

**Merchant Marine Personnel Advisory Committee (MERPAC)  
Meeting Minutes for Wednesday, January 26, 2000  
Maritime Institute of Technology and Graduate Studies  
Linthicum Heights, MD**

OPENING REMARKS

Chairman Bill Eglinton opened the meeting at 0810. In addition to Mr. Eglinton, MERPAC members in attendance included Mr. Mohan Dadlani, Ms. Lou Edmondson, Ms. Beth Gedney, Mr. Nick Grassia, Ms. Lynn Korwatch, Ms. Jeanne Kraus, Mr. Andrew McGovern, Mr. Joe Murphy, Mr. Roy Murphy, Father Sinclair Oubre, Mr. Bill Sembler, Mr. Richard Stewart, and Ms. Ellen Warner.

The chairman recognized CDR Steve Boyle, who delivered remarks for RADM Robert North who couldn't attend due to inclement weather. RADM North thanked Mr. Glenn Paine of the Maritime Institute of Technology and Graduate Studies (MITAGS) for hosting the meeting. He also thanked MERPAC members who have extended their terms voluntarily because the membership slates have not been approved by the Secretary. He specifically thanked Ms. Korwatch and Mr. Stewart who are plankholders of MERPAC and who have both served past their second terms of office. He also thanked Chairman Eglinton, Ms. Warner, Ms. Streckfus, Ms. Kraus, and Mr. Daschbach who would finish their second terms of office on January 31, 2000.

RADM North has developed a management system to facilitate implementation of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended in 1995 (STCW). There is now an STCW implementation team comprised of staff from headquarters and the NMC. He has also re-allocated resources that ensure that critical tasks receive the attention they merit. The work that MERPAC has been doing is a critical piece of our implementation plan. We have an excellent opportunity to obtain a wide range of opinions on what the performance measures should be. He encouraged both MERPAC's and the public's continued participation in these work groups. He stressed again that, once the performance measures MERPAC recommends to the Coast Guard have been reviewed, they will be published in the Federal Register so that the public can review them and submit additional comments. These public comments will be taken into consideration as we develop the final versions for publication as national guidelines.

A brief update on the Marine Transportation System (MTS) was then given. The Coast Guard will create an MTS subcommittee under the auspices of its Navigation Safety Advisory Council because MTS issues will cut across the lines of interest in various other federal advisory committees. This subcommittee will be comprised of representatives from other advisory committees including MERPAC. This will consolidate MTS issues and prevent duplicative efforts by the other advisory committees. Some of the issues that we anticipate this subcommittee to initially address are: (1) high speed vessel operational measures, including training and qualification of operators; and, (2) discussion of

waterfront/waterway development (siting of marinas/facilities) and the relationship of wakes from passing vessels and other navigation issues. The goal would be to develop a risk matrix from the waterway users' perspective that could be used during the permitting process. The Coast Guard is looking for a MERPAC volunteer to serve on this subcommittee. Interested persons should contact CDR Boyle.

RADM North noted that today's agenda is, once again, ambitious and consistent with the purpose of MERPAC and our Marine Safety and Environmental Protection Performance Plan. Of critical importance is MERPAC's completion of the development of performance assessment guidelines for U.S. mariners to demonstrate their abilities and expertise in the 15 different competencies.

RADM North then returned the floor to Chairman Eglinton, who recognized CDR Boyle for the Executive Director's remarks.

CDR Boyle also thanked Mr. Paine of MITAGS for his efforts in putting on the meeting. The Coast Guard had asked MERPAC to move its meeting forward to complete the performance measures task statement before the stated deadline of January 31, 2000. There will therefore be a longer than usual gap between this meeting and the next meeting, which should be held in the fall of 2000. The Coast Guard intends to return to the spring-fall meeting schedule which had been normal before this meeting. CDR Boyle thanked all MERPAC members for their dedication and hard work in finishing the performance measures task statement ahead of schedule. It was a daunting task but MERPAC stood up to the challenges, logistical and otherwise.

Special thanks were delivered to Chairman Eglinton for his leadership in completing the task statement. CDR Boyle reminded members that the G-M performance plan was given to them at the last meeting—he asked them to please continue to comment and review the plan. CDR Boyle also commented that MERPAC members had been provided with a master list of all recommendations MERPAC has made to the Coast Guard since its inception in 1992.

Chairman Eglinton then made comments. On behalf of MERPAC, he thanked CDR Boyle for his efforts. CDR Boyle is being transferred and this is his last MERPAC meeting. CDR Boyle replied that it had been a pleasure working with MERPAC.

Chairman Eglinton then discussed the events of the working meeting which had taken place on January 25, 2000. He thanked outgoing MERPAC members who are attending their last meeting. He also thanked all members for their hard work on the performance measures task statement. He commented that MERPAC can play a major role in STCW implementation. He reminded members that the full implementation date of Feb 1, 2002 leaves us exactly two years to implement the 95 Amendments to STCW. He also announced that due to inclement weather on January 25<sup>th</sup>, briefings scheduled for that day had been moved to January 26<sup>th</sup>.

The minutes from the previous meeting were discussed, and a minor amendment was made. The minutes were then unanimously adopted.

A copy of the agenda for today's meeting is attached as enclosure (1).

## BRIEFINGS

CAPT Chip Boothe of the National Maritime Center (NMC) was introduced to make comments on the recent STW 31 subcommittee meeting. He reported that medical fitness standards, IMO model course adoptions, and pilot's training were main issues discussed. The medical physical abilities standards issue was introduced by the U.S. at the previous session of STW (30). Finland said that the U.S. standards were too prescriptive and offered another view, as well as expanding coverage of the standard beyond entry-level mariners to all mariners. Croatia recommended that psychological testing should be conducted on all mariners, but most nations disagreed. The standards ultimately accepted by the subcommittee were based predominantly upon Finland's recommendations with some specifics of the U.S. included. The reason that this item was introduced by the U.S. was that our regulations call for some physical standards, yet some nations in the world do not have any medical standards. STW 31 also recommended that ILO/WHO guidelines be referenced in the STCW regulations

A draft resolution on pilot's training was returned to the navigation subcommittee for further review.

A number of model courses were validated by STW 31 including revisions to courses on on-board assessments.

CAPT Boothe then briefed the committee on NMC activities. He noted that MERPAC is a principal agent assisting the Coast Guard in STCW implementation, particularly in the area of development of national performance assessment guidelines. There is continuing dialogue in the Coast Guard on how to best do this job. MERPAC is very important to our accomplishment of this major tasking.

The STCW implementation plan was passed out at the last meeting. At that time, RADM North asked the NMC to identify resources to complete this task. NMC has developed an internal plan to create an Implementation Team (IT) staff within NMC. Four members from within NMC were selected, headed by Mr. Don Kerlin, and additional Coast Guard resources will be forthcoming, including one from G-MSO.

A team has also been established for maritime academy audits. The first audit, headed by CAPT Bill Bennett, will be conducted at California Maritime Academy in late February of this year. All academy training programs have already been conditionally approved subject to audit results.

The NMC has finally gotten approval for a national policy statement on approved course oversights, published as Commandant's Instruction 16721.1 on January 7, 2000. It will

be available on the Coast Guard's website. CAPT Boothe also announced that the instruction established audit reporting requirements for the Regional Examination Centers (REC's).

CAPT Boothe thanked CAPT Bennett for all of his efforts, particularly his help with the difficult STCW implementation. This is also CAPT Bennett's last MERPAC meeting as he is being reassigned as Commanding Officer of MSO Wilmington, NC.

CDR Boyle then gave a briefing on a draft Navigation and Vessel Inspection Circular (NVIC) concerning mariners serving on vessels of less than 200 gross tons. MERPAC members received a copy of the NVIC and were asked for comments to help the Coast Guard clarify its position with regard to STCW's applicability to these vessels.

STCW does allow member nations some flexibility regarding applicability to its vessels if the requirements are unreasonable. The public can contact the Coast Guard after the NVIC has been published, NVICs are not generally reviewed by the public before publication because they are only guidance.

Mr. Richard Block of the public then made comments. He has read the draft NVIC and is concerned that near coastal licenses are in question. Many licensees are assuming that they are and will continue to be allowed to operate 200 miles offshore anywhere in the world. There needs to be an effort put forth to tell mariners with these licenses that they may or may not apply to other parts of the world. If other nations recognize their licenses, that's fine, but some will not. We have serious problems because our mariners work in many places in the world and may be in violation of their license. A NVIC is not the proper apparatus to inform the American mariners that their license may be in jeopardy.

Mr. Joe Murphy asked if Mr. Block has a fix to this problem. Mr. Block replied that there is no way of solving it, but if that's the way it is, the first thing is to be up front with the near coastal license holders and advise them that their authority may have vanished. A larger problem is to be able to contact all mariners. The Coast Guard doesn't have a total count of mariners licensed. Not only should it have their names and license held, but their addresses. The use of the Federal Register or a NVIC is not good because both are difficult to read and hard to get to individual mariners.

Dr. Myriam Smith then provided a briefing on the Coast Guard Research and Development (R&D) Center's project to examine the assessment of mariner proficiency. She stressed that MERPAC's development of assessment guidelines was not a duplication of the R&D Center's efforts.

The project's objective was to serve as a laboratory to examine technical issues of STCW implementation. The project reviewed the STCW requirements, instructional systems development, and the best practices of the industry. The review determined that the necessary basics for a reliable and valid assessment include systematic prior preparation; participation, review, and agreement by subject matter experts; and development of

assessment measures/standards. The MERPAC working groups' efforts are fulfilling these requirements for the U.S. maritime industry.

A method for developing assessments was prepared and then tested with the U.S. Merchant Marine Academy on a case study of the use of Automatic Radar Plotting Aids (ARPA). Further tests and refinements of the method included workshops held in 1998 for a variety of industry instructors and case studies conducted with California and Massachusetts Maritime Academies.

A method was also prepared for evaluating simulators to support mariner assessment. The method considered mariner assessment objectives, STCW requirements for simulators, and IMO requirements for equipment features. The method was tested by case studies evaluating desk-top ARPA simulators.

On-board assessments trials are in progress with SeaRiver Maritime, Inc. The trials are being conducted on tankers by the company's examiners and ship's officers with the project personnel observing. The issues being addressed include: (1) How does an assessment need to be customized for a commercial ship? (2) How much training do assessors need? (3) How much detail is needed in the assessment packages?

When available, the Center's conclusions, refined methodology for assessment (compliant with Instructional Systems Development and STCW), "how to" materials, and examples for developers and assessors to use as references will be available on the Center's website, which can be viewed at [www.rdc.uscg.mil](http://www.rdc.uscg.mil).

Mr. Chuck Pillsbury of MITAGS noted that all of the R&D Center's testing has been with the state and federal maritime academies. He wondered if there would be any different results from testing with non-maritime academy training institutions. Dr. Smith replied that the method was "generic" and intended to be useful for any type of institution.

### REPORTS FROM WORK GROUPS

Chairman Eglinton gave a report on the status of work group A, which is the performance measures assessment work group, Task Statement 19. He reported that the remaining 7 subcommittees had completed their work and would make a final report with recommendations to the full committee this afternoon.

Mr. Joe Murphy, chairman of task statement #20, Demonstrating Competence in Crisis Management and Human Behavior, reported that his work group had finished its work and would present their recommendations to the full committee for a vote in the afternoon.

Mr. McGovern, chairman of task statement #21, Simulator Standards for Demonstrating Competence in Ratings Forming Part of a Navigation Watch, reported that his work group was almost finished with its deliberations and would present its recommendations to the full committee for a vote in the afternoon.

Ms. Warner, chairwoman of the Prevention Through People (PTP) standing subcommittee, reported that she had visited the working group addressing task statement #20 and the offshore competencies subcommittee addressing task statement #19. She noted that both groups were observing proper PTP procedures.

### NEW BUSINESS

Chairman Eglinton then opened discussion on proposed task statement #22, Medical and Physical Standards for Merchant Mariners. It was explained that NVIC 2-98 will soon be revised, but the Coast Guard needs to get these guidelines into its regulations.

Mr. McGovern asked when the revisions to NVIC 2-98 will be published. CDR Boyle replied that they will be out very shortly, probable before MERPAC can finish the task statement.

Mr. Chris Krusa of the Maritime Administration (MARAD) stated that the proposed task statement indicates that MARAD has developed the SHIP program. MARAD and the other parties responsible for the SHIP program are prepared to work with the industry. Although NVIC 2-98 took its substance from the SHIP entry level guidelines, maybe some experts from the marine industry such as union doctors could work with the SHIP program and its guidelines. Maybe all that needs to be done is to update NVIC 2-98. Mr. Krusa added that the 1985 SHIP guidelines had 2 separate packages, one for entry level and the other for retention. In 1994, the SHIP work group merged the two in accordance with the Americans with Disabilities Act (ADA) guidelines. The NMC has a copy of the 1994 version, as well as some information on additional work completed by the SHIP work group since then. It can easily be provided to the task statement #22 work group.

Ms. Korwatch asked how the regulations will be written—will they be for both entry level mariners and for the retention of mariners? CDR Boyle replied in the affirmative, adding that the aim is to ensure that all mariners enter and remain physically fit.

Mr. Stewart asked that, since this is an STCW requirement, will it apply to domestic mariners too? CDR Boyle answered that the Coast Guard isn't sure at this time, but since it is looking to have all mariners physically fit, at least some of the requirements would apply to all mariners. However, the Coast Guard is looking for input from MERPAC on this issue.

Mr. Pillsbury commented that the initial statement indicated that the IMO emphasis was on visual and hearing acuity, and asked about other countries' intentions--will they go further? CAPT Boothe replied that there was discussion within the IMO STW 31 working group on this issue, and it was agreed by many delegations that there are still significant shortcomings in the present requirements. There are currently no international standards related to qualifying or disqualifying medical conditions. The U.S already has

disqualifying conditions as most countries probably do; however, there seems to be no impetus in STCW to do the same for international medical qualifications.

Mr. Pillsbury asked if the Coast Guard intends to have two separate standards, one for medical and one for physical. CDR Boyle replied that this would probably be the case, but that the Coast Guard is looking for input from both MERPAC and the public on this issue.

Mr. McGovern requested that the Coast Guard provide a copy of STCW regulation I/9, concerning medical standards, to the work group.

Mr. Block commented that he had reviewed the SHIP program over many years and had serious misgivings about its applicability to inland mariners. Many inland mariners are used to and like the present physical qualifications system, and the Coast Guard should make careful deliberations before adding additional medical or physical standards for inland mariners.

Mr. Gianelli of the Gulf Coast Mariners Association stated that he, too, had reviewed the 1985 ship guidelines. He noted that there are certain medical conditions that, if untreated, would render persons unfit for service, such as high blood pressure and diabetes. However, if treated, mariners can continue to serve. He suggested that there might be other medical conditions which, although normally disqualifying for those in ocean service, might not be disqualifying for mariners serving in areas where attention could be easily obtained, such as near coastal service.

Mr. John Bobb of the NMC then discussed proposed task statement #23, Recommendations on a Training and Assessment Program for Officers in Charge of a Navigation Watch Coming Up Through the Hawsepipe.

Mr. Joe Murphy asked who would issue the Training Record Book (TRB), and Mr. Bobb replied that there would be a national TRB available at all RECs.

Among other items discussed, Chairman Eglinton mentioned that the task statement was silent on the issue of developing the national TRB. He asked if the Coast Guard would like MERPAC to look into this issue. CAPT Bennett replied that, although development of a national TRB would add significantly to the scope of the task statement, the Coast Guard would welcome the assistance.

Ms. Kraus asked if there is a task statement upcoming for engineering officers. She also asked if military sea service would count for either license. CAPT Bennett replied that if MERPAC desires, the Coast Guard will develop an engineering officer task statement that parallels task statement #23. He also answered that, with regards to military sea service, it will count. However, in the future, problems will arise because the training competency demonstration in a military environment will not meet the documentation requirements of STCW.

Father Oubre, who is acting chairman of the Offshore Competencies subcommittee on task statement #19 in the absence of Mr. Daschbach, then gave a report on the status on the subcommittee's progress. He replied that the subcommittee needed another meeting to conclude its business, and that it would be prepared to make its final recommendations to the full committee in the afternoon.

Mr. Stewart also requested that members of the Medical Standards subcommittee on task statement #19 get together for a short meeting.

The full meeting was then recessed so that work groups and subcommittees could conclude their deliberations.

Upon reconvening, Chairman Eglinton announced that MERPAC would vote on the recommendations of the remaining subcommittees of task statement #19.

Subcommittee Acting chairwoman Jeanne Kraus, standing in for the absent Ms. Haven, presented the final recommendations of the Chief Engineer/2<sup>nd</sup> Engineer on vessels > 3000 Kw subcommittee. After minimal discussion, a motion was made to accept the package from the subcommittee as it stands and forward it to the Coast Guard. After seconding, a vote was taken, and the motion was carried unanimously.

Subcommittee Chairwoman Beth Gedney presented the final recommendations of the GMDSS operator/restricted operator subcommittee. She reported that the subcommittee had not prepared a package for limited operator, but that it can easily be prepared from the regular operator package, with the deletion of the satellite or high-frequency modules. After minimal discussion, a motion was made to accept the package from the subcommittee as it stands and forward it to the Coast Guard. After seconding, a vote was taken, and the motion was carried unanimously.

Subcommittee Chairman Nick Grassia presented the final recommendations of the Officer in Charge of Navigation Watch/Master of vessels < 500 gross tons subcommittee. The subcommittee borrowed heavily from Mr. Sembler's >500 gross ton package. After minimal discussion, a motion was made to accept the package from the subcommittee as it stands and forward it to the Coast Guard. After seconding, a vote was taken, and the motion was carried unanimously.

Subcommittee Chairman Joe Murphy presented the final recommendations of the Tankship/Ro-Ro vessel subcommittee. This subcommittee had two distinct tasks: (1) develop a tankship training program, and; (2) develop a Ro-Ro training program. Since there is already an existing tanker training program in the U.S. with plenty of guidance, this task was relatively easy. A strawman for the Ro-Ro training program was developed and sent to all subcommittee members for concurrence. After minimal discussion, a motion was made to accept the package from the subcommittee as it stands and forward it to the Coast Guard. After seconding, a vote was taken, and the motion was carried unanimously.

Subcommittee Chairman Mohan Dadlani presented the final recommendations of the Survival and Rescue Boats subcommittee. This subcommittee likewise had two tasks: (1) develop a training program for survival craft; and, (2) develop a training program for rescue boats. The subcommittee recommended that the Coast Guard consider rigid inflatable boats as fast rescue boats. After minimal discussion, a motion was made to accept the package from the subcommittee as it stands, with the recommendation that the Coast Guard consider rigid inflatable boats as fast rescue boats included. After seconding, a vote was taken, and the motion was carried unanimously.

Subcommittee Chairman Richard Stewart presented the final recommendations of the Medical Aid subcommittee. There had previously been three qualification levels, but the NMC issued policy letter 9-99, covering medical trainer qualifications, in December 1999. In that policy letter, the NMC established a fourth qualification, that of management level for masters and chief mates service on vessels of 500 gross tons ITC or more. Therefore, the subcommittee developed a training program for the fourth qualification level (enclosure (2)). After minimal discussion, a motion was made to accept the package from the subcommittee as it stands and forward it to the Coast Guard. After seconding, a vote was taken, and the motion was carried unanimously.

Acting Subcommittee chairman Father Sinclair Oubre presented the final recommendations of the Offshore Vessel Competencies subcommittee. The subcommittee had developed a list of suggestions which it initially wanted to include with the package as recommendations. After lengthy discussion among the full committee, it was decided to vote on the package alone as it had been developed, and forward the list of suggestions to the Coast Guard with the package. A motion was made to accept the package from the subcommittee as it stands, with the list of suggestions for the Coast Guard to consider included. After seconding, a vote was taken, and the motion was carried by a vote of 7 in favor, 0 against, and 6 abstentions. The list of suggestions from the Offshore Vessel Competencies subcommittee is attached as enclosure (3).

Chairman Eglinton then opened the floor for discussion concerning a proposed task statement covering the development of medical standards. Because members felt that they did not have the medical expertise to adequately complete this task, MERPAC recommended that the Coast Guard develop a strawman from all of the organizations involved in developing these standards for mariners and forward it to the Committee for consideration. A vote was taken and MERPAC unanimously declined to accept this task statement.

Chairman Eglinton then opened the floor for discussion concerning a proposed task statement covering the Development of a Training and Assessment Program for Officers in Charge of a Navigation Watch Coming Up Through the Hawsepipe. After discussion within the committee and comments from the public (Mr. Pillsbury, Mr. Gianelli, and Mr. Block), a motion was made to accept the proposed task statement. After seconding, a vote was taken and passed with 11 votes for and 2 abstentions. The task statement will be task statement #22, and is attached as enclosure (4).

Chairman Eglinton commented that he would like to see the Coast Guard propose a similar task statement covering engineers coming up through the hawsepipe. CAPT Bennett replied that the Coast Guard would be happy to comply. He proposed that a task statement be developed and sent to MERPAC members in the mail so that they could, before the next meeting, vote to accept/reject it. A vote was taken to accept a similar task statement for engineers and it passed with 12 for and 1 abstention. Mr. Andrew McGovern noted that the Coast Guard had developed a strawman for the deck hawsepipe program and included it as an enclosure to task statement #22. He requested that the Coast Guard do the same for the engine hawsepipe task statement.

Ms. Gedney volunteered to be chairwoman for the task statement #22 work group, and Ms. Kraus volunteered to be chairwoman of the engine hawsepipe task statement work group, once it was approved by MERPAC.

Mr. Joe Murphy presented the final recommendations of the task statement #20 work group, concerning Methods for Demonstrating Competence in Crisis Management and Human Behavior. The work group made the following recommendations for the full committee to consider:

- (1) The Coast Guard should not require the use of an actual ship for practical demonstrations to complete the assessment of seafarers satisfying the requirements in Table A-V/2, Sections 1-5. See the recommendations on the attached Table (enclosure 5).
- (2) The Coast Guard should require practical demonstrations to complete the assessment of seafarers satisfying the requirements in Table A-V/2, Sections 1-5. See the recommendations on the attached Table (enclosure 5).
- (3) The Coast Guard should not develop performance measures and standards for practical demonstrations to complete the assessment of seafarers satisfying the requirements in Table A-V/2, Sections 1-5. Members believe that this responsibility should remain with the training institution. This will allow greater flexibility in achieving training and assessment objectives. The NMC still retains oversight and final approval of the training program and assessment criteria.
- (4) The sub-committee recommends that in addition to the minimum standards for Qualified Instructors and Designated Examiners contained in NVIC 6-97, all Qualified Instructors and Designated Examiners involved in Table A-V/2 training and assessment should:
  - (a) have relevant shipboard experience in conducting emergency procedures and drills;
  - (b) have relevant experience in leadership; stress handling, human behavior and response as well as effective communications;
  - (c) have relevant shipboard experience aboard Ro-Ro passenger or passenger vessels. The standard for the relevant shipboard experience requirement will consist of observation or participation in a minimum of ten emergency procedures and drill aboard Ro-Ro passenger or passenger vessels.

After minimal discussion the Committee voted unanimously to accept all 4 recommendations. Chairman Eglinton announced that the work involved in task statement #20 is now complete.

Mr. McGovern presented the final recommendations of the task statement #21 work group, concerning acceptable standards for demonstrating competence in ratings forming part of a navigational watch. The Coast Guard had asked MERPAC to answer five questions, and the work group's recommended answers are as follows:

- (1) What size vessel is appropriate to conduct training in accordance with Table A-II/4? Fifty percent of the training should be conducted on a vessel over 100 gross tons.
- (2) What size vessel is appropriate to conduct the assessments required by Table A-II/4? If assessments are conducted on vessels of less than 200 gross tons, those vessels must;
  - (a) permit a candidate to steer by a fixed object and ranges;
  - (b) have a standard (magnetic) compass and a gyrocompass with 1 degree increments that change readings as the heading changes (digital readout is not acceptable);
  - (c) the ability to steer using either magnetic or gyro compass;
  - (d) a rudder angle indicator and rudder order indicator;
  - (e) realistic replication of the hydrodynamic properties of vessels of at least 200 gross tons throughout the speed and draft changes;
  - (f) realistic steering stands that replicate those found on modern merchant vessels and allow switching steering gear from hand to gyro to non-follow up steering and allow switching steering pumps/motors;
  - (g) the capability to simulate steering failure including control and actuator systems;
  - (h) sufficient behavioral realism to allow candidates to exhibit the required competency;
  - (i) the capability to simulate gyrocompass failure;
  - (j) all navigational equipment required on a vessel of greater than 200 gross tons; and,
  - (k) all steering alarms required on a vessel of greater than 200 gross tons.
- (3) What equipment, as a minimum, should the vessel have to conduct Table A-II/4 training and assessment? The same as above in question (2).
- (4) What minimum equipment and performance standards must a simulator have to permit assessments of Table A-II/4 practical demonstrations? The minimum standards and performance standards should be:
  - (a) a visual scene which permits a candidate to steer by a fixed object and ranges;
  - (b) have a standard (magnetic) compass and a gyrocompass with 1 degree increments that change readings as the heading changes (digital readout is not acceptable);
  - (c) the ability to steer using either compass;
  - (d) a rudder angle indicator and rudder order indicator;

- (e) realistic replication of the hydrodynamic properties of vessels of at least 200 gross tons throughout the speed and draft changes;
- (f) realistic steering stands that replicate those found on modern merchant vessels and allow switching steering gear from hand to gyro to non-follow up steering and allow switching steering pumps/motors;
- (g) the capability to simulate steering failure including control and actuator systems;
- (h) sufficient behavioral realism to allow candidates to exhibit the required competency;
- (i) the capability to simulate gyrocompass failure;
- (j) all navigational equipment required on a vessel of greater than 200 gross tons, and;
- (k) all steering alarms required on a vessel of greater than 200 gross tons.

FOR A LOOKOUT:

- (a) a visual scene from dead ahead to 2 points abaft the beam on either side; and,
  - (b) directional speakers or equivalent able to produce sound from a specific direction anywhere from dead ahead to 2 points abaft the beam on either side.
- (5) Do desktop PCs have sufficient physical and behavioral realism to satisfy this requirement? Not at this time due to the required equipment listed above.

The work group did not specify which type of simulator is acceptable because computers will change in the future. Any type of simulator is acceptable as long as it has these capabilities. As long as a manned model can accomplish all of the above, then it should be acceptable for assessing for service on vessels over 200 gross tons.

After minimal discussion, a vote was taken to accept the work group's recommendations as written. The vote was 9 in favor with one abstention (Three members left to catch their flights home before the vote was taken.). Chairman Eglinton announced that the work involved in task statement #21 is now complete.

Chairman Eglinton then adjourned the meeting.

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Steven J. Boyle, CDR, U.S Coast Guard  
Executive Director, MERPAC

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Bill Eglinton  
Chairman, MERPAC

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Date

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Date

Encl: (1) Meeting Agenda

- (2) Guideline for assessment of medical trainer - masters and chief mates for service on vessels of 500 gross tons ITC or more.
- (3) Comments on Offshore Vessel Competencies assessment guidelines
- (4) Task statement 22 -- Development of a Training and Assessment Program for Officers in Charge of a Navigation Watch Coming Up Through the Hawsepape
- (5) Table A-V/2 – Minimum standards of competence in crowd management training

**MERCHANT MARINE PERSONNEL ADVISORY COMMITTEE  
WORKING GROUP MEETING AGENDA  
TUESDAY, JANUARY 25, 2000  
MARITIME INSTITUTE OF TECHNOLOGY AND GRADUATE STUDIES  
LINTHICUM, MARYLAND**

Introduction: (0800-0810)	Mr. Eglinton
Define Goals for January 2000 meeting	Mr. Eglinton
Status of Task Statements/Working Group Activities: (0810-0840)	Mr. Eglinton
Working Group A – STCW	Mr. Eglinton
Task Statement 19 – National performance measures for evaluating mariner competence	
Working Group B – STCW	Mr. J. Murphy
Task Statement 20 – Methods for demonstrating competence in crisis management and human behavior	
Working Group C – STCW	Mr. McGovern
Task Statement 21 – Simulator standards for demonstrating competence in ratings forming part of a navigational watch	
Briefing session: (0840-1000)	
IMO STW 31 developments	CAPT
Richardson	
NMC status report	CAPT Boothe
IMISS presentation	CDR Ferguson
Mariners serving on vessels <200GRT and STCW	LCDR Harden
R&D Assessment Project	Dr. Myriam
Smith	
Working Group Meetings: (1015-1230)	
Working Group A – STCW	Mr. Eglinton
Task Statement 19 – National performance measures for evaluating mariner competence	
Working Group B – STCW	Mr. J. Murphy
Task Statement 20 – Methods for demonstrating competence in crisis management and human behavior	
Working Group C – STCW	Mr. McGovern
Task Statement 21 – Simulator standards for demonstrating competence in ratings forming part of a navigational watch	

Lunch: (1230-1330)

Working Group Meetings: (1330-1530)

Working Group A – STCW

Mr. Eglinton

Task Statement 19 – National performance measures  
for evaluating mariner competence

Working Group B – STCW

Mr. J. Murphy

Task Statement 20 – Methods for demonstrating competence  
in crisis management and human behavior

Working Group C – STCW

Mr. McGovern

Task Statement 21 – Simulator standards for demonstrating  
competence in ratings forming part of a navigational watch

Working Group Reports: (1530-1600)

Adjournment: (1600)

Mr. Eglinton

**MERCHANT MARINE PERSONNEL ADVISORY COMMITTEE  
MEETING AGENDA  
WEDNESDAY JANUARY 26, 2000  
MARITIME INSTITUTE OF TECHNOLOGY AND GRADUATE STUDIES  
LINTHICUM, MARYLAND**

Introduction: (0800-0805)	Mr. Eglinton
Opening Remarks: (0805-0830)	
MERPAC Sponsor remarks	RADM North
Executive Director remarks	CDR Boyle
Chairman remarks	Mr. Eglinton
Approval of Minutes:	Mr. Eglinton
Old Business: (0830-0900)	
Working Group A – STCW	Mr. Eglinton
Task Statement 19 – National performance measures for evaluating mariner competence	
Working Group B – STCW	Mr. J. Murphy
Task Statement 20 – Methods for demonstrating competence in crisis management and human behavior	
Working Group C – STCW	Mr. McGovern
Task Statement 21 – Simulator standards for demonstrating competence in ratings forming part of a navigational watch	
PTP Working Group Report (Standing Committee)	Ms. Warner
New Business: (0910-1000)	Mr. Eglinton
Medical and physical standards for merchant mariners	LCDR Harden
Model “hawsepiper” training programs	Mr. J. Bobb
Working group meetings: (1000-1230)	
Working Group A – STCW	Mr. Eglinton
Task Statement 19 – National performance measures for evaluating mariner competence	
Working Group B – STCW	Mr. J. Murphy
Task Statement 20 – Methods for demonstrating competence in crisis management and human behavior	
Working Group C – STCW	Mr. McGovern
Task Statement 21 – Simulator standards for demonstrating competence in ratings forming part of a navigational watch	
Lunch: (1230-1330)	
Working Group Progress Reports: (1330-1545)	Mr. Eglinton
Recommendations to USCG	
Committee discussion and voting on recommendations	
New tasks	
Concluding Remarks: (1545-1600)	Mr. Eglinton

Adjournment\*: (1600)

Mr. Eglinton

*\*The meeting may adjourn early if all business is completed*

<b>Column 1 STCW Competence</b>	<b>Column 2 Knowledge, understanding and proficiency</b>	<b>Column 3 Performance conditions (conditions under which performance is measured)</b>	<b>Column 4 Performance behavior (Mariner knowledge or action including consequences of the same)</b>	<b>Column 5 Performance standards (Minimum criteria against which performance is measured)</b>
<p>Organize and manage the provision of medical care on board</p>	<p>A thorough knowledge of the use and content of the following publications:</p> <p>.1 <i>International Medical Guide for Ships</i> or equivalent national publications</p> <p>.2 Medical Section of the <i>International Code of Signals</i></p> <p>.3 <i>Medical First Aid Guide for Use in Accidents Involving Dangerous Goods</i></p>	<p>Given a copy of the <i>International Medical Guide for Ships</i> or an national equivalent</p> <p>Given a copy of the medical section of the <i>International Code of Signals</i></p> <p>Given a copy of the <i>Medical First Aid Guide for Use in Accidents Involving Dangerous Goods</i></p>	<p>On an oral or written examination</p> <p>On an oral or written examination</p> <p>On an oral or written examination</p>	<p>Demonstrate use of the index and table of contents to locate recommended treatment for an illness or injury</p> <p>Identify listing of minimum recommendations for on board medical equipment and medications</p> <p>Identify correct code usage to describe a medical condition and location of illness or injury</p> <p>Identify the directions for treating a patient through utilizing the guide's reference by:</p> <ol style="list-style-type: none"> <li>a. chemical name</li> <li>b. general classification of dangerous goods</li> <li>c. patient signs and symptoms</li> <li>d. United Nations</li> </ol>

				classification number
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**MERPAC MEETING  
JANUARY 25 & 26, 2000  
Workgroup #10  
Offshore Vessel Competencies  
Comments and Recommendations  
January 25, 2000**

Some questions that arose during the workgroups discussions:

I.

What are the vessels that are contained in the Section on “Offshore Vessels”:

- a. Is it Sub-chapter L vessels?
- i. Workboats
- ii. Crewboats
- iii. Anchor vessels
- iv. Stand-by boats
- b. Does this section contain other vessels, such as:
  - i. Diving tenders
  - ii. Coring operation vessels
  - iii. Lift boats
  - iv. Geo-physical vessels
  - v. Small container vessels
  - vi. Coastal Ferries
  - vii. Towing Vessels
  - viii. Etc.
- c. Will “other vessels” (non “L”) in offshore service get OSV-rating on their STCW?
- d. Will these mariners want an OSV-rating?
- e. How will one go from an offshore rating to an “international routes” <500 grt. License and STCW certificate?
- f. Why was the breakdown in the assessment tables made at 500 grt. and not 1600 grt./3000 grt?

1. What is the definition of Near-Coastal Domestic, and what is meant by “offshore” and “offshore vessel?”

- a. Is it the twelve mile limit (12)
- b. Is it the two hundred mile exclusive economic zone (200)

1. Even though these proficiencies may satisfy the desires of the affected company or mariner, does it in fact meet the rules as well as the spirit of the STCW ‘95?

1. Do we as a country wish to have an STCW certificate for 1600 grt. that is valid only for Near Coastal Domestic routes, and what effect will these STCW certificates have on national merchant marine personnel issues?

1. Are the sections that deal with Near Coastal International Assessment and International Assessment really belong in this document?

1. If someone has received a “OSV” or “Near Coastal” restriction on his or her STCW, how does one then convert that restriction into an unrestricted STCW?

1. Does the development of this Near Coastal STCW imply the development of new licenses? If it does, what will these licenses be, and how will they relate to the existing licenses?

1. Though the Assessment and Proficiency tables strongly depend on the work done by OMSA, and assume the conditions of the Gulf of Mexico, do these assumptions properly cover all the conditions and challenges that a mariner will face in working in any of the areas that would be 12 or 200 miles from a U.S. territory? I.e. how well do the tables handle conditions around Hawaii, Alaska, and off the North East states?

1. Comments by Capt. Richard Stewart:

The STCW proposal submitted to the MERPAC Working Group is a series of proposals for special licenses. The OSV licenses are listed in the CFR's without any requirements for subject matter. This proposal would, if accepted establish the subject matter criteria for these new licenses. Considering this fact several questions are raised.

i. Has a "needs assessment" been done to determine that an OSV license (s) are needed? The Current license (s) have provided expertise to operate these vessels. Why is a new license program needed.

i. The cutoff for limited tonnage under STCW is 1600 grt (3000 itc) but the proposal as submitted request that a 6000 itc vessel be treated as "limited" tonnage. This request is in direct conflict with the agreed tonnage limit and should be treated as the "unlimited" tonnage vessels they clearly are.

i. The terms "domestic" and "near coastal" need to be clearly and unambiguously defined in terms of the geographic route covered. "Near Coastal any nation" means that the candidate for the license needs to be examined for subject relevant to all geographic regions they will be licensed to sail as vessel in. Including but not limited to Arctic navigation, worldwide ocean currents and tides and the charts and navigation publications applying to those regions.

A thorough examination of relevant subject matter should be undertaken to determine if there is adequate coverage. The final training package may differ little in depth or breadth from the requirements for a 1600 gt unlimited oceans license.

i. Prior to the approval of any license curriculum or training package, the way that license fits into the overall structure of licensing should be agreed upon and clearly stated. Issues such as transferability of sea service, upgrading, cross movement from inland to ocean and vice versa, and the authority of the license holder to utilize that license are all critical issues fundamentally important to the mariner.

For instance, can service as an OSV mate oceans be applied to a limited mate oceans, or can an OSV master oceans command a 1600 ton oceans vessel. Conversely, can a 1600 oceans master command a <1600 ton OSV. The CFR does not currently address

these issues and without a clear process, redundancy in training and assessment will result.

The scope of the license (s) should be established before determining the subject matter to be assessed.

## MERCHANT MARINE PERSONNEL ADVISORY COMMITTEE (MERPAC)

### TASK STATEMENT #22

## RECOMMENDATIONS ON A TRAINING AND ASSESSMENT PROGRAM FOR OFFICERS IN CHARGE OF A NAVIGATION WATCH COMING UP THROUGH THE HAWSEPIPE

**I. Task Title. National Requirements for a Hawsepiper Training and Assessment Program for Officer in Charge of a Navigational Watch which meets the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW), Regulation II/1, Paragraph 2.**

II. Background.

STCW Regulation II/1, Paragraph 2 states candidates must:

- be 18 years of age;
- have approved seagoing service of not less than one year as part of an approved training program which includes on-board training which meets the requirements of section A-II/1 of the STCW Code and is documented in an approved training record book, or otherwise have approved seagoing service of not less than three years;
- have performed, during the required seagoing service [further defined by STCW as service aboard a ship relevant to the issue of a certificate or other qualification], bridge watchkeeping duties under the supervision of the master or a qualified officer for a period of not less than six months;
- obtain a GMDSS operator's endorsement; and,
- complete approved education and training and meet the standards of competence specified in Section A-II/1 of the STCW Code.

There are also U.S. licensing requirements in Title 46, Code of Federal Regulations, Part 10 that must be met.

The USCG National Maritime Center (NMC) is attempting to define the service, training, education and assessment requirements for candidates for certification using the three years of seagoing service path to STCW certification as an Officer in Charge of a

Navigational Watch. The end product would be an outline for a non-maritime academy training program that will allow individuals to meet the standards of STCW for Officer in Charge of a Navigational Watch.

The Coast Guard believes that candidates for certification can successfully complete approved courses to satisfy the requirement for approved education and training, and may be able to meet the other requirements of Regulation II through on board assessment.

Since a long period of time may elapse between some of the training and education and the completion of all the requirements for certification, the Coast Guard anticipates that candidates must successfully pass the relevant Coast Guard license examination as well.

Attached as enclosure (1) is an example of a draft program for use in discussion by a Working Group.

**III. Problem Statement. The Coast Guard has not addressed a number of issues which would allow unlicensed seamen to become a licensed officer and be certified as an Officer in Charge of a Navigational Watch. The Coast Guard is not free to substitute or waive any of the requirements of Regulation II or the competencies in Table A-II/1. A number of questions remain on how to implement this certification program. The applicable assessment criteria are currently under development.**

**IV. Tasks. Determine the following:**

1. Which knowledge, understanding and proficiencies require training and education at an approved course?
2. Can these courses be taken from any training provider with the relevant approved course?
3. Is there a maximum tonnage for vessels that is acceptable for the approval of the required sea going service?
4. Is there a minimum time that the seafarer must serve on vessels equipped with equipment listed in Table A-II/1?
5. How should seafarers document they performed, during the required seagoing service, bridge watchkeeping duties under the supervision of the master or a qualified officer for a period of not less than six months?
6. Should there be a minimum time period during which all of the requirements must be met?
7. If onboard assessment is envisioned, would the qualifications for an onboard assessor be any different than those outlined in NVIC 6-97 for a Designated Examiner?

V. Time restrictions. Provide recommendations to the Coast Guard by 30 October 2000.

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Mr. William Eglinton  
Chairman  
MERPAC

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Steven J. Boyle  
Commander, USCG  
Executive Director  
**MERPAC**

## A NATIONAL MODEL PROGRAM

### **OFFICER IN CHARGE OF A NAVIGATIONAL WATCH OVER 500 GT ITC**

AND

### **THIRD MATE OCEANS, UNLIMITED, ANY GROSS TONS**

FOR A MARINER WITH NO PRIOR SEA SERVICE, ENTERING THE INDUSTRY AFTER

01 AUG. 1998, WHO DOES NOT PARTICPATE IN AN APPROVED PROGRAM OF STUDY

1. Three years of sea service.
2. Six months service on vessels over 100 GRT
3. An additional 30 months service in the deck department, six months of which are watchkeeping duties under the master or a qualified officer on vessels over 200 GRT.
4. A training record book is kept to sign off on both the training and assessment of STCW Table A-II/1 competencies.
5. The candidate must have successfully completed Coast Guard approved courses in:
  - Basic Safety Training (Elementary First Aid, Basic Firefighting, Personal Survival Techniques, Personal Safety and Social Responsibility)
  - Celestial Navigation
  - Terrestrial Navigation
  - Electronic Navigation, including ECDIS
  - Shiphandling
  - Rules of the Road
  - Medical First Aid Provider
  - Steering Systems
  - Meteorology
  - Stability
  - Emergency Procedures
  - Watchkeeping
  - Bridge Resource Management
  - GMDSS
  - Advanced Firefighting

- Lifeboatman/Proficiency in Survival Craft
  - RADAR
  - ARPA
  - Search and Rescue
  - Magnetic and Gyro Compasses
  - Visual Signaling
  - Cargo Handling and Stowage
  - Pollution Prevention.
6. Pass the USCG Deck License Exam.
  7. Successfully complete all required practical demonstrations of skill.
  8. Meets all other requirements (character, physical, drug screen, etc.) for licensure and certification.