

## Briefing for PWSRCAC Board of Directors – May 2022

**ACTION ITEM**

**Sponsor:** Alan Sorum and the Port Operations and Vessel Traffic Systems (POVTS) Committee

**Project number and name or topic:** 8014 – USCG Approved Basic and Advanced Emergency Ship Handling Courses

1. **Description of agenda item:** The Board is being asked to accept coursework developed by the AVTEC Maritime Training Center as meeting the terms of their contract with the Council. This coursework was developed with AVTEC through project 8014 - USCG Approved Basic and Advanced Emergency Ship Handling Courses to better prepare mariners for real life situations, close an existing knowledge gap, and open career pathways to critical infrastructure positions within the maritime industry.

2. **Why is this item important to PWSRCAC:** Due to ever changing International Maritime Organization (IMO) training guidelines and federal regulations it has become increasingly challenging to become a credentialed mariner. This is especially true for mariners crossing the threshold into officer licensure. Both ship handling courses developed by AVTEC will be USCG approved and will meet the new USCG and IMO requirements for officer licensing. There are no courses like this available in Alaska and the project's simulator scenarios are based on activities occurring in Prince William Sound. AVTEC worked previously with the Council to develop a high-resolution navigation database for the Sound.

Exceptional ship handling skills is mission critical to the safety and success of any maritime organization. Good ship handling makes for more efficient operation and ultimately mitigates related emergencies. Being proficient at maneuvering a ship ensures that the mariner is much less likely to be involved in an incident, and if they are, they will be better prepared to respond to emergency situations.

This project promotes the safe operation of marine vessels in Alaska and beyond. New mariners transitioning into Mate or Master officer positions on unlimited tonnage tankers are now required to take these classes.

3. **Previous actions taken by the Board on this item:**

<u>Meeting</u>	<u>Date</u>	<u>Action</u>
Board	1/28/2021	Approved Annual Long Range Plan.
Board	5/6/2021	Approved FY2022 Budget.

4. **Summary of policy, issues, support, or opposition:** None.

## Acceptance of AVTEC Ship Handling Coursework 4-4

5. **Committee Recommendation:** Captain Robert Thomas of the AVTEC Maritime Training Center made a presentation on the project to the POVTS Committee on March 14, 2022. The Committee was pleased with the final coursework and recommends the Board accept this work as meeting the terms and conditions of the AVTEC contract.
6. **Relationship to LRP and Budget:** Project 8014 – USSCG Basic/Advance Emergency Shiphandling Courses is in the approved FY2022 budget and annual workplan.

**8014--USCG Basic/Advanced Emergency  
Ship  
As of March 23, 2022**

**FY-2022 Budget**

Original	\$30,000.00
Modifications	
Revised Budget	<u>\$30,000.00</u>

**Actual and Commitments**

Actual Year-to-Date	\$27,500.00
Commitments (Professional Services)	<u>\$2,500.00</u>
Actual + Commitments	<u>\$30,000.00</u>
Amount Remaining	<u>\$0</u>

7. **Action Requested of the Board of Directors:** Accept the coursework developed by the AVTEC Maritime Training Center as meeting the terms and conditions of contract 8014.22.01 with the Council.
8. **Alternatives:** None.
9. **Attachments:** AVTEC-AMTC Project Report Letter

Links to:

- [Basic Shiphandling Task Assessments](#)
- [Advanced Shiphandling Task Assessments](#)
- [Basic Shiphandling Simulation Exercise Worksheets](#)
- [Advanced Shiphandling Simulation Exercise Worksheets](#)

Prince William Sound Regional Citizens' Advisory Council

Final Report for Contract No. 8014.22.1, USCG Basic and Advanced Ship Handling Training

#### Executive Summary:

This was a project to complete Basic Shiphandling and Advanced Shiphandling courses during FY 2022. The goal of the project was to develop courses for Basic and Advanced Shiphandling that would be assessment based to better prepare mariners for real life situations, including emergency ship maneuvering. The goal was to develop simulations that utilized the PWS area in training and preparing mariners.

#### Narrative Report

##### **Steps taken prior to starting work on the deliverables:**

After receiving notification that AVTEC had received approval for their proposal to develop “Basic Emergency Shiphandling” and “Advanced Emergency Shiphandling” courses, Robert Thomas, as the new acting Department Head of Maritime reviewed the proposal and scope of work proposed. During this review, it was determined that the proposal as originally submitted was unclear to some extent and by the title of the proposal, impossible to accomplish. AVTEC had proposed in the title to develop “Basic Emergency Shiphandling” and “Advanced Emergency Shiphandling” courses that would be both STCW and USCG approved. Elsewhere in the proposal AVTEC switched between calling the training “Basic Shiphandling” and “Advanced Shiphandling” courses and “Basic Emergency Shiphandling” and “Advanced Emergency Shiphandling” courses.

However, “Basic Emergency Shiphandling” and “Advanced Emergency Shiphandling” courses do not exist in either the STCW or USCG scheme of training courses. What does exist and could be approved as meeting STCW and USCG standards were “Basic Shiphandling” and “Advanced Shiphandling” courses. While some schools do indeed offer both Basic Emergency Shiphandling and Advanced Emergency Shiphandling courses, none of them are STCW or USCG approved as there are no current standards or requirements for these courses.

Realizing this discrepancy in the proposal that was submitted, AVTEC contacted the PWSRCAC staff to discuss this discrepancy and a proposed solution. Because of the detailed nature of the Deliverables focusing on USCG approval of STCW and USCG approved courses, our proposal was to move forward with approved Basic Shiphandling and Advanced Shiphandling courses. This recommendation was made after discussions with the previous Maritime Department Head to determine what he had intended in the original proposal. After discussions with PWSRCAC staff we proceeded along this path. It was determine to focus the simulations in PWS or at least Alaska waters, to make the courses as Alaska centered as possible.

##### **Deliverable A:**

Deliverable A involved the development of two STCW and USCG approved courses: Basic Shiphandling and Advanced Shiphandling.

The work product for this deliverable was a completed Course Syllabus.



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Work commenced on this deliverable on 1 July 2021 and was completed on 15 October 2021.

PWSRCAC staff were advised of the completion of this deliverable on October 18, 2021, and PDF files include the Course Syllabus and the Instruction Manual were delivered on October 20, 2021.

No difficulties were encountered during the development stage of this deliverable.

Both the Course Syllabus and the Instruction Manual were developed using the IMO Model courses 7.03: Officer in Charge of a Navigational Watch; as well as the appropriate NVIC's promulgated by the United States Coast Guard governing training for Officer in Charge of a Navigational Watch (NVIC 12-14 (CH-4) and NVIC 13-14 (CH-4) as well as the training requirements for Master or Chief Mate on Vessels of 3,000 GT or more (NVIC 10-14 (CH-2) and Master or Chief Mate on Vessels of 500 GT or More and Less than 3,000 GT (NVIC 11-14 (CH-3)).

Addition professional publications, including The American Practical Navigator (Bowditch); Naval Shiphandling by Crenshaw; and others were used as references and resources for developing the curriculum.

#### **Deliverable B:**

Deliverable B: Deliverable B involved development of the simulation-based assessments and, if appropriate, a written final exam for students.

The work product for this deliverable was the completed course assessments and exams.

After a staff review, it was determined that the most effective assessment methodologies for these courses would be a simulator assessment and written exam for the Basic Shiphandling course and a simulator assessment only for the Advanced Shiphandling course. Work commenced on this deliverable on 18 October 2021. This deliverable was completed on 25 January 2022 and the appropriate documentation was forwarded to the PWSRCAC staff.

#### **Deliverable C:**

Deliverable C: Deliverable C was submission of both courses to the United States Coast Guard for approval.

The work product for this deliverable was the application to the United States Coast Guard for course review and approval for these two courses.

Work on this deliverable was started on 4 January 2022.

The deliverable for the Basic Shiphandling portion of this project was completed on 27 January 2022.

The deliverable for the Advanced Shiphandling portion of this project was completed on 31 January 2022.

#### **Deliverable D:**



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Deliverable D; Deliverable D was a final written report, including an executive summary and a virtual presentation in PowerPoint format to the Council Board of Directors at an agreed upon meeting time.

The work product for this deliverable was the final report (this document) and the presentation to the Council Board of Directors.

Work on this deliverable was started in October of 2021 to gather the factual information in a timely manner for a complete and detailed report.

**Final Comments:**

The final product, once approved by the National Maritime Center will be a Basic Shiphandling and Advanced Shiphandling course that meets the IMO and USCG requirements for these two training courses with a focus on working in Alaskan waters.

And while technically, this project is now officially completed, from AVTEC's perspective, it will not be totally completed until we receive Coast Guard approval for these two courses. Occasionally, in spite of our research and work, the Coast Guard identifies areas of the curriculum that need further development or clarification. Should that occur with these two courses, AVTEC will continue to work on the curriculum until we have both courses approved.

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