
- Linehaul Vessels are distinct from the Linehaul Towboats referred to above. They are large tugs that usually have conventional twin screw propulsion and a towing winch equipped with a tow wire for long haul ocean and coastwise towing of various cargo barges, ships and oil rigs. They have a horsepower range of 1,800 to 14,000. Some of them are outfitted with Kort Nozzles.
- Petroleum Barge Assist Tugs move oil bunker barges within a harbor from fuel facilities to vessels or between facilities. These tugs may at times be dedicated to this service or also used as general harbor service tugs.
- Tanker Escort Tugs are tugs that primarily escort oil tankers into and out of specific navigation areas as dictated by regulatory requirements. They typically have higher horsepower capabilities and have either ASD or Voith propulsion. The purpose of these tugs is to provide stopping and steering capabilities to tankers in the event of engine or steering casualties during transits. These tugs may also be used as harbor assist tugs for ship docking and undocking. **(Figure B-11)**
- Salvage Tugs are large and high horsepower vessels designed to conduct emergency towing of large vessels, oil platforms, and to perform emergency rescue towing and response work. They may have firefighting, oil spill, and medical treatment capabilities in addition to typical towing capabilities.
- Tugboats that work primarily within harbors and perform ship-handling operations include: Z-Tech Tugs **(Figure B-12)**, Tractor Tugs **(Figure B-13)**, Twin Screw Tugs, and Single Screw Tugs.

- Integrated Tug-Barge Units (ITB), as defined by the Coast Guard, are any tug barge combinations which use special design features or a specially designed connection system to increase seakeeping capabilities compared to a tug and barge in the conventional pushing mode. ITBs have increased speed and cargo capacity.
  - Dual-Mode ITBs contain a tug that can either push or tow, and a barge that can adapt to either pushing or towing.
    - An Articulated Tug and Barge (ATB) Unit is an example of a Dual-Mode ITB. The ATB combines the cargo-handling capabilities of a ship with the typical crewing, maneuverability and efficiency of a tug barge unit. Within the ATB, the tug utilizes mechanical means to lock into the stern notch of a barge. This allows the tug to push the barge at sea in all but the worst conditions. The tug articulates in the notch of the barge, pitching independently, but rolling with the barge as a unit. Most of the

tugs that are built as part of an ATB unit do not have towing winches. They are not intended to tow on a towline except in an emergency situation. There are tugs that are retrofitted as ATBs, and these may retain their conventional towing winches. **(Figures B-14 & B-15)**

- Push-Mode ITBs consist of the propelling unit being tightly connected to the barge for the entire voyage.

B. Regulations

i. Regulations/Oversight of the Industry

- Vessels in this industry are subject to portions of Titles 29, 33, 46, 47 and 49 of the Code of Federal Regulations.
- Numerous vessels are subject to the Responsible Carrier Program (RCP), and some choose to comply with the International Organization for Standardization (ISO).
- Various seagoing vessels are required to follow the International Safety Management (ISM) Code and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
- The industry is also subject to oversight from the Coast Guard, the U.S. Army Corps of Engineers, the Environmental Protection Agency, the Occupational Safety and Health Administration and various state agencies around the country.

C. Background Documents for References *(The following are intended to serve as references; there is no expectation that they be read in their entirety)*

i. Recommended Readings

- The Responsible Carrier Program (RCP), produced by The American Waterways Operators (AWO), is a code of practice for association member companies, with membership dependent upon completion of regular audits. The introduction to the RCP is re-printed in **Appendix B.** The full document can be viewed at: http://www.americanwaterways.com/commitment_safety/RCPfinal.pdf
- The Deckhand's Manual: An Orientation and Training Manual, P.O. Box 343, Titusville, NJ 08560. This is an introductory manual for deckhands new to the maritime industry. It contains a number of illustrations of equipment and necessary tasks.
- Primer of Towing, 3rd Edition, by George H. Reid. Cornell Maritime Press, Inc. Centreville, MD. 2004.
- Regulations Handbook for Uninspected Towing Vessels, 6th Edition, by Rushing Marine, LLC.
- Requirements for Uninspected Towing Vessels, produced by the Coast Guard: Atlantic Area, Ch-1, March 2009.
- Tugboat Enthusiasts Society of the Americas web site. This is a web site that shares information about, and photographs of, tugboats. The address is http://www.tugboatenthusiastsociety.org/index.htm

ii. Additional Reference Materials

- Language of the Western Rivers, DOT U.S. Coast Guard Second District, St. Louis, MO. 1974
- Modern Towing, 1st Edition, by John S. Blank. Cornell Maritime Press, Inc. Centreville, MD. 1989.
- Regulatory Training Guidebook for the Workboat Industry by QSE Solutions. QSE Publishing. Woodinville, WA. 2008.
- The Tug Book, 2nd Edition, by M. Gaston. Haynes Publishing. Somerset, UK. 2004.
- Tug Use In Port: A Practical Guide, 2nd Edition by Captain Henk Hensen. The Nautical Institute. London, UK. 2003.
- Tug Use Offshore in Bays and Rivers: The Towmaster's Manual, by Captain George Livingstone and Grant Livingstone. The Nautical Institute. London, UK. 2006.

As is applicable for the Area of Responsibility, some or all of the references should be maintained as part of the local Coast Guard unit's library.

D. Vessel Familiarization *(There is a wide variety in vessel features from sector to sector)*

i. Physical Characteristics of Vessel **(See Appendix C for Additional Marine Terms)**
- Hull: The main body of a vessel which provides flotation.
- Engine Room: This is where the main engine(s) and other propulsion equipment are located. All of the boat's electricity is generated by a primary and secondary power plant, as most vessels have two power plants. The engine room contains a fire detection system and firefighting equipment.
- Wheelhouse: This is the area where the control over a vessel's movements is normally exercised. Primary navigation equipment and charts are located here. Some towing vessels have an Upper Wheelhouse which is a smaller control station above the regular wheelhouse, used when transporting a tow with unusually high fixed points creating limited visibility.
- Hatch: A removable cover that provides access to an interior space or tank such as storage areas, steering gear, voids, ballast tanks and fuel tanks.
- Confined Spaces: The void, ballast and fuel tanks below deck on towing vessels are confined spaces.
- **See Appendix D for Diagrams of Deck Fittings and their Uses.**
- **See Appendix E for Additional Diagrams and Descriptions of Vessel Features.**

ii. Vessel Handling/Steering
- Lines of Responsibility: The Manager of Vessel Operations, the Port Captain or equivalent position is responsible for implementing navigation policy and ensuring that wheelhouse personnel are aware of its requirements. The vessel Master and Pilot/Mate are responsible for ensuring that all reasonable efforts are made so that the policy is followed. The Master and Pilot/Mate must be credentialed by the Coast Guard.
- Procedures: The vessel Master or person on watch must navigate the vessel in a

safe and prudent manner. His/her other responsibilities include: ensuring that the vessel and tow are suitable for the waterway; maintaining an appropriate radio watch; maintaining in proper working order the vessel's installed navigation equipment; and, communicating with other vessels.

- Steering: Rudders on tugs are oversized in order to promote maneuverability. On most tugs, the leading edge of the rudder extends forward of the rudder post in order to ensure efficient flow from the propellers. Different types of rudders used include spade rudders, flanking rudders, steering rudders and single-screw double rudders. There are vessels in existence that have full rotational power units and, therefore, have no rudders.
- Mooring: During times when vessels are not normally crewed and operating in a manner of navigation, all operations should be performed in the same manner and under the same expectations as when a vessel is crewed and in navigations. Therefore, the expectations are that all work is planned with risk assessment, associates are looking after each other, and there is consistent accountability and appropriate leadership.
- Navigation: The navigational gear on vessels may consist mainly of compasses (gyro and/or magnetic), autopilot and radar. Vessels are often fitted with depth finders, Electronic Charting Systems, an Automatic Identification System (AIS) and a Global Positioning System. Some vessels may have a fax and weather fax as well.

iii. Vessel Maintenance and Repair

- Cleaning of Decks and Walkways: All decks and walkways should be cleaned in order to provide a safe walkway and working area.
- Engine Room Upkeep: The engine room walls, ceiling, walkways, stairs, piping, equipment and deck plates should be kept clean and painted. All bilge spaces should be free of rags, boxes, filters, or any other foreign matter.
- Upkeep of Fuel System and Related Devices: Larger linehaul-type vessels normally have a live-aboard Engineer that maintains the mechanical systems through daily routine preventive maintenance checks. Some smaller horsepower vessels often have a designated individual base shoreside who oversees similar maintenance functions and delegates many of these tasks to onboard individuals who perform the routine checks as necessary.
- Fuel Transfer Procedures: Vessels should have written procedures that outline the specifics of fuel transfers including lubes and the removal of oily slops. Records of the transfers can be recorded in the engineering or vessel log as appropriate, and may be logged in a Coast Guard-approved Oil Record Book if required by tonnage. Prior to commencing a transfer, the person in charge of the operation will complete a Declaration of Inspection **(See Appendix F)** to ensure all safety and pollution prevention items have been considered.
- Hot Work: Only qualified individuals are authorized to perform or oversee hot work.
- Flammable Storage: A deck-mounted gasoline tank or a designated and placarded storage area for "Type II Containers" is generally used for the primary storage of gasoline aboard towboats. Vessel supplies with contents that are flammable, hazardous, or packaged under pressure should be stored in low-risk areas.

iv. Credentials/Maritime Personnel

- Credentials: Mariners are required to be properly credentialed when operating a vessel.
- Licenses by Routes: Mariners receive towing vessel licenses subject to distinctions corresponding to what routes they will operate on. Among the distinctions-by-route for licenses are: ocean; near coastal; inland; Western Rivers; and, Great Lakes. Many mariners operating coastwise vessels carry upper level licenses that must be endorsed for towing.
- Tonnage Restrictions: Some, but not all, mariners receive towing vessel licenses subject to limits corresponding to the tonnage of the vessels they will be operating. The unit used is gross registered tons (GRT). Among the tonnage restrictions put on licenses are: 100 GRT; 200 GRT; 500 GRT; and, 1600 GRT.
- Titles Aboard Vessel: Within the community of towing vessel licenses, there are a variety of titles that mariners hold. Among the titles are: Master; Mate (pilot); Chief Engineer; and, apprentice mate (steersman) of towing vessels.
- Individuals Onboard: Individuals onboard towing vessels typically include the following: Master; Pilot; Mate; Leadman; Chief Engineer; Junior Engineer; Deckhand; and, Cook. On Seagoing tugs, the crew may consist of a Captain, Mate (s), Engineer, Asst. Engineer/Utility, Cook, Deckhands and/or possibly Tankermen. These individuals perform a variety of tasks aboard vessels, including cleaning, effecting repairs, etc.
- Time Spent Operating and Living on Vessel:
  - Hitches/Tours for mariners often last between 7 to 28 days with either an equal time off or a 2-for-1 time off rotation.
  - In a two-watch system, common to most towing vessels, crews that live aboard the vessel typically work on a 6 hours-on and 6 hours-off schedule, or a different schedule such that they work about 12 hours per day.
  - On certain towing vessels engaged in seagoing voyages in excess of 600 nautical miles or those working upon the Great Lakes, the crew stands 8-hour watches, usually working 4 hours-on followed by 8 hours-off.
  - Some crews in the harbor sector do not live aboard the vessels and may work 12-hour shifts as “day boats.” Almost all harbor vessels on the Gulf Coast, however, are manned and operated 24 hours per day using crews that work a 12 hour-on/off schedule.
  - On towing vessels subject to STCW, 10 hours rest are required in any 24-hour period, with 2 rest periods permitted, one of which should be at least 6 hours.
  - No licensed towing vessel operator may work more than 12 hours in any continuous 24-hour period.
  - Certain types of work are excluded from the time requirements. Such excluded work includes: shifting berth, mooring, unmooring; performing work necessary for the safety of the vessel or the vessel's passengers, crew or cargo; saving of life on board another vessel in jeopardy; or, performing fire, lifeboat or other drills in port or at sea.
- Crew Endurance Guidelines:
  - Mariners are recommended to: make an effort to get at least 5 hours of sleep during the primary sleep watch; maintain a regular sleep/wake schedule;

manage caffeine intake and food consumption; and, manage and minimize stress.
    - No crewmember may work more than 15 hours in any 24-hour period nor may he/she work more than 42 hours in a 72-hour period.
    - No licensed vessel operator may work more than 12 hours in any 24-hour period.
    - According to the United States Code, mariners operating in the Great Lakes sector and in the deck or engine department may "not be required to work more than 8 hours in one day, or permitted to work more than 15 hours in any 24-hour period, or more than 36 hours in any 72-hour period, except in an emergency when life or property are endangered."

v. Safety Management System (SMS)
- A Safety Management System (SMS) describes procedures and practices for safe vessel operations, and promotes a safe work environment onboard towing vessels; it also is designed to provide guidance for emergencies and for environmental protection with regard to company-specific and vessel-specific operations.
- One example of an SMS is The American Waterways Operators' Responsible Carrier Program (RCP). An industry-wide risk assessment was performed in the process of developing the RCP. Another example of a system is the International Safety Management (ISM) Code.
- An important element of any SMS is regular audits by third-party auditors. To maintain a company's RCP certification, the successful completion of periodic audits is required by certified and approved auditors.
- A company's SMS should include methods for confirming that the company is actually following (or complying with) its own policies and procedures.

vi. Security Plan
- Vessel Security Plans: The 2002 Maritime Transportation Security Act (MTSA) required the Coast Guard to promulgate rules on vessel security plans. Many companies have since implemented the AWO Alternative Security Program (ASP), an option that has been recognized by the Coast Guard as satisfying this requirement. ASPs are valid for five years upon enactment.
- Vessel Security Officer: The Coast Guard's Navigation and Vessel Inspection Circular 10-02 established the position of Vessel Security Officer (VSO). The VSO is a member of the crew who conducts regular security inspections of the vessel, and implements, maintains and supervises the company's vessel security plan.
- Company Security Officer: The Company Security Officer is the designated person responsible for overseeing the company (vessel) security plan.
- Security Drills: Vessels are required to conduct security drills every quarter, or when the Maritime Security (MARSEC) level of alert changes.
- IRVMC: The Inland River Vessel Movement Center (IRVMC) was formed by the Coast Guard in 2003 to gather information and track barges loaded with certain dangerous cargoes along the Western Rivers system of the United States.
- TWIC: MTSA 2002 mandated a Transportation Worker Identification Credential (TWIC). As of April 15, 2009, all licensed/documented mariners and any

workers requiring unescorted access to the secure area onboard a MTSA regulated vessel must possess a valid TWIC readily available for inspection. Verification of these credentials shall be incorporated into annual vessel inspections or during any response to a marine incident. Non-licensed mariners onboard vessels not subject to the MTSA regulations are not required to possess a TWIC.

- TWIC New Hire Provision: Newly hired employees may be granted "accompanied" access to the secure area of a regulated vessel for thirty days while waiting to receive their TWIC. This access is contingent upon enrollment into the TWIC program and submission of the employees' name into http://homeport.uscg.mil. This access may be extended an additional thirty days by the cognizant COTP. This provision is only available for direct hire employees, and does not extend to contracted employees.

vii. Injury Prevention

- To prevent injuries, companies are highly recommended to have, in accordance with their SMS, plans for:
  - slips, trips and falls;
  - ladder safety;
  - fall overboard prevention;
  - eye and face protection;
  - hearing protection; and,
  - back safety
- Personal Protective Equipment: Personal Protective Equipment (PPE), including Type V work vests, safety glasses or other eye protection, hard hats, safety shoes, hearing protection, etc. should be worn and used as appropriate. Work vests are not intended to replace Personal Floatation Devices (PFD), which should be on board towing vessels and should have water lights and/or whistles, depending upon the particular towing vessel's service and waters on which it is working.

viii. Emergency Response/Prevention

- Equipment Accidents: After addressing the equipment accident in question, the Coast Guard requires the company to notify the nearest Coast Guard Sector Office whenever a vessel is involved in a marine casualty due to equipment failure. A written report (CG-2692 Report of Marine Accident, Injury or Death) should be submitted to the Coast Guard within five days of the incident. Any required drug testing should take place within the appropriate time parameters.
- First Responder Requirements: Crewmembers should perform the following duties:
  - report any spill of a liquid material from the vessel to the wheelhouse;
  - identify any hazardous materials in barges in tow and review the properties;
  - inspect the spill kit each trip; and,
  - during each trip, review what possible actions could be taken to lessen the effects of a spill.
- Spill Kit: All towing vessels are highly recommended to be equipped with a spill kit. Spill kits should have suitable cleanup materials such as bags, tools, personal protective equipment and absorbent pads.

- First Aid: Vessels should have supplies for the treatment of medical conditions and emergencies. The kits may include bandages, antiseptic, compresses, splints, general medications and a first aid handbook. Some vessels may have additional trauma kits, including prescription drugs, backboards, bifibulators and other items for the treatment of more serious medical emergencies.
- Personal Injuries: In the event of a serious personal injury or illness, the Master should: sound the general alarm; determine the injured person's need for emergency care; see that a properly trained crewmember administers the necessary first aid; and, fill out a personal injury packet.
- General Alarm: The Coast Guard requires weekly testing of the general alarm.
- Emergency Drills: Emergency drills should include fire, person overboard, abandon ship, etc. The required drills should be described in each boat's emergency station bill, and the frequency of drills is described in each company's safety management system. Quarterly OPA-90 and security drills apply to many operators.
- Collisions, Allisions, Groundings: There are specific procedures to be followed in the event of these emergencies, which may include sounding the general alarm, sounding the "danger signal" on the vessel's whistle, and alerting authorities by radio or other means.
- Fire Response: When a fire onboard is discovered, the alarm should be immediately sounded. Each vessel contains a Station Bill and an Emergency Response Procedure for responding to fires.

ix. Pollution Prevention

- Handling Waste: Companies have individual procedures and processes in place in order to dispose of waste.
- Used Paint Products, Solvent, and Gasoline: All solvents, paints, thinners, gasoline or other cleaning waste products should be properly stored onboard in a designated area that is properly marked and labeled, and different wastes should not be mixed.
- Ballast Water Management: In 2004, the Coast Guard published regulations establishing a national mandatory ballast water management program for all vessels equipped with ballast water tanks that enter or operate within U.S. waters. Vessels are required to keep a ballast water management plan that is specific for that vessel, and assigns responsibility to the Master or appropriate official to understand and execute the ballast water management strategy for that vessel.
- Vessel General Permit: The AWO created a Best Management Practices Guide to assist the towing industry with understanding and complying with the Vessel General Permit (VGP) required by the EPA's National Pollutant Discharge Elimination System (NPDES). The guide can be read here: http://americanwaterways.com/index/AWO_bmp_Manual.pdf
- Disposal of Contaminated Engine Parts: All fuel filters, sufficiently drained oil filters and oil rags should be disposed of by placing them in bags. The bags are then offloaded at approved facilities.

Time on Vessels: Familiarization with Industry Operations

A. Introduction

In order for new examiner to fully understand and appreciate the towing industry, they must have hands-on, real-world experience about the vessels they will be examining. This indoctrination program includes a requirement for examiners to spend a period of time on a tugboat or towboat with a company representative(s) who will explain the various aspects of the vessel. During these visits, both the examiner and company personnel have several responsibilities to ensure the visit is a productive one and gives the examiner a solid background in towing vessel operations.

Examiner Responsibilities

It is the responsibility of the examiner to:

- **Act as the company's guest on the vessel**
  The company has volunteered to help the Coast Guard educate new examiners in order to smooth the transition of the towing industry to inspected status. Please be courteous and respectful.
- **Make gaining knowledge your top priority**
  Ask questions and explore in detail the issues outlined in the checklist.
- **Ensure that all tasks have been completed**
  Ask company personnel to help complete the tasks.

Company Responsibilities

The company should provide adequate personnel, both in number and experience, to educate the examiner while on the vessel. It is very important that the examiner walks away fully educated about the areas outlined in the checklist below, and that all of his or her questions are addressed.

It is the responsibility of the company personnel accompanying the examiner to:

- **Foster a dialogue**
  This is an unparalleled opportunity to demonstrate to future regulators the commitment to safety and professionalism of the industry and the men and women who work in it.
- **Treat the examiner as a guest**
  Understand the examiner may have very little knowledge of vessel operations.
- **Be familiar with the checklist and the examiner responsibilities**
- **Highlight SMS**
  Take special attention to highlight the role and implementation of Safety Management Systems (SMS) on vessels at every opportunity.
- **Demonstrate equipment on the vessel whenever possible**
- **Initial the "Verified" box once a task has been completed**
  Note that some tasks may not apply to the vessel.

B. Information Form (Fill out one for every vessel boarded)

Company Name:	Location:
Examiner Name:	Date:
Vessel Name:	Official #:
Year Built:	Call sign:

Dimensions		**Main Engines**	
Length overall		Horsepower	
Breadth (molded)		Service speed	
Maximum draft		Type of steering gear	
Minimum freeboard		Bow thruster (BHP)	
Gross tonnage		Stern thrusters (BHP)	

_____	_____	_____
Examiner Name	Examiner Signature	Date

_____	_____	_____
Company Representative Name	Company Representative Signature	Date

B. Information Form (Fill out one for every vessel boarded)

Company Name:	Location:
Examiner Name:	Date:
Vessel Name:	Official #:
Year Built:	Call sign:

Dimensions		**Main Engines**	
Length overall		Horsepower	
Breadth (molded)		Service speed	
Maximum draft		Type of steering gear	
Minimum freeboard		Bow thruster (BHP)	
Gross tonnage		Stern thrusters (BHP)	

_____ _____ _____

Examiner Name Examiner Signature Date

_____ _____ _____

Company Representative Name Company Representative Signature Date

B. Information Form (Fill out one for every vessel boarded)

Company Name:	Location:
Examiner Name:	Date:
Vessel Name:	Official #:
Year Built:	Call sign:

Dimensions		**Main Engines**	
Length overall		Horsepower	
Breadth (molded)		Service speed	
Maximum draft		Type of steering gear	
Minimum freeboard		Bow thruster (BHP)	
Gross tonnage		Stern thrusters (BHP)	

_____ _____ _____

Examiner Name Examiner Signature Date

_____ _____ _____

Company Representative Name Company Representative Signature Date

B. Information Form (Fill out one for every vessel boarded)

Company Name:	Location:
Examiner Name:	Date:
Vessel Name:	Official #:
Year Built:	Call sign:

Dimensions		**Main Engines**	
Length overall		Horsepower	
Breadth (molded)		Service speed	
Maximum draft		Type of steering gear	
Minimum freeboard		Bow thruster (BHP)	
Gross tonnage		Stern thrusters (BHP)	

_____ _____ _____

Examiner Name Examiner Signature Date

_____ _____ _____

Company Representative Name Company Representative Signature Date

B. Information Form (Fill out one for every vessel boarded)

Company Name:	Location:
Examiner Name:	Date:
Vessel Name:	Official #:
Year Built:	Call sign:

Dimensions		**Main Engines**	
Length overall		Horsepower	
Breadth (molded)		Service speed	
Maximum draft		Type of steering gear	
Minimum freeboard		Bow thruster (BHP)	
Gross tonnage		Stern thrusters (BHP)	

_____ _____ _____

Examiner Name Examiner Signature Date

_____ _____ _____

Company Representative Name Company Representative Signature Date

C. Vessel Familiarization Checklist

SAFETY MANAGEMENT SYSTEM			
☑	**Task**	**Vessel**	**Verified**
	Ask company personnel to explain and demonstrate how the company's Safety Management System is implemented on the vessel, including policies and procedures, documentation, audits, and corrective actions.		
PHYSICAL CHARACTERISTICS OF VESSELS			
☑	**Task**	**Vessel**	**Verified**
	Learn about the physical characteristics of the vessel, including the length, breadth, draft, hull, and highest fixed point of vessel. Ask company personnel to explain how the vessel design helps it accomplish its purpose.		
	Take a tour of the vessel, including the pilothouse, engineroom, deck, and galley, and learn about the equipment used by the crew to operate the vessel. Ask company personnel to demonstrate the use of the equipment, if possible.		
	Examine equipment the crew uses to make the vessel safe and watertight, including safety chains and doors/hatches.		
	Examine the barge handling equipment on the deck, including lines, wires, winches, shackles, anchoring gear, terminal gear, and facewires, if applicable. Learn how it is used, maintained, and stowed.		
	Locate operational manuals and other documents, such as vessel log and certificate of documentation (COD), if applicable.		
VESSEL HANDLING/STEERING			
☑	**Task**	**Vessel**	**Verified**
	Examine the main engine or propulsion system, taking note of the make, manufacturer, horsepower, control system, wheels, and rudders.		
	Examine the steering system, including type, controls, and back-up systems.		
	Learn how the vessel is moored and anchored, if applicable.		
	Examine the technology used to navigate the vessel, including VTS, AIS, radar, radio, compass, charts/maps, and GPS, and ask crew personnel to demonstrate its use, if possible. Learn about the technology used by the crew to communicate.		
	Stand at least one watch in the wheelhouse, learning about the navigation of the vessel.		
	Ask company personnel to explain the key evolutions of the vessel, such as mooring, making tow, maneuvering around obstacles, etc., and observe those evolutions.		

NOTES:_____

MAINTENANCE AND REPAIR			
☑	**Task**	**Vessel**	**Verified**
	Ask company personnel to explain and demonstrate how the equipment, engine, and hull are maintained, including hot work and welding, if applicable.		
	Stand at least one engineering watch with the crewmember responsible for engineering duties.		
LICENSING AND CREW LIFE			
☑	**Task**	**Vessel**	**Verified**
	Learn about the different job titles of the crew, their main duties and responsibilities, licenses and documents they may hold (including TOARs, endorsements, routes, and tonnage restrictions), experience they have, and the chain of command.		
	Learn about work and rest hour requirements, as well as the vessel's watch schedule and tour of duty. Ask company personnel why they use that kind of watch schedule, and if there are any procedures in place to enhance crew alertness, such as the Crew Endurance Management System (CEMS).		
	Stand at least one watch on the deck with deck personnel.		
	Locate amenities on the vessel, such as exercise equipment and TVs, and ask company personnel about life on a towing vessel.		
	Learn about company's drug and alcohol policy and testing procedures.		
VESSEL SECURITY			
☑	**Task**	**Vessel**	**Verified**
	If the vessel has a security plan, locate it and ask company personnel to explain how it is implemented on the vessel, including the security responsibilities of each crewmember.		
	Discuss with company personnel how Transportation Worker Identification Credential (TWIC) regulations and other recent security enhancements have changed procedures on the vessel.		
	Ask company personnel if the vessel is required report its movements to the Inland River Vessel Movement Center (IRVMC) or the National Vessel Movement Center (NVMC) and, if so, why and how.		
INJURY PREVENTION			
☑	**Task**	**Vessel**	**Verified**
	Learn about safety procedures and equipment to prevent slips, trips, ladder falls, and falls overboard.		
	Ask company personnel to explain and demonstrate the use of personal protective gear such as life jackets, helmets, goggles, gloves and ear plugs.		

NOTES:_____

EMERGENCY RESPONSE			
☑	**Task**	**Vessel**	**Verified**
	Ask company personnel to describe how and why potential incidents may occur and procedures in place to respond to them, such as equipment failures, oil spills, crew injuries, person overboard, abandon ship, collisions, allisions and groundings.		
	Learn about training and drills that the vessel and crew conduct to prepare for incidents.		
	Learn about reporting requirements in the event of an incident.		
	Locate applicable life-saving equipment and learn how and when they are used. Ask company personnel to see the first-aid kit.		
	Locate fire detection and response equipment and ask company personnel to explain how they are used.		
	Ask company personnel how they store flammable materials.		
POLLUTION PREVENTION			
☑	**Task**	**Vessel**	**Verified**
	Locate and learn about oil discharge containment and response equipment, such as spill kits.		
	Locate the written copy of the vessel's fuel-transfer procedures and discuss the responsibilities of the crew when transferring fuel.		
	Discuss with crew personnel the procedures for the disposal of garbage, sewage, oily bilges, oily waste, and paint. Ask to see the Marine Sanitation Device (MSD) and oily-water separator, if applicable.		
	If applicable, discuss with crew personnel how fuel transfer hoses and other equipment are tested and examine and ask to see the records of the tests and inspections, as well as the oil placard.		

NOTES:_____

Time Shoreside: Familiarization with Office Practices

A. Introduction

All tugboat and towboat operations begin with their shoreside management. New examiners can familiarize themselves with the day-to-day operations of their sector's towing industry by spending several days shoreside, touring a tugboat or towboat company office and meeting with a knowledgeable company representative(s) who can explain the various aspects of the towing industry's business, operations, safety management systems, traffic management and personnel decisions. During these visits, both the examiner and company personnel have several responsibilities to ensure the visit is a productive one and gives the examiner a solid background in towing industry operations.

Examiner Responsibilities

It is the responsibility of the examiner to:

- **Act as the company's guest in their office of operations**
  The company has volunteered to help the Coast Guard educate new examiners in order to smooth the transition of the towing industry to inspected status. Please be courteous and respectful.
- **Make gaining knowledge your top priority**
  Ask questions and explore in detail the issues outlined in the checklist.
- **Ensure that all tasks have been completed and verified by company personnel**
  Ask company personnel to help complete the tasks and initial the "Verified" box once the task has been completed.

Company Responsibilities

The company should provide adequate personnel, both in number and experience, to educate the examiner while touring a company's shoreside offices and operations. Nothing is more important than ensuring that the examiner walks away fully educated about the areas outlined in the checklist below, and that all of his or her questions are addressed.

It is the responsibility of the company personnel accompanying the examiner to:

- **Foster a dialogue**
  This is an unparalleled opportunity to demonstrate to future regulators the commitment to safety and professionalism of the industry and the men and women who work in it.
- **Treat the examiner as a guest**
  Understand the examiner may have very little knowledge of industry operations.
- **Be familiar with the checklist and the examiner responsibilities**
- **Highlight SMS**
  Take special attention to highlight the role and implementation of Safety Management Systems (SMS) in company operations at every opportunity.
- **Initial the "Verified" box once a task has been completed**
  Note that some tasks may not apply to all company operations.

B. Shoreside Checklist

SAFETY MANAGEMENT SYSTEM (SMS)		
☑	**Task**	**Verified**
	Ask company personnel to review the types of certified SMS currently in use (i.e. AWO-Responsible Carrier Program, ISM, ISO 9001, ISO 14001, etc.).	
	Ask company personnel to review position of designated person ashore.	
	Ask company personnel to provide a summary of internal audit program.	
	Ask company personnel to provide a summary of external 3rd party audit program.	
	Ask company personnel to provide a summary of reporting procedures for non-conformities and corrective actions.	
	Ask company personnel to provide a summary of strategy for continual improvement of programs.	
SHORESIDE/OFFICE OPERATIONS MANAGER		
☑	**Task**	**Verified**
	Ask Operations Manager or company equivalent to examine the company's organization chart.	
	Ask Operations Manager or company equivalent to provide a summary of the company's holdings, divisions and corporate mission.	
	Ask Operations Manager or company equivalent to provide a summary of the types of operations carried out (including but not limited to ocean towing, vessel assist, tanker escort, barge moves, construction support, etc.).	
	Ask Operations Manager or company equivalent to review type/s of cargo/s transported.	
	Accompany Operations Manager or company equivalent on a facility tour.	
	Complete a visitor orientation sheet and release of liability form.	
PORT CAPTAIN		
☑	**Task**	**Verified**
	Ask Port Captain or company equivalent to review the types and number of vessels currently owned or operated.	
	Ask Port Captain or company equivalent to provide a summary of territorial/ operational domain.	
	Ask Port Captain or company equivalent to provide a list of current rigging and mooring makeups.	
	Ask Port Captain or company equivalent to provide a summary of typical crewing make up, watch schedules, tour/hitch makeup.	
	Ask Port Captain or company equivalent to provide a summary of vessel specific orientations.	

NOTES:_____

SAFETY/SECURITY/ENVIRONMENTAL		
☑	**Task**	**Verified**
	Ask company personnel to review the safety, security and environmental policies.	
	Ask company personnel for a summary of contingency plans, operation manuals and Federal / State regulations.	
	Ask company personnel to review spill prevention programs.	
	Ask company personnel for a summary of contracts with spill response providers.	
	Ask company personnel to review injury prevention policies (i.e. training, etc.).	
	Ask company personnel to review the PPE policy.	
	Ask company personnel to provide a summary of safety statistics.	
	Ask company personnel to review procedures for incident reporting, accident investigations, near miss reporting, and root cause analysis.	
	Ask company personnel to provide a summary of job safety analysis and pre-task planning.	
ENGINEERING		
☑	**Task**	**Verified**
	Ask company personnel to review vessel preventative maintenance, maintenance and inspection program.	
	Ask company personnel to provide a summary of the types of vessel classes currently in use (i.e. USCG inspected vessels/ classed vessels / SOLAS).	
	Ask company personnel to review types of propulsion systems in use (including but not limited to conventional, z-drive, Voith), propulsion types, and how it differs from other steering types.	
	Ask company personnel to review drydocking and shipyard schedules and their key components.	
	Ask company personnel for a summary of fuel transfer procedures, DOIs, and PIC qualifications.	
	Ask company personnel to review procedures for waste management and environmental programs.	

NOTES:_____

TRAFFIC MANAGEMENT		
☑	**Task**	**Verified**
	Ask company personnel to review dispatch procedures and vessel scheduling.	
	Ask company personnel to provide a summary of contractual agreements.	
	Ask company personnel to review current fleet communication capabilities (i.e. GPS, AIS vessel tracking, etc.).	
PERSONNEL ISSUES		
☑	**Task**	**Verified**
	Ask company personnel to provide a summary of all Coast Guard credentials (e.g., licenses, MMDs) held and how they are tracked and managed. This includes: • Standards of Training, Certification and Watchkeeping • Towing Officer Assessment Record • Transportation Worker Identification Credential	
	Ask company personnel to review hiring process, candidate background tests/screening, qualifications and abilities.	
	Ask company personnel to explain the company's drug and alcohol policies and testing procedures.	
	Ask company personnel to provide a summary of entry level training & continuation training programs and how training records are tracked and managed.	
	As company personnel to review employee career progression.	
	Ask company personnel to review company CEMS program; training of CEMS coaches, crew, and management; and, steps taken to implement CEMS.	

NOTES:_____

TVBP Program Survey (To be Filled out by Examiners)

It is important that the TVBP Program provides Coast Guard Examiners with a thorough education of the tugboat, towboat and barge industry's commitment to safety and provides examiners with hands on operational exposure to strengthen our industry-agency partnership. In order to assess what strides the TVBP Program has made towards the realization of these ultimate goals, we are asking each examiner to fill out the following short survey to provide feedback on the educational effectiveness of the program. We have provided space for more detailed comments and we strongly urge examiners to take advantage of that space. Your feedback is integral to the meaningful development of the TVBP Program.

Overall Program Effectiveness

1) Did the TVBP program provide you with a useful working knowledge of towing operations in your Sector's AOR?

   ❑ Very Useful ❑Somewhat Useful ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

2) Was the TVBP program helpful in providing you with additional skills to successfully conduct towing vessel examinations, including a comprehensive understanding of safety management systems? If not, what was missing?

   ❑ Very Helpful ❑Somewhat Helpful ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

3) Please rate the effectiveness of each of the following education components in familiarizing you with industry operations and safety management systems:

   Industry Background
   ❑ Excellent ❑Somewhat Effective ❑Room for Improvement ❑Poor

   Time on Vessel
   ❑ Excellent ❑Somewhat Effective ❑Room for Improvement ❑Poor

   Time Shoreside
   ❑ Excellent ❑Somewhat Effective ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

4) Did you have enough time to fully digest the information in each education component? If not, how much time would you have preferred?

Industry Background
❑ Too Much Time ❑ Plenty of Time ❑Needed More Time ❑Not Nearly Enough

Time on Vessel
❑ Too Much Time ❑ Plenty of Time ❑Needed More Time ❑Not Nearly Enough

Time Shoreside
❑ Too Much Time ❑ Plenty of Time ❑Needed More Time ❑Not Nearly Enough

Comments:_____
_____
_____

5) In your opinion, how well do these three components capture the complete picture of industry operations and safety management systems? Are there additional nodes the TVBP Program should consider adding? If so, do you have suggestions?

Industry Background
❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Time on Vessel
❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Time Shoreside
❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

6) In your experience, how did the Industry Background enhance the effectiveness of your on-site education?

❑ Very Effective ❑Generally Useful ❑Needs Improvement ❑Not Helpful at All

Comments:_____
_____
_____

7) Are there any other suggestions you would like to offer to improve the program?

Comments:_____
_____
_____

Examiner Name_____Unit_____

The completion of this form is a necessary step to providing insight to both participants in this program, so that any weaknesses in structure and/or presentation can be addressed in a timely manner. Trainees should keep in mind that as the industry is very diverse, not everything in the workbook will be applicable to all company visits. At the end of the orientation and indoctrination period, each trainee should complete the Overall Program Effectiveness survey, scan the survey into an adobe format, and forward it as an email attachment through the chain of command to the Towing Vessel National Center of Expertise (TVNCOE), i.e., from unit command representative to TVNCOE, Attn: TVNCOE@uscg.mil, for consideration.

TVBP Program Survey (To be Filled out by Examiners)

It is important that the TVBP Program provides Coast Guard Examiners with a thorough education of the tugboat, towboat and barge industry's commitment to safety and provides examiners with hands on operational exposure to strengthen our industry-agency partnership. In order to assess what strides the TVBP Program has made towards the realization of these ultimate goals, we are asking each examiner to fill out the following short survey to provide feedback on the educational effectiveness of the program. We have provided space for more detailed comments and we strongly urge examiners to take advantage of that space. Your feedback is integral to the meaningful development of the TVBP Program.

Industry Background

1) Was the industry background helpful in familiarizing you with towing operations as they relate to inspections?

   ❑ Very Helpful ❑Somewhat Helpful ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

2) Was the industry background helpful in familiarizing you with the policies, procedures and administrative requirements for safety management systems and how this relates to towing vessel inspections?

   ❑ Very Helpful ❑Somewhat Helpful ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

3) Did the industry background provide an informative and useful context for the importance of the towing industry to national commerce?

   ❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

4) Did the industry background adequately explain the various categories of vessels and their operations and how these considerations impact the vessel's approach to safety, security and environmental stewardship?

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

5) Did the industry background adequately explain the numerous regulations that apply to the towing industry and how these regulations impact vessel operations?

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

6) Was the industry background comprehensive? If not, can you recommend specific topics we should add?

❑ Very Comprehensive ❑Somewhat Comprehensive ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

7) Was the industry background too dense and too time consuming to review? Are there specific topics or sections that we should remove or make more concise?

❑ Much Too Dense ❑Needs Improvement ❑Somewhat Concise ❑Very Concise

Comments:_____
_____
_____

8) Generally speaking, do you feel confident that the industry background has prepared you for the on-site training components included as part of this program?

❑ Very Confident ❑Generally Confident ❑Need more Preparation ❑Concerned

Comments:_____
_____
_____

Examiner Name_____Unit_____

The completion of this form is a necessary step to providing insight to both participants in this program, so that any weaknesses in structure and/or presentation can be addressed in a timely manner. Trainees should keep in mind that as the industry is very diverse, not everything in the workbook will be applicable to all company visits. At the end of the orientation and indoctrination period, each trainee should complete the Industry Background survey, scan the survey into an adobe format, and forward it as an

email attachment through the chain of command to the Towing Vessel National Center of Expertise (TVNCOE), i.e., from unit command representative to TVNCOE, Attn: TVNCOE@uscg.mil, for consideration.

TVBP Program Survey (To be Filled out by Examiners)

It is important that the TVBP Program provides Coast Guard Examiners with a thorough education of the tugboat, towboat and barge industry's commitment to safety and provides examiners with hands on operational exposure to strengthen our industry-agency partnership. In order to assess what strides the TVBP Program has made towards the realization of these ultimate goals, we are asking each examiner to fill out the following short survey to provide feedback on the educational effectiveness of the program. We have provided space for more detailed comments and we strongly urge examiners to take advantage of that space. Your feedback is integral to the meaningful development of the TVBP Program.

Time on Vessels

1) Please indicate the name of the company and the name of the vessel you were stationed on

Company Name:_____ Vessel Name:_____

2) Please rate how effectively the vessel crew familiarized you with physical layout of the vessel and the functions of the equipment on board.

❑ Very Helpful ❑ Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

3) Please rate how effectively the vessel crew demonstrated safety as a priority on a vessel, including but not limited to how well you were familiarized with the safety management system.

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

4) Were you given a clear understanding of how safety management systems impact the way vessel operations are conducted?

❑ Very Clear ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

5) Was the vessel crew willing to answer your questions and facilitate your understanding of personnel issues, including but not limited to licensing and watch schedules?

❑ Very Accommodating ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

6) How clearly were the specific duties of each crew member defined for you?

❑ Very Clearly ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

7) Please rate how effectively the vessel crew demonstrated procedures for injury prevention and emergency response.

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

8) Please rate how effectively the vessel crew demonstrated commitment to environmental stewardship, including procedures for pollution prevention.

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

9) Where applicable, did you receive value from observing any meetings, training drills or recordkeeping procedures carried out by the vessel crew while you were on board?

❑ Excellent Value ❑Generally Useful ❑Not Very Useful ❑ Not Useful at All

Comments:_____
_____
_____

10) How effective was the industry background in preparing you for your experience on the vessel?

❑ Very Effective ❑Generally Useful ❑Not Very Helpful ❑Not Helpful at All

Comments:_____
_____
_____

ExaminerName_____Unit_____

The completion of this form is a necessary step to providing insight to both participants in this program, so that any weaknesses in structure and/or presentation can be addressed in a timely manner. Trainees should keep in mind that as the industry is very diverse, not everything in the workbook will be applicable to all company visits. At the end of the orientation and indoctrination period, each trainee should complete the Time on Vessels survey, scan the survey into an adobe format, and forward it as an email attachment through the chain of command to the Towing Vessel National Center of Expertise (TVNCOE), i.e., from unit command representative to TVNCOE, Attn: TVNCOE@uscg.mil, for consideration.

TVBP Program Survey

It is important that the TVBP Program provides Coast Guard Examiners with a thorough education of the tugboat, towboat and barge industry's commitment to safety and provides examiners with hands on operational exposure to strengthen our industry-agency partnership. In order to assess what strides the TVBP Program has made towards the realization of these ultimate goals, we are asking each examiner to fill out the following short survey to provide feedback on the educational effectiveness of the program. We have provided space for more detailed comments and we strongly urge examiners to take advantage of that space. Your feedback is integral to the meaningful development of the TVBP Program.

Time Shoreside

1) Please indicate the name of the facility you were stationed at as well as the owner of that facility

Facility Name:_____ Company Name:_____

2) How helpful was the site tour in familiarizing you with the role of shoreside facilities in managing vessel operations on the waterways?

❑ Very Helpful ❑Somewhat Helpful ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

3) Please rate how effectively the shoreside staff briefed you on the company's corporate overview, including the number of vessels owned, the operational domain, and the company's organizational chart.

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

4) Were you given a clear understanding of how safety management systems impact the way shoreside operations are conducted and how the shoreside operations interact and impact vessel operations?

❑ Very Clear ❑Somewhat Clear ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

5) Please rate how effectively the shoreside staff demonstrated safety as a priority in a facility, including but not limited to prevention policies, incident reporting and investigation, and job safety analysis.

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

6) Please rate how effectively shoreside staff demonstrated the importance of security at a facility, including by not limited to access control.

❑ Excellent ❑Adequate ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

7) How clearly were the specific roles of each department within a facility defined for you?

❑ Very Clear ❑Somewhat Clear ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

8) Was the vessel crew willing to answer your questions and facilitate your understanding of personnel issues, including but not limited to licensing and certification and career progression?

❑ Very Accommodating ❑Somewhat Accommodating ❑Room for Improvement ❑Poor

Comments:_____
_____
_____

9) Where applicable, did you receive value from observing any meetings, training drills or recordkeeping procedures carried out by the shoreside staff while you were at the site?

❑ Excellent Value ❑Generally Useful ❑Needs Improvement ❑No Value at All

Comments:_____
_____
_____

10) How effective was the industry background in preparing you for your experience shoreside?

❑ Very Effective ❑Generally Useful ❑Needs Improvement ❑Not Effective at All

Comments:_____
_____
_____

Examiner Name_____Unit_____

The completion of this form is a necessary step to providing insight to both participants in this program, so that any weaknesses in structure and/or presentation can be addressed in a timely manner. Trainees should keep in mind that as the industry is very diverse, not everything in the workbook will be applicable to all company visits. At the end of the orientation and indoctrination period, each trainee should complete the Time Shoreside survey, scan the survey into an adobe format, and forward it as an email attachment through the chain of command to the Towing Vessel National Center of Expertise (TVNCOE), i.e., from unit command representative to TVNCOE, Attn: TVNCOE@uscg.mil, for consideration.

TVBP Program Survey (To be Filled out by Industry Representative)

At the end of the orientation and indoctrination period, each host company should complete this Coast Guard Trainee Evaluation. It is important that industry provides thorough feedback on the progress examiners have made towards understanding the nuances of industry operation through this orientation. Your feedback will inform the direction and structure of the TVBP Program and internal examination training performed by the Coast Guard. We have provided space for more detailed comments and we strongly urge you to take advantage of that space. Directions for submission of this form can be found at the bottom of the second page.

Coast Guard Trainee Evaluation

1) Please indicate the name of the Coast Guard trainee your company hosted

   Last:_____ First: _____

2) Please indicate which educational component your company hosted

   ❑ Time on Vessel
   ❑ Time Shoreside

3) Did the trainee appear to have reviewed the provided background information thoroughly before joining your crew/staff?

   ❑ Very Prepared ❑Somewhat Prepared ❑Needs Improvement ❑Unprepared

Comments:_____
_____
_____

4) Having completed the training, how would you rate the trainee's understanding of safety management systems and how they inform towing vessel inspection?

   ❑ Excellent ❑Adequate ❑Needs Improvement ❑Poor

Comments:_____
_____
_____

5) Was the trainee energetic and intellectually curious about vessel/shoreside operations? Did the trainee appear to be engaged?

   ❑ Very Engaged ❑Somewhat Engaged ❑Needs Improvement ❑Unengaged

Comments:_____
_____
_____

6) Did the trainee conduct themselves in a professional manner in accordance with the rules and regulations of your vessel/facility?

   ❑ Very Professional ❑Somewhat Professional ❑Needs Improvement ❑Unprofessional

Comments:_____
_____
_____

7) Did the trainee appear to be comfortable at your vessel/facility and comfortable interacting with your crew/staff?

❑ Very Comfortable ❑Somewhat Comfortable ❑Needs Improvement ❑Uncomfortable

Comments:_____
_____
_____

8) Did the trainee display mature conduct during their interaction with the company's staff? Do you believe that this trainee will represent the Coast Guard maturely and professionally as an examiner?

❑ Excellent ❑Adequate ❑Needs Improvement ❑Poor

Comments:_____
_____
_____

9) Please rate the trainee's apparent willingness to ask questions when things were not clear.

❑ Very Willing ❑Somewhat Willing ❑Needs Improvement ❑Unwilling

Comments:_____
_____
_____

10) Does the trainee need any more training at your vessel/facility? If so, what type?

❑ No
❑ Yes

Comments:_____
_____
_____

11) Name of Host Company_____

- Region or area training took place_____
- Point of Contact with phone number_____

You may submit this form either by email, fax or mail. For email, scan the survey into an adobe format, and forward it as an email attachment to the Towing Vessel National Center of Expertise (TVNCOE), at: TVNCOE@uscg.mil. By fax send it to Attn: TVNCOE at 270-442-1633. By mail send it to: Marine Safety Unit Paducah, 225 Tully St., Paducah, KY 42003, Attn: TVNCOE. **Note: (After October 1, 2009 the fax number and mailing address will be updated on this form to reflect the new, permanent TVNCOE Office Spaces in Downtown Paducah).**

Companies Hosting Coast Guard Examiners

As of the date of the printing of this workbook, the following companies have volunteered to host Coast Guard Towing Vessel Examiner Trainees. Each Coast Guard Captain of the Port will maintain an updated list of participating companies in his/her Area of Responsibility.

First Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel and/or Shoreside Training	Type of Operations	Company Location(s)
Sector Boston	Constellation Maritime Company	Scott Jason (617) 561-0223	Both	Fleeting, coastal towing, ship assist, tanker escort	100 Terminal Rd. Charlestown, MA 02129
Sector New York	K-Sea Transportation	William Sullivan (718) 303-7353	Both	Tug/barge operations	1 Tower Center Blvd. 17th Floor E. Brunswick, NJ 08816
Sector New York	McAllister Towing	Steven J. Kress (718) 273-6300	Both	Ship docking & barge towing	3165 Richmond Terr. Staten Island, NY 10303
Sector New York	Moran Towing Corporation	Matt Baker-Corporate Contact (203) 442-2873 or Peter Keyes-New York Office Contact (203) 442-2839	Both	Ship assist, vessel escort, coastal towing, ATB operations, petroleum barges, dry bulk barges	50 Locust Ave. New Canaan, CT 06840 & 2015 Richmond Terr. Staten Island, NY 10302 *(Operations in New York and limited training also available in Portsmouth, NH)*
Sector New York	Weeks Marine, Inc.	O.S. (Rudy) Wohl (908) 272-4010, extension 2107			4 Commerce Dr. Cranford, NJ 07016

Sector Northern New England	Portland Tugboat	Brian Fournier (207) 774-2902	Vessel Training	Ship docking & coastal towing	40 Commercial St., Suite 700 Portland, ME 04101
Sector Southeastern New England	McAllister Towing of Narragansett Bay	Gary Oliveira (401) 331-1930	Vessel Training	Ship docking & coastal towing	1 India St. Providence, RI 02903
All Sectors on the Atlantic Coast	Dann Ocean Towing	Bob Bennington (813) 251-5100	Vessel Training	Oceangoing tugs, wire boats, stern tows, push tows, petroleum barges, ship assist, hauser tug (NY only), ship assist (NY only), international voyages	3670 S. West Shore Blvd. Tampa, FL 33629 *(Operations along the Atlantic Coast)*

Fifth Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel and/or Shoreside Training	Type of Operations	Company Location(s)
Sector Baltimore	McAllister Towing of Baltimore	Mike Reagoso (410) 276-8000	Both	Harbor assist & harbor towing	2600 Broening Highway, Building B Baltimore, MD 21224
Sector Baltimore	The Vane Brothers Company	Bob Roosevelt (410) 735-8246	Both	Coastwise & inland tug and petroleum barge operations	2100 Frankfurst Ave. Baltimore, MD 21226
Sector Delaware Bay	K-Sea Transportation	William Sullivan (718) 303-7353	Both	Tug/barge operations	1 Tower Center Blvd. 17th Floor E. Brunswick, NJ 08816
Sector Delaware Bay	McAllister Towing of Philadelphia	Joseph Benton (856) 456-7200	Both	Ship docking & harbor barge towing	4 South King St. Gloucester, NJ 08030

Sector Delaware Bay	The Vane Brothers Company	Rick Iuliucci (215) 252-9330	Both	Coastwise & inland tug & petroleum barge operations	4925 W. Fort Mifflin Rd. City Dock Philadelphia, PA 19153
Sector Hampton Roads	Allied Transportation Company	Jeff Parker (757) 226-7608	Both	Mostly engaged in coastwise voyages; carry various chemicals, black oil or dry bulk cargos	500 E. Indian River Rd. Norfolk, VA 23523
Sector Hampton Roads	McAllister Towing of Virginia	Dean Fabian (757) 247-7800 or Elliott Westall (757) 438-3064	Both	Ship docking & barge towing	2600 Washington Ave. Suite 1004 Newport News, VA 23607
Sector Hampton Roads	Moran Towing Corporation	Matt Baker-Corporate Contact (203) 442-2873 or Mark Vanty-Norfolk Office Contact (757) 625-6070	Both	Ship assist, coastal towing, inland pushboats	1901 Brown Ave. Norfolk, VA 23504 *(Limited training also available in Philadelphia, Baltimore & Wilmington, NC)*
All Sectors on the Atlantic Coast	Dann Ocean Towing	Bob Bennington (813) 251-5100	Vessel Training	Oceangoing tugs, wire boats, stern tows, push tows, petroleum barges, ship assist, international voyages	3670 S. West Shore Blvd. Tampa, FL 33629 *(Operations along the Atlantic Coast)*

Seventh Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel Training, Shoreside Training, or Both	Type of Operations	Company Location(s)
Sector Charleston	McAllister Towing of Charleston, Inc.	Steve Kicklighter	Both	Ship docking & coastal towing	1120 N. Port Dr. North Charleston, SC 29405
Sector Charleston, MSU Savannah	Moran Towing Corporation	Matt Baker-Corporate Contact (203) 442-2873 or Ron Droop-Savannah Office Contact (912) 232-8103	Both	Ship assist, vessel escort	504 E. River St. Savannah, GA 31402 *(Limited training also available in Charleston, SC, Jacksonville & Miami)*
Sector Jacksonville, MSO Jacksonville *& Sector Miami*	Crowley Maritime Corporation	Charles Nalen (904) 727-4116	Both	Tug & barge towing (container & general cargo); ATB petroleum transportation; harbor ship assist & tug escort; ship management - MARAD RRF ships & commercial container ships; terminals (ro/ro & lo/lo); marine salvage - Titan	9487 Regency Square Blvd. Jacksonville, FL & 4300 McIntosh Rd, Ft. Lauderdale, FL 33316

Sector Jacksonville, MSO Jacksonville *& Sector Miami*	McAllister Towing of Florida, Inc.	Michael Ring (904) 751-6228	Both	Ship docking & harbor services	4358 Apollo Ave. Jacksonville, FL 32226 & 2110 Eller Dr. Fort Lauderdale, FL 33316
Sector Tampa-St. Petersburg & on the Atlantic Coast & Gulf Coast	Dann Ocean Towing	Bob Bennington (813) 251-5100	<u>Vessel</u> Every Sector on the Atlantic Coast & Gulf Coast <u>Shoreside</u> Tampa Office only	Oceangoing tugs, wire boats, stern tows, push tows, petroleum barges, ship assist, international voyages	3670 S. West Shore Blvd. Tampa, FL 33629 *(Also operations along the Atlantic Coast)*
Sector Tampa-St. Petersburg	United Ocean Services	Jay Hess (813) 209-4265 or (813) 480-1063	Both	Dry bulk ocean transport	601 S. Harbour Island Blvd., Suite 230 Tampa, FL 33602

Eighth Coast Guard District

Coast Guard Sector and/or MSU	Company Name	Company Contact Person(s)	Vessel and/or Shoreside Training	Type of Operations	Company Location(s)
Sector Houston-Galveston, MSU Galveston, MSU Port Arthur & MSU Lake Charles	Buffalo Marine Service, Inc.	Chuck King (713) 923-5571	Both	Liquid short linehaul, bunkering in harbor dockside & anchorage	8201 E. Erath St. Houston, TX 77012 *(Also operations in Galveston, TX, Port Arthur, TX & Lake Charles, LA)*
Sector Houston-Galveston, MSU Lake Charles	Crowley Maritime Corporation	Charles Nalen (904) 727-4116	Both	Tug & barge towing (container & general cargo); ATB petroleum transportation; harbor ship assist & tug escort; ship management - MARAD RRF ships & commercial container ships; terminals (ro/ro & lo/lo); marine salvage - Titan	State Rd. 384, Big Lake Road Lake Charles, LA 70605

Sector Houston-Galveston, MSU Port Arthur & *Sector Mobile*	Higman Barge Lines	John Costello (713) 552-1101	Vessel Channelview, TX, Orange, TX & Mobile, AL Shoreside Houston, TX, Channelview, TX & Orange, TX	Oil transport by tank barge	1980 Post Oak Blvd., Suite 1101 Houston, TX 77056 *(Also operations in Channelview, TX, Orange, TX & Mobile, AL)*
Sector Houston-Galveston	Kirby Corporation	Patrick Kelly (713) 435-1198	Both	Transportation of bulk liquid products by inland tank barge, dry-bulk commodities in coastwise trade, fleeting	55 Waugh Dr. Houston, TX 77007
Sector Houston-Galveston, MSU Port Arthur	Moran Towing Corporation	Matt Baker-Corporate Contact (203) 442-2873 or Steve Kelley-Port Arthur Office Contact (757) 625-6070	Both	Ship assist, vessel escort	8740 Old Yacht Club Rd. Port Arthur, TX 77642 *(Limited training also available in New Orleans, LA)*
Sector Lower Mississippi River, MSU Vicksburg	Golding Barge Line, Inc.	Russell Moore (601) 629-9800	Vessel Training	Inland Tank Barge Carrier	101 Lee St. Vicksburg, MS 39180
Sector Lower Mississippi River, MSU Vicksburg	Magnolia Marine Transport Company	Jim Smith (601) 638-5921	Both	Inland Liquid	697 Haining Rd. Vicksburg, MS 39183
Sector Lower Mississippi River	Southern Towing Company	Bill Stegbauer (901) 386-2644	Both	Move liquid hazardous materials & dry bulk	1874 Thomas Rd. Memphis, TN 38174
Sector Lower Mississippi River	Wepfer Marine, Inc.	George Leavell (901) 775-0980	Both	Harbor services & fleeting	2661 Channel Ave. Memphis, TN 38113

Sector Mobile	Gulf Caribe	Jim Peschel (206) 281-3769	Both	Coastal towing	251 St. Anthony St. Mobile, AL 36603 & 600 W. Ewing St. Seattle, WA 98119 *(Address for correspondence)*
Sector Mobile	Parker Towing Company, Inc.	Rick Snow (205) 391-1117	Both	Linehaul dry bulk	1001 3rd St. Northport, AL 35476
Sector New Orleans, MSU Baton Rouge & *Sector Houston*	Blessey Marine Services, Inc.	Randy Adams or Todd Maise (504) 734-1156	Vessel Harahan, LA & Houston, TX Shoreside Harahan, LA	Liquid transport	1515 River Oaks Rd. E. Harahan, LA 70123 *(Also operations in Houston, TX)*
Sector New Orleans, MSU Baton Rouge & MSU Lake Charles	Canal Barge Company, Inc.	Tom Smith (504) 584-1538 or Joe Tyson (504) 585-4624	Both	Linehaul liquid, linehaul dry, deck project affraightment	835 Union St., Suite 300 New Orleans, LA 70112 *(Also operations in Baton Rouge & Sulphur, LA)*
Sector New Orleans, MSU Baton Rouge	DeLoach Marine Services	Z. David DeLoach (225) 336-9933	Both	Linehaul along the GIWW, liquid & dry	420 Court St. Port Allen, LA 70767
Sector New Orleans	E.N. Bisso & Son, Inc.	Michael Vitt (504) 828-7178 or William Summers (504) 861-3551	Both	Harbor assist, ship-docking & offshore towing	3939 North Causeway Blvd., Suite 401 Metairie, LA 70002
Sector New Orleans	Turn Services, Inc.	Bob Mueller (504) 432-3403	Both		2200 Royal St. New Orleans, LA 70117

Sector Ohio Valley, MSU Paducah, *Sector New Orleans*, MSU Baton Rouge, *Sector Upper Mississippi River & Sector Houston-Galveston*	American Commercial Lines	Todd Whyte (812) 288-0224 or Mark Dougherty (812) 288-1618	Vessel Jeffersonville, IN, Cairo, IL, New Orleans, Baton Rouge, LA & Houston Shoreside Jeffersonville, IN	Fleeting & linehaul vessels moving liquid & dry cargo barges on the GIWW & Western Rivers; canal, mainline & harbor operations Canal Houston, New Orleans & Baton Rouge, LA Mainline Jeffersonville, IN, Cairo, IL, St. Louis, & Baton Rouge, LA Harbor Cairo, IL, New Orleans & Baton Rouge, LA	1701 E. Market St. Jeffersonville, IN 47130 *(Also operations in Houston, Cairo, IL, New Orleans, Baton Rouge, LA & St. Louis)*
Sector Ohio Valley, MSU Paducah, *Sector New Orleans & Sector Upper Mississippi River*	AEP River Operations	Keith Bell (504) 615-2111	Vessel Convent, LA & Paducah, KY Shoreside Convent, LA, Paducah, KY & Chesterfield, MO	Fleeting (Convent, LA), linehaul dry cargo	16150 Main Circle Dr., Suite 400 Chesterfield, MO 63017 *(Also operations in Convent, LA & Paducah, KY)*

Sector Ohio Valley, MSU Pittsburgh	Campbell Transportation Company, Inc.	Ronald Corigliano (412) 233-3657			525 William Penn Pl., Suite 3901 Pittsburgh, PA 15219
Sector Ohio Valley, MSU Pittsburgh	CONSOL Energy Sales Company	Michael Somales (724) 684-2315	Vessel Training	Linehaul contract carrier & fleeting	1200 Maronda Way, Suite 100 Monesses, PA 15062
Sector Ohio Valley, MSU Huntington & MSU Paducah, *Sector New Orleans*, MSU Baton Rouge & *Sector Upper Mississippi River*	Ingram Barge Company	Les Grimm (270) 441-1665, Jason Adams (270) 441-1624 or Arnie Rothstein (985) 479-7235	<u>Vessel</u> Huntington, WV, Paducah, KY, E. Carondelet, IL, Baton Rouge, LA & Reserve, LA <u>Shoreside</u> Paducah, KY, E. Carondelet, IL, Baton Rouge, LA & Reserve, LA	Linehaul dry & liquid cargos, fleeting, harbor operations & midstream fueling	P.O. Box 2756 Paducah, KY 42002 or 1000 S. 3rd St. Paducah, KY 42003 *(Also operations in Reserve, LA, Baton Rouge, LA, E. Carondelet, IL & Huntington, WV)*
Sector Ohio Valley, MSU Huntington	Madison Coal & Supply Company	Bill Barr (304) 926-1117	Both		#2 Port Amherst Dr. Charleston, WV 25306
Sector Ohio Valley, MSU Huntington	Marathon Oil Company	Fred Nyhuis (606) 739-2503	Both	Fleeting & linehaul vessels, moving liquid products	100 12th St. Catlettsburg, KY 41129
Sector Ohio Valley, MSU Paducah	United Barge Line	Duane Dubrock (618) 524-6023	Both	Dry bulk river barge transport	100 Scott St. Metropolis, IL 62960
Sector Upper Mississippi River, MSD Quad Cities	Alter Barge Line, Inc. & Blackhawk Fleet	Larry Daily (563) 344-5109	Both	Linehaul dry, fleeting, harbor services	2117 State St., Suite 250 Bettendorf, IA 52722
Sector Upper Mississippi River	JB Marine Services, Inc.	Paul Hassler (314) 894-3805	Both	Fleeting	4190 Bussen Rd. St. Louis, MO 63151

Sector Upper Mississippi River, MSD Quad Cities	Upper Mississippi River Fleeting, LLC	Jim Manley (636) 225-9106 or Walt Bassow (563) 381-4990	Both	Fleeting, harbor operations, fueling (Custom Fuels)	PO Box 554 Buffalo, IA 52728
Sector Upper Mississippi River, MSD St. Paul	Upper River Services, LLC	Lee Nelson (651) 292-9293	Vessel Training		40 State St. St. Paul, MN 55107
All Sectors on the Gulf Coast	Dann Ocean Towing	Bob Bennington (813) 251-5100	Vessel Training	Oceangoing tugs, wire boats, stern tows, push tows, petroleum barges, ship assist, international voyages	3670 S. West Shore Blvd. Tampa, FL 33629 *(Operations along the Gulf Coast)*

Ninth Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel and/or Shoreside Training	Type of Operations	Company Location(s)
Sector Buffalo, MSU Cleveland & *Sector Detroit*	The Great Lakes Group	Gregg Thauvette (216) 621-4854	Vessel Cleveland & Detroit Shoreside Cleveland	Harbor towing & ship assist	4500 Division Ave. Cleveland, OH 44102 *(Also operations in Detroit)*
Sector Lake Michigan	Andrie Inc.	Mike Caliendo (231) 728-2226, ext. 243 or Matt Stump (231) 728-2226, ext. 230	Both	Great Lakes bulk liquid and dry cargo operations; conventional and ATB	561 E. Western Ave. Muskegon, MI 49442
Sector Lake Michigan, MSU Chicago	Blessey Marine Services, Inc.	Randy Adams or Todd Maise (504) 734-1156	Vessel Training	Liquid transport	1515 River Oaks Rd. E. Harahan, LA 70123 *(Also operations in Chicago and Joliet, IL)*

Sector Lake Michigan, MSU Chicago	Illinois Marine Towing, Inc.	Bill Russell (630) 257-3400	Both	Shipyard, inland towing (tank barges & dry cargo open hoppers)	379 River St. Lemont, IL 60439

Eleventh Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel and/or Shoreside Training	Type of Operations	Company Location(s)
Sector Los Angeles-Long Beach	Crowley Maritime Corporation	Charles Nalen (904) 727-4116	Both	Tug & barge towing (container & general cargo); ATB petroleum transportation; harbor ship assist & tug escort; ship management - MARAD RRF ships & commercial container ships; terminals (ro/ro & lo/lo); marine salvage - Titan	Berth 86, 300 S. Harbor Blvd San Pedro, CA 90731
Sector Los Angeles-Long Beach & Sector San Francisco	Foss Maritime Company	Jim Peschel (206) 281-3769	Both	Fleeting, bunkering, coastal towing, ship assist, tanker escort	600 W. Ewing St. Seattle, WA 98119 *(Operations in Long Beach & San Francisco)*
Sector Los Angeles-Long Beach	Global Marine Transportation	Brad Roberson (206) 613-1443	Vessel Training	Inland towing fuel barge & refueling operations	1711 13th Ave. SW Seattle, WA 98134 *(Operations in Long Beach)*
Sector Los Angeles-Long Beach & Sector San Francisco	Harley Marine Services	Mike Curry (206) 423-9955	Vessel Training	Bunkering, ship assist	910 SW Spokane St. Seattle, WA 98134 *(Operations in Los Angeles-Long Beach & San Francisco)*

Thirteenth Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel and/or Shoreside Training	Type of Operations	Company Location(s)
Sector Seattle	Crowley Maritime Corporation	Charles Nalen (904) 727-4116	Both	Tug & barge towing (container & general cargo); ATB petroleum transportation; harbor ship assist & tug escort; ship management - MARAD RRF ships & commercial container ships; terminals (ro/ro & lo/lo); marine salvage - Titan	1102 S.W. Massachusetts St., Seattle, WA 98134
Sector Seattle & Sector Portland	Foss Maritime Company	Jim Peschel (206) 281-3769	Both	Fleeting, bunkering, coastal towing, ship assist, tanker escort	600 W. Ewing St. Seattle, WA 98119 *(Also operations in Portland)*
Sector Seattle	Global Marine Transportation	Brad Roberson (206) 613-1443	Vessel Training	Inland towing fuel barge and refueling operations	1711 13th Ave. SW Seattle, WA 98134
Sector Seattle & Sector Portland	Harley Marine Services	Mike Curry (206) 423-9955	Vessel Seattle & Portland Shoreside Seattle	Bunkering, general towing (Seattle only), petroleum transport (Seattle only)	910 SW Spokane St. Seattle, WA 98134 *(Also operations in Portland)*

Seventeenth Coast Guard District

Coast Guard Sector	Company Name	Company Contact Person(s)	Vessel Training, Shoreside Training, or Both	Type of Operations	Company Location(s)
Sector Anchorage, MSU Valdez	Crowley Maritime Corporation	Charles Nalen (904) 727-4116	Both	Tug & barge towing (container & general cargo); ATB petroleum transportation; harbor ship assist & tug escort; ship management - MARAD RRF ships & commercial container ships; terminals (ro/ro & lo/lo); marine salvage - Titan	201 Arctic Slope Ave, Anchorage, AK 99518 & 254 Fidalgo, Valdez, AK 99686
Sector Anchorage, MSD Unalaska	Harley Marine Services	Mike Curry (206) 423-9955	Vessel Training	Ship assist, general towing	910 SW Spokane St. Seattle, WA 98134 *(Operations in Dutch Harbor)*

APPENDIX A

Photographs of Vessels (Figures B1-B15)

Liquid Tank Barge

Figure B-1

Courtesy of Ingram Barge Company

Liquid Tank Barge

Figure B-2

Courtesy of Buffalo Marine Service, Inc.

Linehaul Towboat

Figure B-3

Courtesy of Ingram Barge Company

Locking River Towboat

Figure B-4

Courtesy of Ingram Barge Company

Locking River Towboat

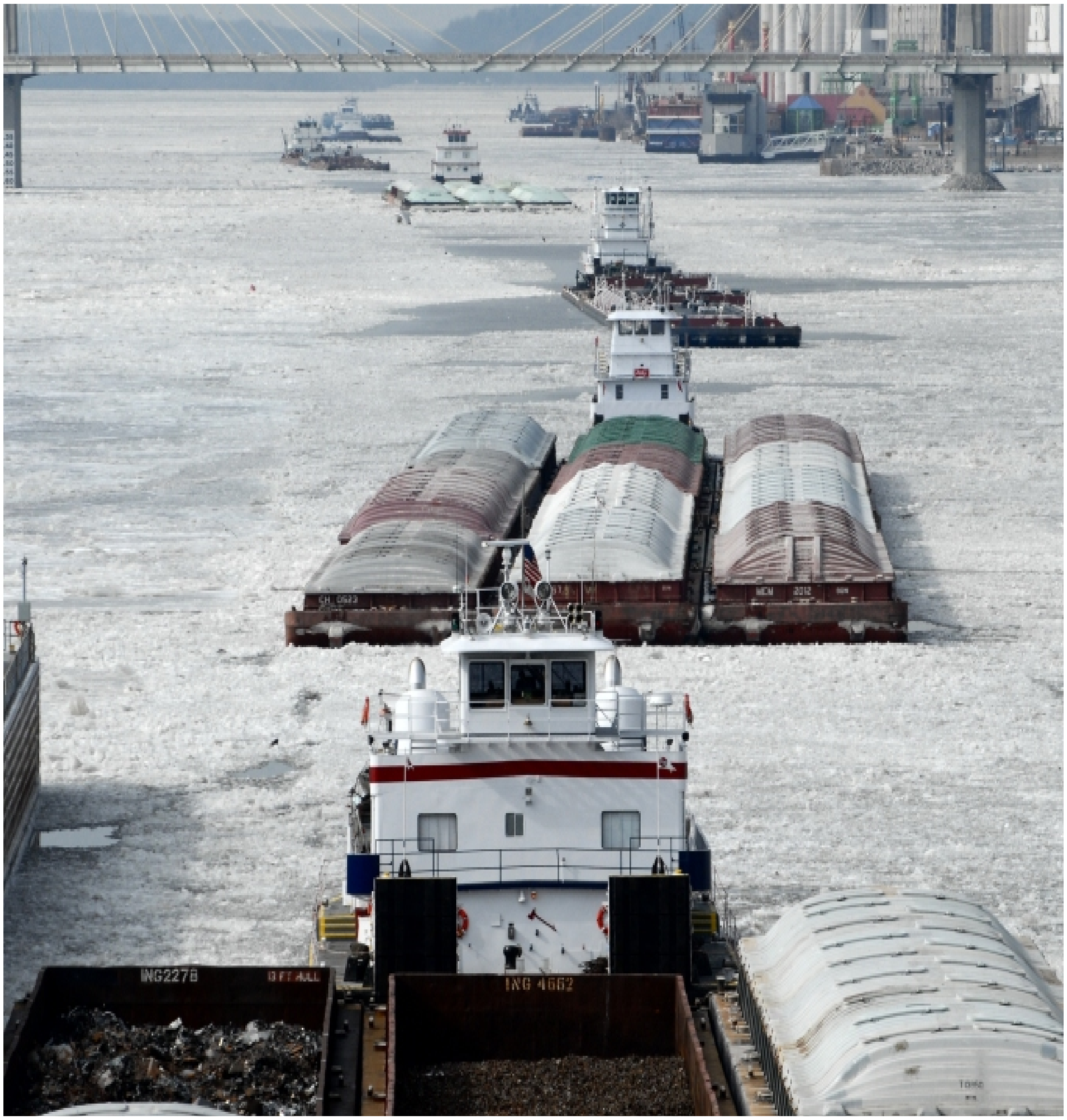


Figure B-5

Courtesy of Ingram Barge Company

Canal Towboat

Figure B-6

Courtesy of Ingram Barge Company

Canal Towboat

Figure B-7

Courtesy of Ingram Barge Company

Seagoing Tug

Figure B-8

Courtesy of Allied Transportation Company

Seagoing Tug

Figure B-9

Courtesy of Foss Maritime Company

Harbor Assist Tug

Figure B-10

Courtesy of Foss Maritime Company

Tanker Escort Tug

Figure B-11

Courtesy of Foss Maritime Company

Z-Tech Tug

Figure B-12

Courtesy of Bay-Houston Towing Company

Tractor Tug

Figure B-13

Courtesy of Foss Maritime Company

Articulated Tug and Barge

Figure B-14

Courtesy of Allied Transportation Company

Articulated Tug and Barge

Figure B-15

Courtesy of Allied Transportation Company

APPENDIX B

Introduction to Responsible Carrier Program
(Produced by The American Waterways Operators)

Disclaimer

The AWO Responsible Carrier Program is intended to improve marine safety and environmental protection in the tugboat, towboat and barge industry. The program aims to accomplish this objective by establishing preferred industry operating principles and practices as voluntary standards of conduct for tugboat and towboat companies. While the standards outlined in the Responsible Carrier Program meet or exceed current governmental standards for the operation of barges and towing vessels, they do not necessarily constitute an exhaustive catalogue of all potential safety practices that any particular company should undertake. Each company must determine for itself its own operational needs and the range of safety measures necessary to protect its employees, the public, and the environment. The program is not intended to supplant any existing safety procedures that a company may have in place in excess of the standards outlined herein. Finally, while the objective of the Responsible Carrier Program is to enhance safety and environmental protection in the tugboat and towboat industry, no program can be considered a panacea that will completely eliminate injuries, accidents, or pollution incidents. The pursuit of better, safer operations through continuous improvement must always be the industry's goal.

Note: Changes in this 11/08 edition from the previous edition (10/06) are designated by text in ***bold italics***.

I. Introduction

On December 7, 1994, the Board of Directors of the American Waterways Operators (AWO) unanimously approved the establishment of the AWO Responsible Carrier Program as a code of practice for association member companies. The Board's historic vote marked the culmination of an intensive, eight-month effort to develop the outlines of a new, industry-driven safety program for the tugboat and towboat industry. In voting to adopt the Responsible Carrier Program, however, the Board did more than signal its approval of the code of practice and its endorsement of the process that produced it. Perhaps more significantly, the Board directed that a new process begin to help the newly developed safety program take root in the industry and to ensure that the program's goals of a better, safer, and more responsible industry are realized. To that end, the Board set January 1, 1998, as the target date to bring all AWO member companies into compliance with the Responsible Carrier Program.

Background and Purpose

Development of the Responsible Carrier Program began in April 1994, when the Board of Directors authorized the establishment of a specially selected task force of senior industry executives. Comprised of 13 members representing a broad cross section of AWO's diverse membership -- inland, coastal, and harbor operators; dry and liquid carriers; large and small companies drawn from each of the association's five regions -- the working group was tasked with developing a series of "recommended positions, practices, and standards aimed at enhancing the safety of the barge and towing industry." This work stemmed from the directive of the association's newly approved strategic plan, *AWO 2000*, that AWO "improve industry safety and environmental protection by establishing preferred industry operating principles and practices," and from the process of industry self-examination which began in the wake of the September 1993 derailment of the Amtrak *Sunset Limited.*

Throughout the spring and summer of 1994, the working group labored to fulfill the Board's mandate and to develop the outlines of a new, industry-specific safety program for the tugboat and towboat industry. By late September, the framework of the program had emerged, and a draft document was shared with all AWO members, including shipyard and affiliate members, for review and comment. Throughout the month of October, regional briefing sessions were held in Greenville, Mississippi; New York, New York; St. Louis, Missouri; and Seattle, Washington, to subject the draft program to the critical review of AWO members in all regions of the country. Armed with this feedback, the working group reconvened in early November to consider the input received from the membership, to revise the document as necessary, and to develop final recommendations for consideration by the AWO Executive Committee and Board of Directors. On November 3, the Responsible Carrier Program was approved by the AWO Executive Committee. The Committee-approved changes to the content of the draft program, as well as its recommendations for implementation and use of the new safety program, were shared with all AWO members in mid-November. On December 7, following a final briefing and discussion session on the content of the program held December 6, AWO's Board of Directors voted unanimously to adopt the Responsible Carrier Program as a code of practice for AWO member companies.

The Responsible Carrier Program

The program approved by the Board of Directors has three principal parts -- management and administration, equipment and inspection, and human factors -- reflecting the role that each of these components plays in ensuring safe and efficient vessel operations. The program is intended to serve as a template for AWO member companies to use in developing company-specific safety programs that are consistent with applicable law and regulation, that incorporate sound operating principles and practices not currently required by law or regulation, and that are practical and flexible enough to reflect a company's unique operational needs. The three sections of the program are meant to be used in conjunction with one another; the policies and procedures called for in the management and administration section, for example, should reflect the recommended principles and practices outlined in the equipment and inspection and human factors sections, as well as the variables of a company's trade, area of operations, size and organizational structure, and the like.

The Responsible Carrier Program does not attempt to catalogue or to duplicate that which is already required by federal law or regulation. (For clarity, references to applicable law and regulation are included in several areas of the document.) Rather, the program seeks to complement and build upon existing law and regulation and to identify sound operating principles and practices that will enhance the safety of a company's operations, with or without governmental action in these areas. The program is intended to be a practical one. It takes its inspiration not from a government-prescribed standard or from a deep-sea, ship-focused model, but from the experience of the tugboat and towboat industry itself. The practices and principles outlined herein are, in large measure, based on principles of safe and sound operation that many companies in our industry have already voluntarily embraced. This program aims to build upon that foundation by extending those practices and principles throughout the industry as a whole.

It is not the aim of the Responsible Carrier Program to homogenize industry operations, however; the industry is far too diverse for such a simplistic approach. Rather, the program aims to combine a set of common principles and practices that can be observed by a company regardless of its trade or its size, with an emphasis on company-specific policies and procedures which may vary significantly both between and among industry sectors. The policies and procedures developed by a small inland grain carrier will inevitably differ from those of a large coastal oil transporter; indeed, the policies developed by one carrier will likely differ even from those of a similarly situated company. The Responsible Carrier Program is rooted in the premise that common principles of safe operation, and industry practices that are recognized as sound standards industry-wide, can and must coexist with the operational diversity that has long been a hallmark of the U.S. tugboat, towboat and barge industry.

Implementation and Use

In approving the establishment of the Responsible Carrier Program, AWO's Board of Directors recognized that developing a comprehensive plan for implementation and use of the new safety program would be critical to achieving the program's objectives. *AWO 2000* directed the association to "improve industry safety and environmental protection by establishing preferred industry operating principles and practices," but the mere development of such a program would

not by itself achieve these crucial goals. To make real gains in marine safety and environmental protection, the Board recognized that the next step for the association must be to put the Responsible Carrier Program in place and to help all AWO members integrate the program into their own companies' operations.

The Board set January 1, 1998, as the target date to bring all AWO member companies into compliance with the Responsible Carrier Program. To assist AWO members in meeting this target, the Board directed that the development of an implementation and assistance program aimed at giving all AWO members the tools they needed to adopt the Responsible Carrier Program commence immediately following Board approval of the program. Development of such a program, which included the identification or development of sample policies and procedures, identification of industry training resources, and a series of regional implementation seminars, then began, and a detailed implementation plan was presented to the AWO membership and Board of Directors at the association's April 1995 Annual Meeting. The Board also recognized the importance of monitoring the implementation process closely to ensure continued progress toward universal member adoption of the program and to identify any difficulties requiring modification, either of the document itself or of the implementation program. To that end, the Board received regular reports on the implementation process at each of its meetings between 1995 and 1998.

Responsible Carrier Program Third-Party Audit

In December 1995, AWO's Board of Directors established the Responsible Carrier Program Audit Task Force. The mission of this member task force was to consider the need for and value of an external audit program for the Responsible Carrier Program. In October 1996, the Board approved the recommendation of the Audit Task Force that an audit program be established for the Responsible Carrier Program. The Board concluded that not only would an external audit advance the objectives of marine safety and environmental protection, but that it would significantly increase the external credibility of the Responsible Carrier Program and facilitate the attainment of other important benefits, such as charterer acceptance, recognition from federal and state regulators, and lower insurance premiums. It was clear to the task force and to the Board of Directors that, increasingly, some form of audit would be required by regulators, shippers, and insurers as a condition of conferring many of the tangible benefits of the RCP on individual members. Given these conclusions, the Board established a Technical Subcommittee to develop the details of a future Responsible Carrier Program audit.

The Responsible Carrier Program Audit Task Force Technical Subcommittee first met in January 1997 and began the challenge of developing an audit program that increases industry safety, provides recognition for responsible operators, generates greater industry credibility in the public forum, and recognizes the diverse needs of AWO's members. In August 1997 the task force recommended that all members of AWO achieve audited compliance with the Responsible Carrier Program by January 1, 2000, or within two years of joining the association, whichever was later. In October 1997, in response to the recommendation by the task force, the AWO Board of Directors voted to approve the establishment of a third-party audit program for the Responsible Carrier Program, including the creation of a Responsible Carrier Program Accreditation Board responsible for the selection, orientation, oversight and recertification of

AWO-certified auditors. The Accreditation Board also plays a role in clarifying or interpreting the audit guidelines and in considering and recommending changes to the audit program as appropriate. The establishment of an audit program was an extraordinarily important step for the Responsible Carrier Program, AWO and the entire industry.

Condition of Membership

In a move that fundamentally changed the face of AWO, in April 1998, the membership voted to change the association's *Constitution and Bylaws* to require carrier members to demonstrate a "good faith commitment" ***(In 2008, the Board of Directors voted to delete the "good faith commitment" clause and simply require that members)*** achieve compliance with the AWO Responsible Carrier Program, and undergo an AWO-certified audit of their program by January 1, 2000, or within two years of joining the association, whichever is later. (In 2004, the Board of Directors voted to reduce the timeframe requirement to within one year of joining the association.) No longer was it enough to just operate a towing company and pay dues to belong to AWO. Now, members had to commit their companies to operate safely and responsibly by implementing the Responsible Carrier Program, and then demonstrate their implementation by undergoing a comprehensive third-party audit conducted by professional, experienced and knowledgeable auditors.

On January 1, 2000, 100 percent of AWO's carrier members were in audited compliance with the Responsible Carrier Program. Thirteen member companies chose not to comply with this condition of membership and thus, their memberships in AWO were terminated.

The membership and the Board of Directors recognize that the process of enhancing marine safety and environmental protection is, and must be, a continuum. The Board votes to establish the Responsible Carrier Program and to require participation in the program as a condition of membership in AWO were milestones, not an ending. The members of AWO are committed to making the Responsible Carrier Program a living document and a continuing process: incorporating lessons learned and new technological developments into the program; considering, debating, and adopting suggestions to improve, strengthen, and build upon the program; and maintaining a constant fix on the program's underlying objectives to improve industry safety and environmental protection.

There are many parties with a role to play in building a better, safer tugboat, towboat and barge industry, but the primary responsibility for making industry operations safer unquestionably lies with the industry itself. The AWO Responsible Carrier Program is a tangible manifestation of the association's acceptance of that responsibility, and its deeply felt commitment to carrying it out.

APPENDIX C

Glossary of Marine Terms
(Produced by McDonough Marine Service)

Marine Terms & Definitions

Jump to Section:
A | B | C | D | E | F | G | H | I | K | L | M | N | O | P | R | S | T | U | V | W

A

ABS -
American Bureau of Shipping; a vessel classification agency which also assigns international loadlines.

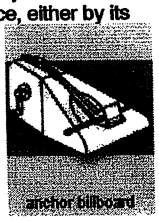
admeasure -
to measure, calculate, and certify; for the purpose of registration, certain dimensions of a vessel as well as its gross and net tons.

affreightment -
a contract for the movement of cargo in which the cargo owner/shipper is neither charterer nor operator of the vessel.

AHP -
Above Head of Passes; used with mileage designations on the Mississippi River, the Head of Passes being mile zero.

AIWW -
Atlantic Intracoastal Waterway.

anchor -
a heavy object of steel or iron attached to a vessel by a cable and/or chain and cast overboard to keep the vessel in place, either by its weight or by its flukes gripping the bottom.

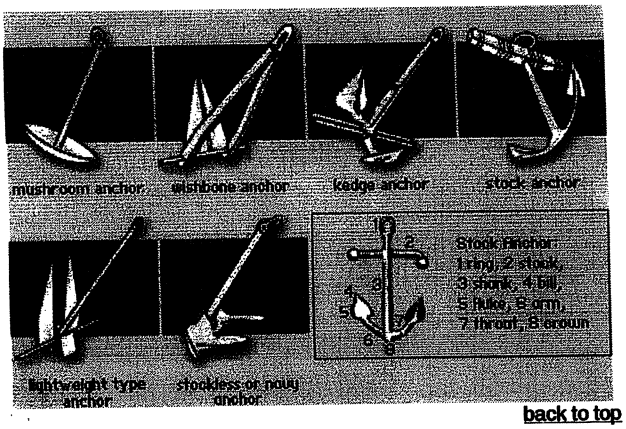

anchor billboard

anchor billboard -
a structure on the deck of a vessel upon which the anchor is mounted when not in use.

anodes -
metallic plates which, when attached to the hull of a vessel, decompose because of electrolysis, thereby reducing deterioration of hull plate.

athwartship -
transverse or across a vessel from side to side.

Automated Identification System (AIS) -
an electronic instrument placed on regulated powered vessels to automatically provide their identity, location and other navigational data to a central receiving base to facilitate navigational control and safety.



back to top

B

ballast -
any substance, other than cargo, which is usually placed in the inner compartment of a vessel to produce a desired draft or trim.

bareboat charter - (demise charter) -
a form of vessel rental in which the charterer assumes total responsibility for the vessel and its operations as if it were his own.

beam -
the breadth of a vessel.

bell suction -
the flared open end of a cargo pipeline which is situated at close tolerances to the bottom of a liquid cargo tank.

bilge -
the lower inner space of a vessel's hull.

bin -
a walled enclosure built on the deck of a barge for the purpose of retaining cargo; also called a pen or cargo box.

bounding angle -
a steel angle used for reinforcement at the junction of two steel plates.

bow -
the forward or front end of a vessel.

boxed end -
the end of a barge which is squared for the full depth and width of the hull.

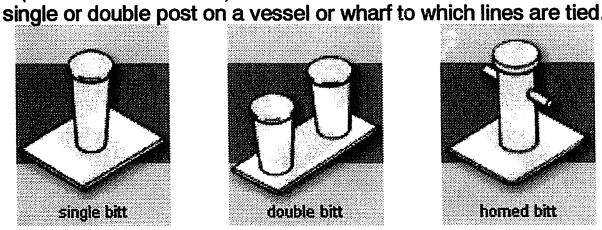
bridle -
a V-shaped chain, wire, or rope attached to a vessel being towed to which the towline is connected.


bridle

buck frame -
a transverse truss.

bulkhead -
an upright partition separating compartments.

bitt (bollard or timberhead) -
a single or double post on a vessel or wharf to which lines are tied.



bollard pull -
the static pulling force of a tugboat measured in pounds.

bulwark -
the side of a vessel which extends above the upper deck.

buoy -
a stationary floating object used as an aid for navigation.

butterworth -
a washing process used to gas free or clean a cargo tank, employing hot water or chemicals, sprayed through a patented rotating nozzle.

butterworth opening -
a deck access opening with bolted cover, designed for butterworth operations.

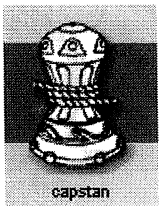
back to top

C

camber -
the upward slope of a vessel's deck, occurring when the centerline is higher than the gunwale.

camel -
a pontoon used to fender between a vessel and a wharf.

capstan -
a hand or machine powered, vertical, spindle-mounted drum which rotates and pulls lines by winding.



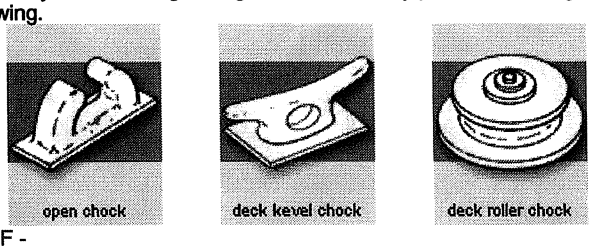
CERCLA -
Comprehensive Environmental Response, Compensation and Liability Act. The U.S. federal statute that establishes the legal and financial responsibilities of those persons or companies which discharge or dispose of hazardous substances on or into land, air, and navigable waters of the U.S. Primarily administered by the U.S. Environmental Protection Agency.

certification -
the act of attesting that a vessel has met specific legal requirements by the issuance of various certificates or validation of documents by certain governmental or private agencies.

channel -
that portion of a waterway which is naturally or artificially deepened to permit safe navigation within certain limits.

charter party -
a contractual agreement between two entities for the purpose of renting, hiring, or leasing the exclusive use of a vessel.

chock -
a heavy metal casting through which lines may pass for mooring or towing.



CIF -
Cost, Insurance, and Freight; cost of transportation and insurance to be paid by the seller of goods to the named point of destination.

classification -
the certification process as administered by certain international agencies whereby a vessel is designed, constructed, and maintained to an agency's requirements.

cleat -
a metal fitting with two projecting horns around which a rope may be made fast. (See kevel.)

clip -
a small steel bracket used for securing or reinforcing.

coaming -
a watertight, raised framework around an opening in the deck of a vessel.

cofferdam -
the space in a vessel between two closely located parallel bulkheads.

COFR -
Certificate of Financial Responsibility; a document issued by U.S.C.G. to a company for a vessel or a fleet of vessels, giving evidence that the vessel owner/ operator has met the financial requirements for oil spill clean up costs as contained in the Oil Pollution Act of 1990.

coils -
a system of small diameter pipes installed inside a liquid cargo tank for the purpose of heating the cargo by means of hot oil or steam.

comehome -
a convex curvature of the rake sides of a barge that produces a narrower beam at the headlog than the beam of the hull.

common carrier -
a federally licensed company which offers to the general public, under published tariffs, to engage in the interstate or foreign transportation of commodities of various types.

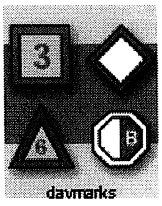
compartment -
an interior space of a vessel's hull which is formed by bulkheads.

contract carrier -
a federally licensed company which offers, under individual contracts, to engage in interstate or foreign transportation of commodities of various types.

back to top

D

daymark -
a marker used as an aid to navigation and which is visible in daylight.



deadman -
an object, such as an anchor, piling, or concrete block, buried on shore.

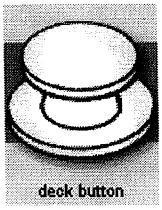
docking tug -
a tugboat which assists a large seagoing vessel to and from its berth.

documentation -
the process of licensing a vessel in either enrollment or registry, resulting in the issuance of a vessel's official document.

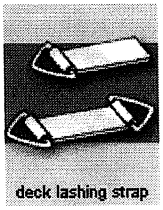
deadrise -
the upward slope of a vessel's bottom occurring when the centerline is deeper than the bilge knuckle; provided to facilitate removal of liquid cargo.

deadweight tonnage -
the cargo capacity of a vessel.

deck button -
a round, steel fitting affixed to a vessel's deck, designed to secure or guide cables for making up barge tows.


deck button

deck lashing strap -
a steel deck fitting normally used as an attachment for cargo tie down lines.


deck lashing strap

"dedicated" tow -
movement of barge(s) between two points by the use of a boat exclusively assigned to that movement (contrast with "tramp" tow).
A "dedicated" boat offers greater control of barge movements than a "tramp" tow, but generally at a higher cost.

demurrage -
a charge assessed for detaining a vessel beyond the free time stipulated for loading or unloading.

detention -
the period of time that an owner or charterer is deprived of the use of his vessel as a result of actions of another party.

E

EHL -
East of Harvey Lock; used with mileage designations on the Gulf Intracoastal Waterway, Harvey Lock being mile zero.

ETA -
Estimated Time of Arrival.

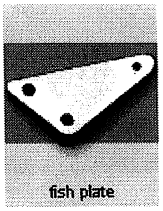
F

fairing -
re-forming distorted steel to its original form or shape.

fairlead -
a device consisting of pulleys or rollers arranged to permit the reeling in of a cable from any direction; often used in conjunction with winches and similar apparatus.

fender -
any device used to absorb and distribute shock and to prevent chafing between a vessel and another object.

fish plate -
a triangular-shaped steel plate used to strengthen the connection between the towing bridle and the towing hawser.

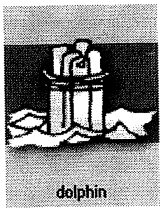

fish plate

flame screen -
a corrosion-resistant fine wire mesh screen used to cover certain openings on tank vessels to prevent the passage of flame into the tank.

flange -
that portion of a steel shape which projects at a right angle to provide strength or a means of attachment to another part.

fleet boat -

dolphin -
a cluster of piles driven into the bottom of a waterway and bound firmly together for the mooring of vessels.

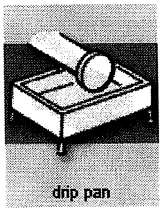

dolphin

doubler -
a steel plate installed on an existing structural plate and used as a strengthening base for deck fittings or as a repair of a damaged area.

draft -
the depth of a vessel's keel below the waterline; often expressed as light draft, or conversely, loaded draft.

draft marks -
the numerical markings on the sides of a vessel at the bow and stern, which indicate, at the lower edge of the number, the amount of water the vessel draws.

drip pan -
an open container, located on deck under the ends of a pipeline header to retain cargo drippage. Required on all U.S.C.G. certified tank barges.


drip pan

drydocking -
the removal of a vessel from the water to accomplish repairs or inspections.

dumb vessel -
a vessel without means of self-propulsion.

dunnage -
any materials used to block or brace cargo to prevent its motion, chafing, or damage and to facilitate its handling.

back to top

ETD -
Estimated Time of Departure.

expansion trunk -
a raised enclosure around an opening in the top of a liquid cargo tank which allows for heat expansion of the cargo.

back to top

fleeting area (fleet) -
a designated portion of a waterway where vessels are regularly moored and tended.

F.O.B. -
Free on Board; cargo delivered to and placed on board a carrier at a specific point without charge.

freeboard -
the distance from the waterline to the main deck of a boat or barge.

freeing port -
a large opening in the bulwark on an exposed deck of a seagoing vessel which provides for the rapid draining of water from that deck.

fully found -
a vessel completely equipped and manned for service.

FWPCA -
Federal Water Pollution Control Act; the U.S. federal statute that establishes the legal and financial responsibilities of those persons or companies which discharge or dispose of oil or hazardous substances into or upon the navigable waters of the U.S. Primarily administered by the U.S. Coast Guard.

a boat which primarily tends, tows within, or otherwise services a fleeting area.

back to top

G

gas free -
the process of removing all hazardous gases and residues from the compartments of a vessel.

gasket -
an elastic packing material used for making joints watertight.

gauge -
a waterway marker which measures the level of the water in foot increments; also refers to the specific measure on the gauge.

GIWW -
Gulf Intracoastal Waterway.

gross tons -
the volume measurement of the internal voids of a vessel wherein 100 cu. ft. equals one ton.

gunwale (gunnel) -
that part of a barge or boat where the main deck and the side meet.

gusset -
a steel plate used for reinforcing or bracing the junction of other steel members.

back to top

H

harbor boat -
any powered vessel which is used primarily in harbor operations.

hatch -
a removable cover over the cargo hold of a vessel.

hawser -
a large circumference rope used for towing or mooring a vessel or for securing it at a dock.

headlog -
the reinforced, vertical plate which connects the bow rake bottom to the rake deck of a barge or square-stemmed boat.

head of navigation -
the uppermost limit of navigation from the mouth of a waterway.

hip towing (hipping) -
a method of towing whereby the vessel being towed is secured along-side the towboat.

home port -
the port city which is the home base of a vessel or the city from which it is documented.

horsepower -
a standard unit of power which is often classified in connection with engines as brake, continuous input, intermittent, output, or shaft horsepower.

hull -
the main body of a vessel which provides flotation.

back to top

I

ICC -
Interstate Commerce Commission; a U.S. governmental agency which regulates the domestic transportation of certain commodities.

inland waters -
considered to be the canals, lakes, rivers and their tributaries, and bays and sounds of the land mass of a country.

integrated tow -
a tow of box-ended barges which, as a complete unit, is raked at the bow, boxed at the intermediate connections, and boxed or raked at the stern.

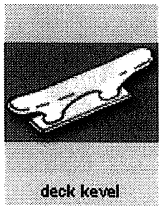
back to top

K

keel -
the lowest structural member of a ship or boat which runs the length of the vessel at the centerline and to which the frames are attached.

keel line -
an imaginary line describing the lowest portion of a vessel's hull.

kevel (caval) -
a heavy, metal deck fitting having two horn-shaped arms projecting outward around which lines may be made fast for towing or mooring of a vessel.


deck kevel

knot -
one nautical mile per hour; used as a unit of measurement in expressing the rate of speed of seagoing vessels and the relative speed of water currents.

back to top

L

landing -
an improved waterfront property which facilitates loading, unloading, and servicing of vessels.

lightening hole -
a hole cut in a plate or frame to reduce its weight without reducing its strength.

lighter -
a vessel, usually a barge, that is used in loading or unloading a ship or in transporting cargo in and around a harbor.

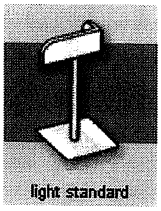
limber hole -
a drain hole near the bottom of a frame or bulkhead.

lines -
the ropes or cables used on a vessel for towing, mooring, or lashing.

loadline marks -
a set of permanent markings on the side of an oceangoing or Great Lakes vessel which denotes its maximum legal operating draft under certain specified conditions and which is determined by one of the internationally-recognized assigning agencies.

light screen -
a structure surrounding a vessel's navigation light so as to shield the light from view at certain points of the compass as required by navigational regulations.

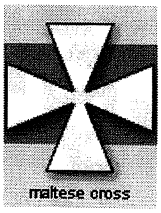
light standard -
a structure on a vessel used to hold a navigation light.


light standard

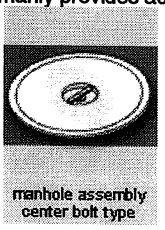
M

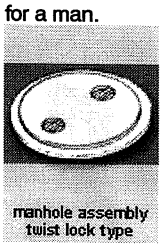
make-up -
the act of final positioning and securing of the vessels that form a tow.

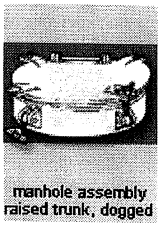
Maltese Cross A-1 -
the designation used by ABS which signifies that a vessel has met the classification requirements of that agency.


maltese cross

manhole -
a framed opening in the deck of a vessel which primarily provides access for a man.


manhole assembly center bolt type


manhole assembly twist lock type


manhole assembly raised trunk, dogged

manhole cover -
a cover which seals a manhole and is usually designed to lock in place by twisting or using a centerbolt, studbolts, or dogs.

MARAD -
the U. S. Maritime Administration.

marine chemist -
one who is certified to perform inspections in accordance with the Standard for the Control of Gas Hazards on Vessels to be Repaired as adopted by the National Fire Protection Association.

N

nautical mile -
a unit of length used in sea navigation equal to 1852 meters or approximately 6076 feet.

navigable waters -
those waterways upon which commercial or private vessels are able to operate in their customary mode of navigation.

O

OCMI -
Officer in Charge of Marine Inspections at a U.S. Coast Guard Marine Inspection office. Such offices are located in a number of U.S. ports.

official number -
the registration number assigned by the U.S. Maritime Administration to a U.S. documented vessel which is permanently marked on the main beam of that vessel.

P

padeye -
a steel fitting formed by a flat doubler plate and vertical steel

lock -
an enclosure on a river or canal, with movable, watertight gates, through which vessels pass, and proceed from one water level to another by raising or lowering the water within the lock chamber.

logbook (logs) -
the official records of the daily operations of a manned vessel, kept in detail by the master.

back to top

marine chemist's certificate -
the documentation of a vessel's inspection by a marine chemist and his assignment of standard safety designations to the inspected compartments or spaces.

master -
the captain of a vessel; the person who has complete charge of and authority aboard an operating vessel.

mats -
slabs, usually constructed of timbers, which are placed on the deck of a vessel for the purpose of supporting and distributing the weight of heavy loads.

milemarker (mileboard) -
a marker set up to indicate distances in miles along a waterway.

model hull -
a type of hull design in which the form is molded, curved, and shaped into a pointed stem and rounded stern.

molded depth -
the distance from the top of the keel to the top of the upper deck beams amidships at the gunwale.

MRGO -
Mississippi River Gulf Outlet; the deep draft waterway connecting the New Orleans Inner Harbor Navigation Canal to the Gulf of Mexico.

back to top

net tons -
the gross tons of a vessel less deductions for certain specified non-cargo spaces resulting in a net volume capacity of 100 cu. ft. per ton. (See gross tons.)

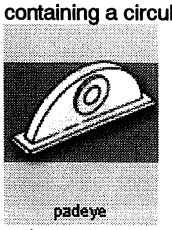
back to top

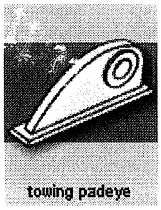
offshore waters -
a common term for those waters which are beyond inland water limits and have the technical classification of oceans.

back to top

port -
the left-hand side of a vessel when facing forward; a city having a

member containing a circular opening.

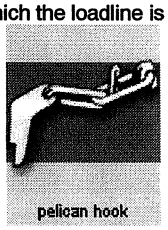

padeye

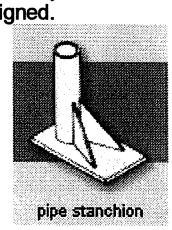

towing padeye

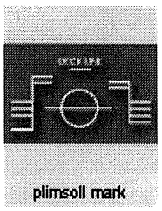
pelican hook -
a hinged hook held closed by a ring and used to provide the quick release of an object which it holds.

pipe stanchion -
a steel deck fitting consisting of a vertical post with angled bracket (s) on one side, welded to a doubler plate, which is welded on the deck of a vessel to restrain the movement of cargo, such as pipe.

Plimsoll mark -
the primary loadline mark which is a circle intersected by a horizontal line accompanied by letters indicating the authority under which the loadline is assigned.


pelican hook


pipe stanchion


plimsoll mark

R

raised rake -
the rake of a barge which has sheer.

reachrod -
a steel rod which connects an above deck valve handle to a below deck valve.

registered -
pertaining to certain vessel data calculated under specific rules and officially documented, such as registered length.

rubrail -
a protective railing on the hull of a vessel which is used for fendering.

Responsible Carrier Program - (RCP)
A vessel safety management program developed by the maritime industry through the American Waterways Operators and designed as a framework for continuously improving the industry's safety performance. AWO members use the RCP as a guide in developing company-specific safety and environmental programs that are tailored to the unique operational environments found in the barge and towing industry. The program complements and builds upon existing government regulations, requiring company safety standards that exceed those required by federal law or regulation.

S

sailing line -
the preferred course for safe and efficient navigation in the channel of a waterway.

scow -
another term for a deck cargo barge having a hull design of a flat bottom, square ended rakes, and usually with a deck cargo bin.

scupper -
a drainage opening cut flush with the deck of a vessel through the bulwark or bin wall.

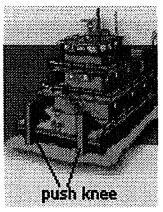
seaworthy -
harbor for vessels; a port hole.

pv valve -
pressure vacuum relief valve; a valve which automatically regulates the pressure or vacuum in a tank.

propeller -
a mechanical device having radiating blades which is mounted on a revolving, power-driven shaft for the purpose of propelling a boat; also called a screw or wheel.

pushboat -
a highly maneuverable, inland waters, shallow draft towboat usually designed with a square bow and towing knees which facilitate its primary method of towing which is pushing.

push knee (tow knee) -
a vertical, reinforced steel structure installed on a vessel to facilitate push towing. The height of the knee allows for variance in freeboard between vessels.


push knee

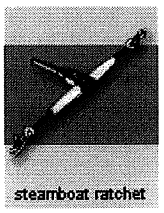
back to top

Rules of the Road -
a code governing vessels as to the lights to be carried, the signals to be made, and their safe and proper navigation in order to avoid collisions. Statutes of the United States provide varying regulations for two areas of navigation. These regulations are known as Inland Navigation Rules and International Navigation Rules.

running lights -
those lights required to be shown at night aboard a vessel or a tow while underway.

back to top

steamboat ratchet -
a sleeve, internally threaded at the ends and with attached eye-rods, equipped with a ratchet used to turn the sleeve, thereby pulling the rods toward each other.


steamboat ratchet

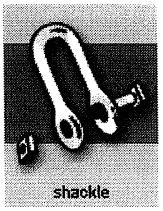
stem -
the main vertical structural member which forms the foremost part of a boat's model bow.

stern -
the after or rear end of a vessel.

the reasonably staunch, sound, and fit condition describing a vessel's capability to safely carry its cargo and complete its intended voyage or use.

semi-integrated barge -
a barge which is raked at one end and boxed at the other end.

shackle -
a U-shaped metal fitting used as a connection for line, cable, or chain and which has a pin secured through its end by a nut cotterpin, or screw threads.


shackle

sheer -
the upward curvature or angle of a vessel's deck at the bow or stern.

shifting -
the short movement or transfer of a vessel within a harbor or mooring area.

skeg (skag) -
a framed steel plate structure which acts as a fixed rudder under the stern rake of a barge; also, the after part extension of a boat's keel upon which the rudder rests.

slopesheet -
the sloped vertical steel plate forming the end of the hopper barge cargo compartment and which is part of the rake bulkhead.

SOPEP -
Shipboard Oil Pollution Emergency Plan; a U.S.C.G. approved set of guidelines for responding to a spill or potential spill of oil from all U.S. flag oil tankers of 150 gross tons and above, as mandated in Regulation 21 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78).

sponson -
an addition to the side of a vessel that is outside its normal hull and which provides added deck space and/or greater flotation stability.

spud -
a steel or wooden post or pile that is placed vertically through a well in the hull of a vessel and which, when lowered to the bottom of the waterway, anchors the vessel.

spudwell -
a casing which is attached to or passes through the hull of a vessel through which a spud is raised or lowered.

starboard -
the right-hand side of a vessel when facing forward.

T

tank -
an enclosed space used for holding liquids.

time charter -
a contract for the services of a vessel for a specified period of time during which the primary control and management of the vessel remain with the owner.

tow -
to push or pull vessels on a waterway; also refers to the unit comprised of the towing vessel and the vessels being towed or only the vessels being towed.

towboat -
any powered vessel which is used for towing.

" tramp" tow -
movement of barge(s) between two points by including it/them in a tow of a boat and other barges going in the same direction (contrast

sternlog -
the reinforced, vertical shell plating which connects the stern rake bottom to the rake deck of a barge.

strake -
a longitudinal or transverse row of steel hull plates.

strapping table -
a chart used to convert readings of liquid levels in the tanks of a barge to volume measurements of that liquid.

strongback -
the bar in a centerbolt manhole cover assembly which is drawn up against the manhole ring to pull the cover down tight.

superstructure -
the structural part of a boat above the main deck.

survey -
a critical examination or inspection of a vessel, cargo, or marine structure for the purpose of ascertaining desired facts and conclusions when necessary.

survey, condition -
a survey that determines in some detail the specific condition of a vessel or of cargo; usually performed at the commencement or termination of charters or voyages for the agreed mutual benefit of various parties.

survey, damage -
a survey that determines the exact extent of damages incurred and specifies repair requirements.

survey report -
the written evidence of the survey.

survey, suitability -
a survey that determines whether a vessel and its equipment are capable of adequately and safely performing an intended task.

survey, trip and tow -
a survey in which the surveyor has full responsibility for inspecting and approving the suitability of the towing vessel, its gear and its tow, the loading and lashing of the cargo, and the navigational procedures, all in relation to the trip intended.

survey, valuation -
a survey that determines the current market value and may also express replacement value.

surveyor -
a qualified marine inspector who performs surveys.

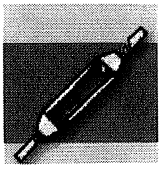
back to top

transom -
the hull plate and its framing that form the vertical end of a box-shaped barge; also, the frame plate forming the stern of a square-ended boat.

truss -
a rigid framework of horizontal, vertical, and diagonal structural members designed to support loads and reinforce a vessel's hull.

tugboat -
a model hull towboat of relatively deep draft used primarily for pull towing and designed for navigation in open or unprotected waters.

turnbuckle -
a connecting device usually used with cable or chain and which takes up slack by rotating on its screw threads.



with "dedicated" tow). It is sometimes necessary to transfer barges being "tramped" from one boat to another to achieve the desired route and destination. Cost is generally less than the use of a "dedicated" boat, but control of the timing of barge movements is also less.

back to top

U

ullage opening -
a small, covered opening in the top of a cargo tank through which measurements are made to determine the level of the liquid in the tank.

U.S.C.G. -
the United States Coast Guard.

back to top

V

VCG -
vertical center of gravity; an important computation used in the determination of the stability of a vessel with its cargo.

VRP -
Vessel Response Plan; a U.S.C.G. approved set of guidelines for responding to a spill or potential spill of oil from tank vessels, including training and testing procedures, as mandated in the Oil Pollution Act of 1990.

VTC -
Vessel Traffic Control; a central control system used in some ports to safely direct navigation.

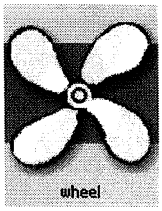
Vessel Security Plan - (VSP)
A U.S.C.G. approved set of guidelines providing for the secure operation of regulated vessels under various levels of national security warning levels, including specific protections, defenses and procedures as mandated by the Maritime Transportation Security Act of 2002.

back to top

W

watertight -
of such construction or fit as to prevent the passage of water, except when structural discontinuity, physical rupture, or purposeful opening may occur.

wheel -
another term for a propeller; also, a boat's steering wheel. WHL - West of Harvey Lock; used with mileage designations on the Gulf Intracoastal Waterway, Harvey Lock being mile zero.


wheel

WHL -
West of Harvey Lock; used with mileage designations on the Gulf Intracoastal Waterway, Harvey Lock being mile zero.

WQIS -
Water Quality Insurance Syndicate; an underwriting agency formed by various insurance companies for the purpose of insuring against losses resulting from water pollution.

back to top

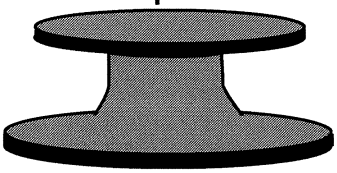
NOTE: The preceding terminology is defined as it is used in the shallow draft boat and barge industry in the United States. For complete information regarding requirements or regulations of governmental or private agencies, we recommend direct contact with those agencies.

APPENDIX D

Diagrams of Deck Fittings and their Uses
(Produced by Ingram Barge Company)

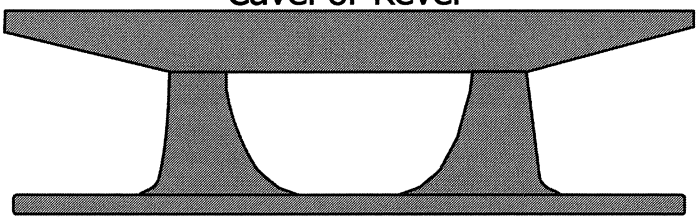
DECK FITTINGS AND THEIR USES

Spool



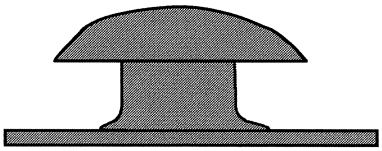
The spool is designed primarily for wire and is usually found on the head of a towing vessel.

Cavel or Kevel



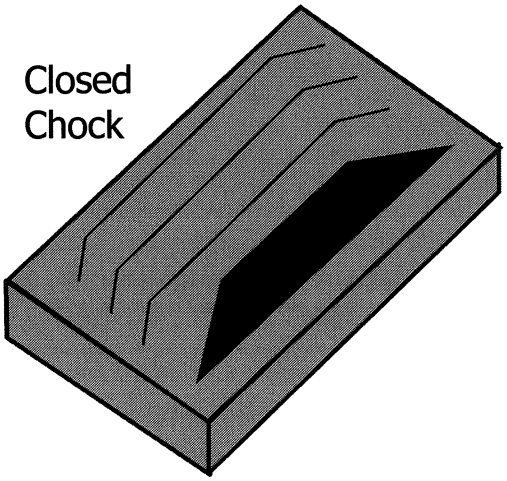
The Kevel is designed for wire or line and is found on barges, boats and docks. Use a figure "8" criss-cross fashion when using with a line.

Button



The button is designed primarily for wire and is found on the head of a towing vessels and barges.

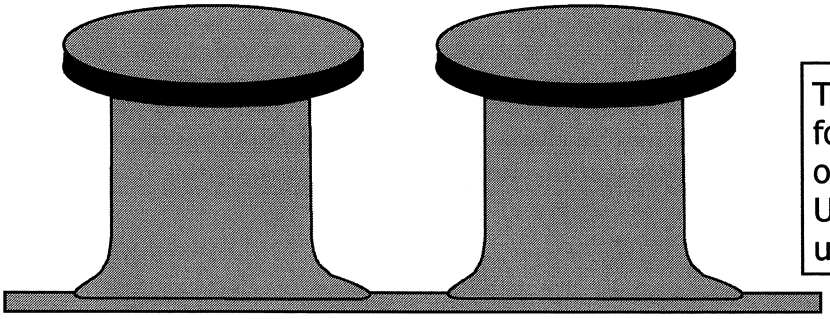
Closed Chock



The closed chock is designed for wire or line and is found on some boats and barges. Used mostly as a fair lead to hold down wires or lines.

Timberheads

P



Timberheads are designed for wire or line and are found on barges, boats and docks. Use clockwise wraps when using with a line.

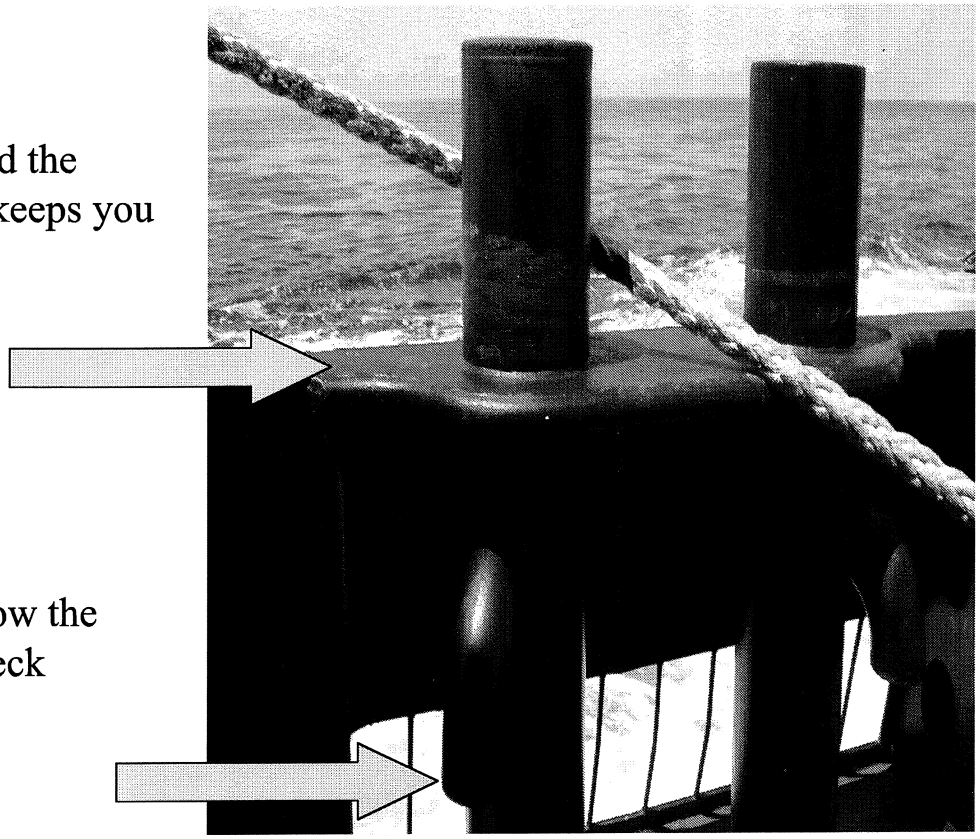
APPENDIX E

Additional Diagrams and Descriptions of Vessel Features
(Produced by Eric Johansson-State University of New York)

Bulwark

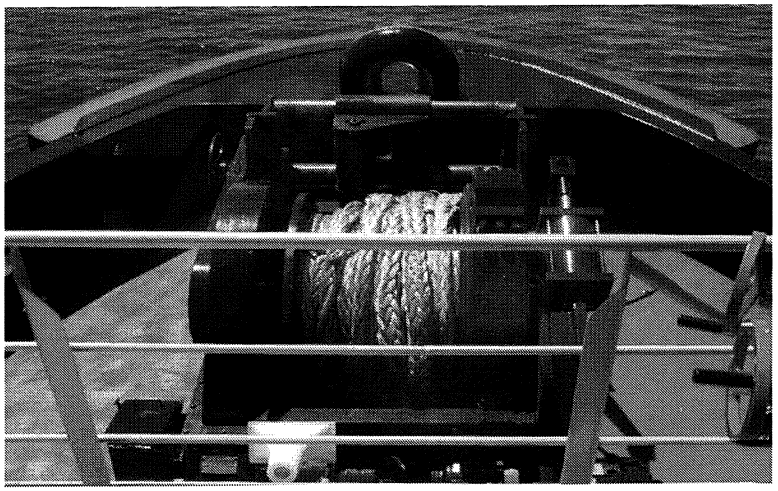
- Bulwark - A safety wall around the main deck of some boats that keeps you from slipping overboard.

- Freeing Ports - Opening to allow the egress of water off the main deck



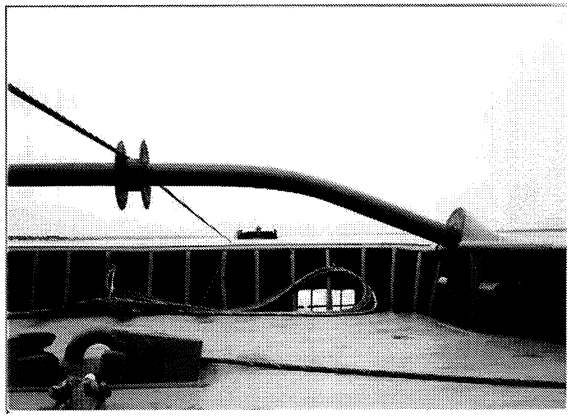
Bow Winch

- Bow Winch - Located on the bow and is common among tractor tugs and other vessel assist tugs.

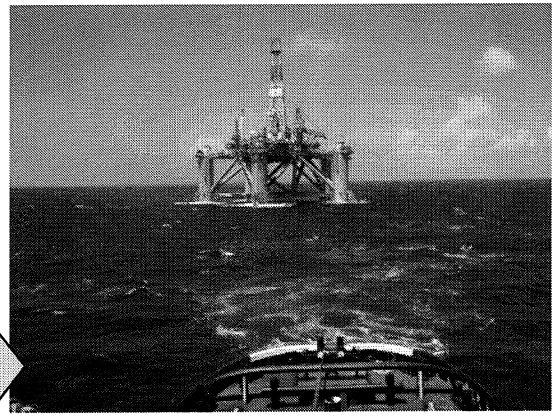


Tow Spans

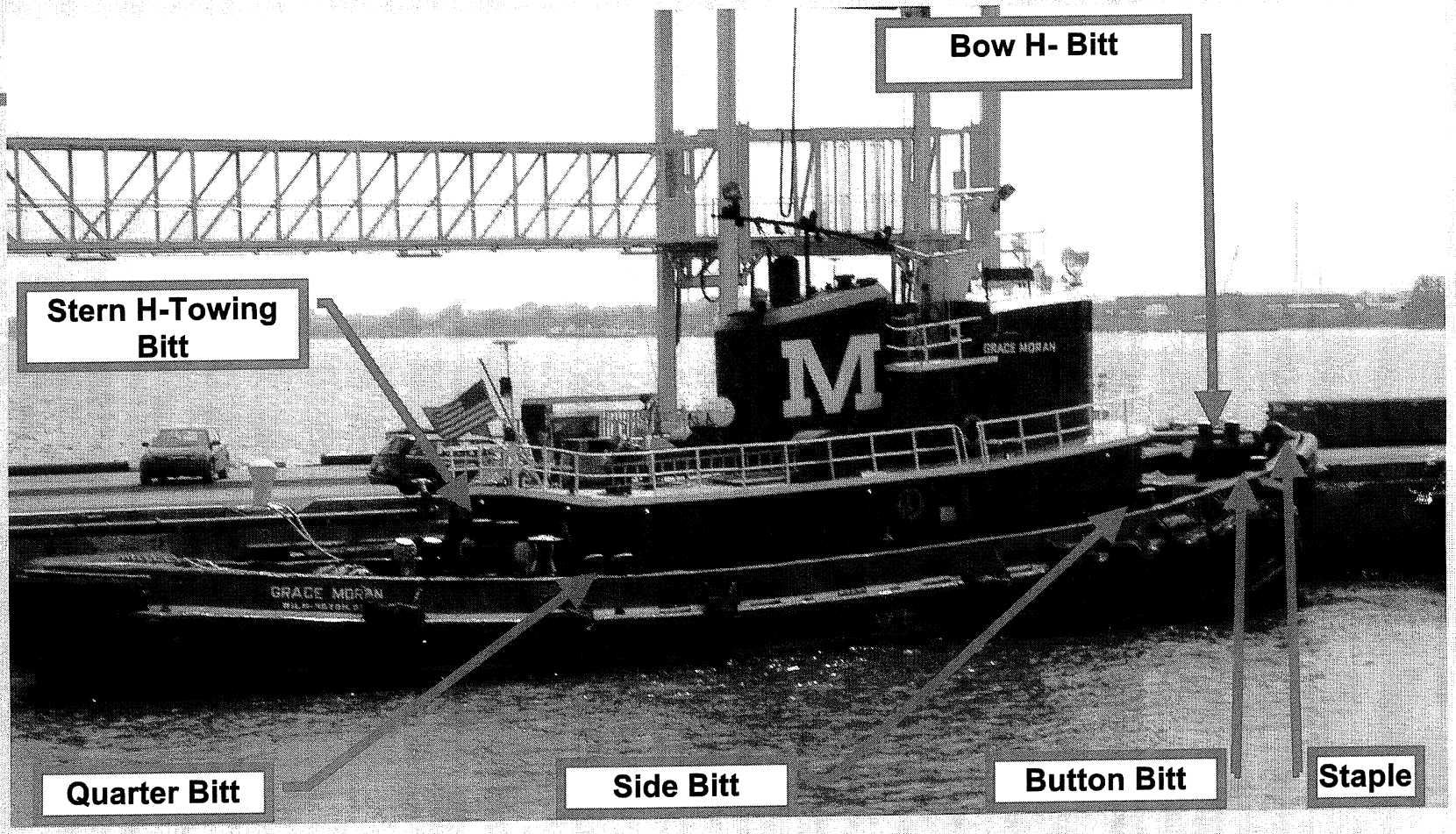
- Texas Tow Bar - reduces friction for tow wires. *Texas bar has rollers*



- *Dutch bars - Similar to Texas bars sans rollers used for both wire and line with chafing gear.*

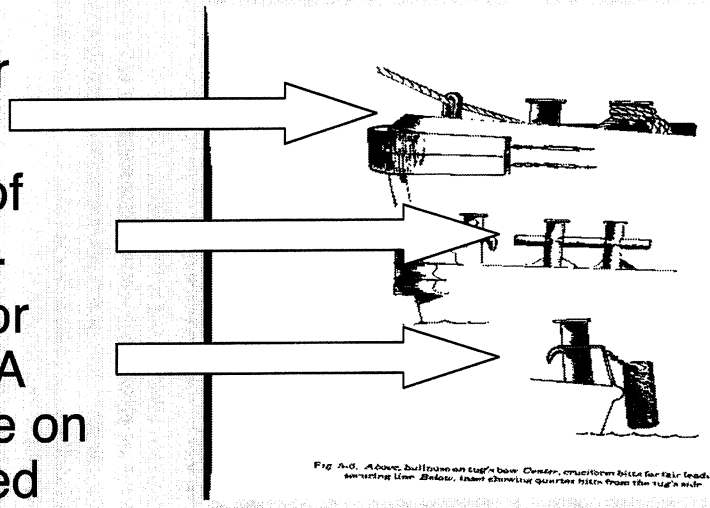


Bitts Names

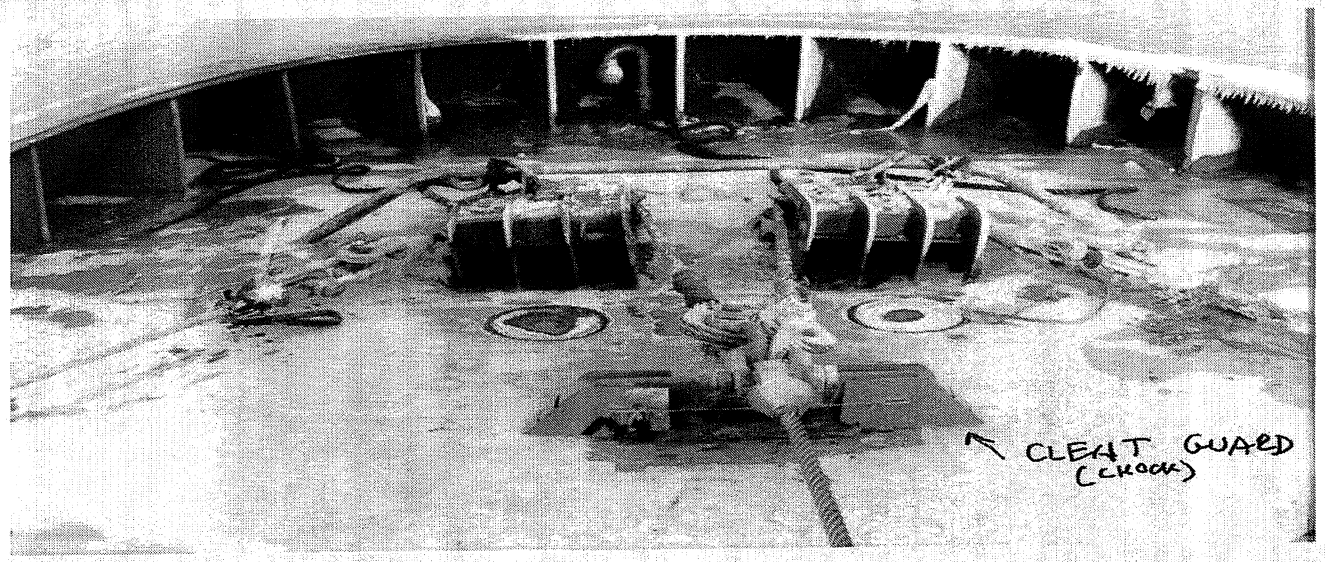

Bow H- Bitt
Stern H-Towing Bitt
Quarter Bitt
Side Bitt
Button Bitt
Staple
GRACE MORAN

Staple, Bitt, and H-Bitts

- The foundation supports for towing bitts terminate in the frames or other substantial structural members below decks
- Staple - Half-round ring for fairleading lines.
- Cavil - Horizontal portion of main bow and stern H-Bitt.
- Horns - Located on Bitts for facilitating line fastening. A round turn should be made on the bitt first and then figured eights.



Cleats



Cleat - Secured to a deck the cleat has two horns to fairlead and/or make lines fast. Cleats with an opening in

Cleat Chocks - Cleats equipped with a chock in the center.

Cleat Guards - Made of various materials (wood, metal, etc.) when secured they prevent cables and/or lines from fouling

APPENDIX F

Declaration of Inspection

DECLARATION OF INSPECTION PRIOR TO BULK CARGO TRANSFER		COMP	BEFORE	AFTER
Vessels:				
Transfer Facility:				
Location:				

The following list refers to requirements set forth in detail in 33 CFR 156.150 and 46 CFR 35.35-30 *The spaces adjacent to items on the list are provided to indicate that the detailed requirement has been met.*		**INITIAL**	
		Deliver	**Receiver**
1.	Communication System/Language Fluency. (156.120 (O) (154.560) (155.785) (156.120V))		
2.	Warning Systems And Red Warning Signal. (35.35-30)		
3.	Adequate Vessels Moorings. (156.120 (a))		
4.	Transfer System Alignment. (156.120 (d)		
5.	Transfer System; unused components (156.120 (a) (f) (154.120) (155.805))		
6.	Transfer System; fixed piping. (156.120 (g))		
.7.	Overboard Discharge/Sea Suction Lashed Valves. (156.120 (h))		
8.	Hoses or Loading Arms condition. (156.120 (I) (j) (154.500) (154.510))		
9.	Hoses; length and support. (156.120 (b) (c)		
10.	Connections. (156.120 (k) (p) (156.130))		
11.	Monitoring Devices. (156.120 (I) (154.525))		
12.	Discharge Containment System Capacity Maintained. (156.120 (m) (n) (p) (154.530) (155.320)		
13.	Scuppers or drains. (156.120 (o) (155.310))		
14.	Emergency Shutdown. (156.120 (r) (154.550) (155.780))		
15.	Repair Work Authorization. (35.35-30)		
16.	Boiler and Galley Fires Safety. (35.35-30)		
17.	Fires or Open Flames. (35.35-30)		
18.	Lighting (sunset to sunrise). (156.120 (y) (z) (154.570) (155.790)		
19.	Safe Smoking Spaces. (35.35-30)		
20.	Spill and Emergency Shutdown Procedures. (156.120W)		
21.	Sufficient Personnel. (156.120 (s) (156.115 (u))		
22.	Pre-Transfer Conference – Face to Face. (156.120 (w))		
23.	Agreement to begin Transfer. (156.120 (x))		
24.	Person In Charge in immediate vicinity/positioned to observe and supervise transfer (156.160)		

I do certify that I have personally inspected this facility or vessel with reference to the requirements set forth in section (35.35-30) and that opposite each of them have indicated by my initials that the regulations have been complied with.

DEL. UNIT		REC. UNIT	
	INITIAL PERSON IN CHARGE		INITIAL PERSON IN CHARGE
	TITLE		TITLE
	TIME AND DATE		TIME AND DATE

I certify that I have read the above declaration and detailed requirements and all conditions remain satisfactory.

UNIT	SUBSEQUENT PERSON IN CHARGE	TITLE	TIME AND DATE
DELIVERING			
RECEIVING			
DELIVERING			
RECEIVING			
DELIVERING			
RECEIVING			
DELIVERING			
RECEIVING			

TIME AND DATE COMPLETED