

**MEETING OF THE HOUSTON/GALVESTON NAVIGATION
SAFETY ADVISORY COMMITTEE
November 23, 1999**

The fifty-fifth meeting of the Houston/Galveston Navigation Safety Advisory Committee was held on Tuesday, November 23, 1999, in the Conference Room at the Houston Pilots' Office, Houston, Texas. A list of attendees is attached as enclosure (1). A recording of the meeting is available upon request. This recording must be requested by November 23, 2000.

CALL TO ORDER

The meeting was called to order by Chairman, Tim Leitzell, with quorum, at 10:00 AM.

OPENING REMARKS BY COMMITTEE EXECUTIVE DIRECTOR

Captain Wayne Gusman welcomed members and guests and made some general remarks, noting that the principal purpose of the meeting was to hear from Captain Robert Ross, Chief, Office of Vessel Traffic Management, Marine Safety and Environmental Protection Directorate, Coast Guard Headquarters.

OPENING REMARKS BY COMMITTEE CHAIRMAN

Chairman Leitzell greeted committee members and attendees. Self-introductions of the Committee members followed.

APPROVAL OF SEPTEMBER 9, 1999 MINUTES

A motion was made and seconded to approve the previous meeting's minutes. Motion carried.

PRESENTATION ON AUTOMATED INFORMATION SYSTEM AND PORT AND WATERWAYS SAFETY ASSESSMENT

Captain Ross began his presentation by noting that PAWSA is a project sponsored by the Coast Guard's Vessel Traffic Management program. In essence, it is a risk management tool for identifying port-specific navigation risks and developing vessel traffic management strategies to minimize the impact of those risks. Captain Ross noted that in many ports there is no forum like HOGANSAC and that committees such as HOGANSAC increase awareness of maritime safety issues. Thus, PAWSA provides a formal opportunity for individuals to discuss navigational issues across organizational boundaries in ports that lack formal organizations such as HOGANSAC.

According to Captain Ross, the Coast Guard's VTM program is a dynamic one. Its objective is to ensure predictability on our nation's waterways to maximize safety and vessel throughput. A central theme, partnership efforts between parties interested in navigation safety issues, is critical to the successful implementation of VTM measures. Captain Ross also discussed the variety of VTM tools (e.g., Rules of the Road, regulated navigation areas, vessel traffic information service and vessel traffic service) and the principles (proposed by the National Dialogue Group as part of the Federal Government's Marine Transportation System initiative) behind VTM. Captain Ross noted that the Coast Guard recognizes that different ports have different VTM requirements. Thus, no single VTM solution can be imposed nationwide.

Finally, Captain Ross noted that there are three thrusts to his view of the VTM model: partnership with interested entities; a holistic approach to vessel traffic management issues (e.g., use the right tool and only the right tool to solve the specific problem); and, automated information systems.

The balance of Captain Ross' presentation then focused on two specific VTM issues: AIS and PAWSA.

Automated Identification Systems

There are three types of AIS systems (ship-to-ship, ship-to-shore-to-ship (e.g., a method of alternative surveillance technology for a VTS), and ship-to-shore). Captain Ross identified the various hardware components of an AIS system and discussed the inherent flexibility of AIS technology. He discussed the various ways in which AIS can be integrated into VTS or VTIS operations.

The prevailing issue in AIS development is approval of international standards. There are four standards to be established before AIS can become commercially viable and universally employable: functional (what is wanted from an operator's perspective), technical (how to make the device work), type certification and testing (how to make sure a particular device works properly) and frequency (what bandwidth the equipment will be licensed to transmit on). The first two standards have been approved. The third is a work in progress and is expected to be approved by May 2000. The final standard, frequency allocation within the United States, is the subject of ongoing discussion between the Federal Government and the private corporation who purchased various portions of the VHF-FM spectrum at Government auction. Captain Ross noted that the Coast Guard expects to begin testing various AIS devices in New Orleans early next year, even as the final stages of the standards-setting process are completed.

A Ross Corporation AIS transponder was available for review. Captain Ross highlighted the principal features and limitations of the equipment. He discussed the ability of the equipment to interact with a variety of navigational equipment aboard a vessel (e.g., an ARPA, pilot carry-aboard device). He also discussed some of the ways AIS is used to pilot a vessel, citing specific examples from the ports of New Orleans and Los Angeles/Long Beach.

The issue of carriage requirements is a topic of keen interest in the maritime community. After discussing the various options, Captain Ross indicated that the Coast Guard's preference is to adopt IMO carriage requirements for vessels in the seagoing trade (and over 300 gross tons in size) and to implement domestic requirements for non-SOLAS vessels. Captain Ross shared the tentative carriage-requirements proposal with the group.

Chairman Leitzell asked whether there would be any specific AIS training requirements. Because international AIS standards focus on system requirements (e.g., what the system should be expected to perform) rather than specific components (e.g., how the system achieves its expected objectives) it may be difficult to impose specific training requirements.

Vessel Traffic Service Partnership Concept

A principal component of the Coast Guard's approach to VTM involves partnerships to enhance dynamic dialogue on VTM solutions. Under the VTS partnership concept envisioned in VTM, each party to the partnership contributes something of value,

but not necessarily money, to the partnership. VTM partnership arrangements vary in scope and organizational relationships. In some cases these partnership efforts extend to formal involvement in a VTS/VTIS operations. For example, there are limited traffic advisory services in which watchstanders do not have captain of the port authority (for example, Delaware Bay). There are also different models of VTS organizations, including units that are federally funded and staffed (as in Houston), federal facilities that operate with joint staffing (as proposed for New Orleans) and jointly-staffed, non-federal facilities (as in Long Beach).

Port and Waterways Safety Assessment

The Port and Waterways Safety Assessment (PAWSA) is a risk-based decision support tool to help local stakeholders quantify port-specific navigation risks and identify associated VTM strategies to minimize the impact of those navigation risks. The process employs a risk model developed by Dr. Jack Harrold of George Washington University. Local stakeholders, selected by the Captain of the Port, work through a process to analyze navigation risks in a particular area. The COTP is responsible for identifying the make-up of the committee. The risk assessment process is accomplished with the help of a professional facilitation team hired by the Coast Guard.

The PAWSA assessment process begins with a unique approach to risk ranking in which participants choose between pairs of navigation risks to build a port-specific model. By identifying risk factors within specific risk reduction categories (such as traffic conditions, environmental considerations) and weighing risks through pair-wise comparisons (e.g., weather versus traffic density) a risk model can be mathematically developed. The result of the PAWSA process is a model that identifies (and quantifies) local navigation risks, develops an action plan for the host COTP, establishes a risk-assessment baseline, identifies resource requirements for various risk reduction strategies, and provides supports for associated budgetary requirements.

Captain Ross noted that, since Houston already has a Federally-funded VTS, one objective of the local effort will be to calibrate the national model for ports with VTS programs in place. Thus, the Houston PAWSA represents an opportunity to refine the PAWSA tool for other ports.

Captain Ross concluded his presentation by discussing some of the study results, including specific VTM recommendations, obtained from PAWSA efforts performed in other ports.

Committee Discussion

Captain Gusman thanked Captain Ross for his willingness to address the Committee on such short notice, given the numerous constraints in his schedule. He then led the Committee's discussion on the PAWSA process for the Houston/Galveston area. He noted that the purpose for the Committee's special meeting was to identify participants for a local assessment team. Captain Gusman noted that the PAWSA will be held during the week of January 24, 2000.

Captain Ross identified the local members of the implementation team. The team leader, LCDR Joe Re, discussed the implementation schedule and the types of individuals who should be involved in the PAWSA process. The discussion referred to documents provided to the Committee in a read-ahead package.

Chairman Leitzell suggested that the makeup of the workshop panel mirror that of the Committee. Captain Gusman reviewed a list, prepared by the PAWSA project officer at Coast Guard Headquarters, of recommended stakeholders. The focus is on individuals with navigation expertise. Captain Gusman noted that the process has the ability to incorporate interested parties who may not necessarily be direct stakeholders and thus voting participants on the workshop panel. Colonel Buechler suggested that the most critical portion of this process is carefully identifying who is appropriate to serve on the workshop panel.

Captain Gusman noted that PAWSA is one of many tools available to assess port navigation risks. He indicated that part of the PAWSA process involves continuing assessments (after the initial study) to ensure that the recommendations remain timely and are followed up on.

Captain Morris suggested that the offshore rig community be considered for membership on the assessment team since they are not represented on HOGANSAC. Mariners piloting offshore rigs in and out of Galveston Bay encounter navigation risks which differ from those experienced by other port users.

Captain Gusman asked the Committee to consider carefully the PAWSA process and provide specific recommendations in terms of workshop participants to the implementation team leader. The deadline for this input will be December 3, 1999. LCDR Re indicated that, based on the Committee discussions, he would also look to other organizations (not represented on HOGANSAC) as potential participants in the PAWSA process.

NEXT MEETING

The date of the next meeting was moved to Friday, January 28, 2000. (This date differs from the date set forth in the September 9, 1999 Committee minutes.) The meeting will be held at the Houston Pilots' Office at 9:00 AM. The Committee members and others in attendance were polled and voiced no concerns regarding the location of the next meeting.

The subcommittees will meet January 13, 2000 at the Port of Houston Authority, 111 East Loop North, Houston, Texas, with the Navigation Subcommittee meeting at 9:00 AM, followed by the Waterways Subcommittee.

Proposed agenda items are due to the Committee's Executive Secretary no later than Friday, January 7, 2000.

ADJOURNMENT

The meeting was adjourned at 11:30 AM.

WAYNE D. GUSMAN
Executive Director

Certified: TIM LEITZELL
Committee Chairman

Encl: (1) Attendance for the HOGANSAC meeting of September 9, 1999
(2) Copy of Captain Ross' Slide Presentation