"Identifying, analyzing and bridging the gap between the STCW Code (1978) as amended and the current course delivery for the marine qualifications":

Seminar Workshop Activity Proceedings

April 28-May 2, 2014
MAAP CAMS Campus Bataan

Dr Angelica M Baylon

This is a 49-page documentation report of the 5-day TKF Foundation Global MET Seminar-Workshop on April 28-May 2, 2014 hosted by MAAP in CAMS Mariveles, Bataan with Dr. Angelica M Baylon as TKF workshop administrator for MAAP for the project “Identifying, analyzing and bridging the gap between the STCW Code (1978) as amended and the current course delivery for the marine qualifications”

Background and rationale of the GlobalMET-TK Foundation Professional Development Workshop Programme Philippines April to November 2014. First Phase hosted and sponsored by the Maritime Academy for Asia and the Pacific with international facilitators: Dr Christopher Haughton, United Kingdom & Capt Richard Teo, Australia

With close cooperation between the Asian Development Bank, which funded the Fisher Associate’s 2013 Consultancy Report identifying activities to improve the quality of maritime education and training in the region, the TK Foundation which provided the funding and GlobalMET which initiated the development project and arranged the venue and facilitation, the five days from 28 April to 02 May, had accomplished the first phase of a significant learning programme to review and bridge perceived gaps between the STCW Code and current practice in the Philippines. MAAP President VAdm Santos is Vice-chair of the GlobalMET and had agreed for MAAP to host and sponsor the said 5-day activities at its campus in the Center of Advanced Maritime Studies (CAMS) in Mariveles, Bataan, with Dr Baylon as TKF workshop administrator.

Sixteen participants from a wide range of Philippine maritime education and training organisations participated in this learning event initiating a tailor-made, six month programme. The participants included a female cadet, early-career instructors, experienced educators, administrators, legislators, superintendents, trainers, masters and chief engineers. Dr AttyCapt A Tormon, the recently appointed Executive Director of MARINA – STCW Office, was a particularly welcome participant. To the delight of all, a more eclectic mix of experience and expertise would be hard to find. With a packed agenda of student-centred learning activities the week got off to a cracking start. The group was divided into three working sets tasked with a wide range of tasks requiring considerable research and debate. The STCW Code was systematically and forensically unpicked and a multitude of perceived gaps identified between the competencies demanded by the maritime industry and the competencies stipulated in the Code. A significant conclusion was inescapable: any institution working strictly to the Code stands little chance of meeting industry’s demands. There was considerable and effective exploration of competency assessment, performance criteria, teaching and learning strategies, and the terminology associated with these issues. Delegates worked with unflagging enthusiasm and energy. Motivation levels were sky-high, with real eagerness to see this initiative succeed. From about the halfway point in this highly stimulating five days, attention focused on the next substantial steps. Each of the working sets formed a Project Team tasked with producing a written report over the next six months. The
The report will crystallise the initial research from this week and extend the scope to benchmark against three overseas administrations. They will continue to identify and analyse gaps in provision across all STCW functions and levels of responsibility, taking into account a range of significant stakeholders from across the industry. Action plans and recommendations will be crucial elements of the projects. The intention is that this considerable research initiative will be presented to key decision-makers in the Philippine and the overseas maritime sector at a proposed special GlobalMET Seminar scheduled to be held in Manila on 25th November 2014, the day before the next in the series of annual conferences on Asia Pacific Manning and Training. The outcomes of the seminar will be reported during a conference plenary. This significant step by GlobalMET has initiated a program of learning about state-of-the-art teaching and assessment for maritime academy faculty in the Philippines, an initiative which given the necessary support, could be expanded into a major program of development for maritime education, training and certification in the Philippines, as well as in other maritime labour supplying countries. Dr Baylon will document these initiatives to form part of the manning productivity gain cycle as far as competency and curriculum development are concerned.

APRIL 28, 2014. OPENING CEREMONIES

The program started with the emcee Dr. Angelica M. Baylon, introducing herself as the MAAP External Relations Director, the TKF Global MET programme administrator /coordinator and the Master of ceremonies. She acknowledged the presence of the Guest of Honor and Speaker Atty. Dr. Capt. Alvin A. Tormon, MAAP President/GlobalMET Vice-Chair VAdm Santos, the facilitators—Capt. Richard Teo and Dr. Chris Haughton, as well as the 16 participants representing various training centers (5), crewing agencies (2), schools (4), and MARINA. For the Commission on Higher Education supposedly to be represented by Ms Ellen Fernandez, she informed everyone that she had sent her regrets as the activity at MAAP coincided with her activity in Bicol and none from CHED can be sent to attend at MAAP as her substitute. Instead, since Dr Baylon is a good friend, she had been requested to re-echo the outcomes of the activity in CHED in one of their meetings.

- **Opening Prayer led by Dr. Baylon**

- **Welcome/Open Remarks of MAAP President VADM Eduardo Ma R Santos, AFP (Ret)**
  - MAAP President acknowledged the GOH, the facilitators, MAAP Officials, Faculty and Staff, and the participants of this 5-day seminar workshop (First Phase).
  - He said that this is breakthrough because of the effort of GlobalMET. He mentioned that Global MET used to be AMETIAP – Association of Maritime Educators and
Training Institutes in the Asia Pacific but with already 90 plus members worldwide, it now becomes GlobalMET. The objective of GlobalMET is always as always and always will be the enhancement and betterment of maritime education and training, not only in the region, not only in your respective schools, but all over the world. The slogan of GlobalMET is “Train, Train, Retrain, Retain” So, on that slogan alone, there is an exerted effort of everyone in the GlobalMET to really improve teaching - the conduct of teaching as well as assessment, to ensure more competent seafarers/officers on board our ships.

Further, VADM Santos stated that the Executive Secretary Rod Short exerted effort to get a grant from TK Foundation or TKF. The grant is not really that big, but it was enough to get renowned facilitators to come here - where the training is. He mentioned that he volunteered to have the workshop here in Manila, not only because we have the most number of seafarers but we are in this interesting stage in our history of maritime education and training where we are shifting from the traditional teaching methods to outcome based education and assessment and that is actually what the participants will be doing in the next five days.

Addressing the participants, he stated that they are going to look at the gap between what is required by STCW; find out gaps, if there are any; if there are, what are they; why there is a gap; and; how do they intend to close that gap”. He added that the participants will work together to at least help their respective institutions in drawing up the curriculum or the schedule that is needed to come up with a more responsive teaching and assessment methods so that we will be aligned with the requirements of STCW. So it is a difficult task. He added that it is interesting because all of us in the Philippines, as a result of the requirements of MARINA and CHED, are shifting to outcome-based education and assessment and unfortunately, it is taking us too long to finish because we need to map the curriculum, find out exactly what is to be taught, what is to be assessed, up to what level are we going to give the assessment - to assure ourselves that our students have learned something. He stated that this workshop is indeed very timely because the participants are going to be exactly doing these. He told the participants that they already have the reading material (which is so many) that they are supposed to have gone through. If not, he jokingly said that they will have enough time to read through these, since they will be sleeping here, from 8pm to 5am the next morning, to be able to contribute and participate in the discussions.

He mentioned that Dr. Haughton and Capt. Teo came up with a program that according to them is serious but can be fun. On which he added that, Filipinos will always say “it’s always fun in the Philippines”. He then said that he hope that they will have fun and learn from their activities and mentioned that they will see each other again for the second phase after their reflection and after finding out what to do.

Further, VADM Santos expressed his hope that the guests are satisfied with the preparations that were made. He mentioned that MAAP have reduced the travel time, except for the GOH, from three (3) hours to one and a half hour. He added that when they will go back to Manila, they can be able to watch TV on board. So, MAAP is exerting effort for them to enjoy their stay at the Academy with all the facilities, food, transportation, and secretarial requirements that they need. He cited that this is the Center of Advanced Maritime Studies designed for post graduate schools of which the classrooms are arranged for maximum participation of students.

Finally, he conveyed his hope that the facilitators and participants will enjoy their stay at MAAP and is looking forward to a beneficial learning activity for everyone which is all for the benefit of MET facilities in the country.
• **Dr. Baylon introduced the Guest of Honor and Speaker**
  - Dr. Baylon manifested her gratitude and respect to the GOH and speaker as she opined that the task of introducing the GOH and speaker is the most pleasant and difficult task in the program. Pleasant because he is a good friend and difficult because the more than 100-page impressive CV was summarized into 300 words.
  - Alvin or Tor to friends is a ship master on oil/chemical tankers; a practicing attorney specializing in criminal and admiralty law; and a lifelong educator of tens of thousands of Filipinos. He is the youngest-ever recipient of the Outstanding Professional Achievement Award of the United States Merchant Marine Academy Alumni Association at Kings Point, New York – an institution where he graduated number one in his class in B.S. Marine Transportation, Magna Cum Laude, in 1995. Despite coming from a poor family, he consistently graduated valedictorian from Pre-School to Grade School and High School. In the U.S. Coast Guard license exam for Third Mate, he received the highest scores of 100% in both Navigation and Collision Regulations. He continued to top the PRC license exams for Second Mate, Chief Mate and Master Mariner, and served in those noteworthy positions at a very young age. He was one of the top graduates of the University of the Philippines - College of Law, with a degree of Juris Doctor. He also received his Doctorates in Business Administration and in Human Resource Management, and is currently completing his Doctorate in Public Administration. He is a lifetime member of the Integrated Bar of the Philippines, and a professor of Admiralty and Maritime Law, Strategic Management and business subjects both at PMMA Graduate School and MAAP Center for Advanced Maritime Studies. He has been a trainer and assessor of Filipino seafarers for nearly two decades, and was a participant in the STCW 2010 Conference. In his spare time, he helps poor, innocent prisoners regain their freedom and enjoys sending ugly criminals to prison. He strongly believes that we Filipinos, by talking less, thinking faster, doing more, and walking the “Daang Matuwid (Straight road)” can be a great nation of true winners in the near future.
  - Gracing the occasion, Dr. Baylon then called ALVIN “TOR” TORMON with high regards as the DR. ATTY. CAPT. PROF, the STCW MARINA Executive Director and our good friend, all rolled into one, to render his message.

• **Keynote Address of Atty. Dr. Capt. Alvin A. Tormon:**
  - GOH Capt. Tormon greeted everyone a good afternoon with special mention to VAdm Santos, Dr. Baylon, the facilitators and other friends who are participants or in the audience. He expressed his gratitude for being invited to speak before the audience on this very important occasion.
  - He stated that as VADM Santos mentioned earlier, this is truly a very critical turning point in the history of maritime education and training in the Philippines. As everyone is very aware of, the Philippine national education has recently shifted from Input-Based to Outcome-Based Education. He added that in fact, after a year of this shift, many are still confused on the difference between these two. Jokingly, he said that some have chosen to mix these together to be Income-based.
  - He stated that such change have been part of recent improvements in the Philippine education, not only in general education but to numerous professions in the maritime sector. He added that they, at the MARINA, recognize the need to have such drastic improvements.
  - He mentioned the signing of President Benigno S. Aquino, Jr. of Republic Act RA 10635 on March 13, 2014. On the lighter side, he said that he memorized it very well as it sounds as a radio station 106.35 FM.
Republic Act 10635 is an act establishing the Maritime Industry Authority (MARINA) as the single maritime administration and enforcement of the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended, and International Agreements and Covenants related thereto. Under this law, the most critical thing is that MARINA assumes all powers and functions of the following: (1) PRC with respect to the licensure and certification of the officers; (2) CHED with respect to education in preparation to becoming officers; (3) TESDA, training with respect to ratings; (4) Department of Health (DOH) with respect to the medical competence of all seafarers, and; (5) National Telecommunications Commission (NTC) with respect to the GMDSS ratio operators, which is now part of the qualifications of deck officers. He said that their current role on STCW and add to that are the function of these 5 other agencies is calling it monumental is an understatement.

He made mention that he just came back from Korea where he attended an IMO conference last week. He said that there, he realized how advance other countries are with respect to e-navigation, he does not want to say how far behind the Philippines is. He said that, sadly the event happened right after the ferry sinking in Korea. Of course, we have to be sensitive to the on-going emotional outflow at the moment but he said that he had to highlight in Korea, that despite the technological advances in e-navigation, we should always look at the human factor. He added that with the events that transpired in that ferry, it appeared that the master perhaps instructed the passengers to stay in their cabins. Although that is not yet conclusive, but that is one of the earlier discoveries and after that there was no other instruction. Imagine this scenario, what could advance navigation systems have done to prevent this from happening which resulted to the loss of more than 300 lives. Of course, none. He mentioned that they highlighted there that the Philippines opened its gates, despite our lack of infrastructure in terms of e-navigation, as we have the human resources not only to be trained but to train others.

Further, he cited that the private sector is very cooperative, including GlobalMET and MAAP. He said that though our government is very limited in its resources, but he is proud being a Filipino, because the private sector is always there to assist and to make things better.

He excitedly shared another development, that is, Europe finally said that there will be no non-recognition of certificates in the Philippines.

He related his secret on why he joined the government, because for a very long time he refused to be in the government. After learning how problematic “kalunos-lunos” the situation was, especially in MARINA, and after seeing the seafarers, his brothers, lining up in order to get COCs/COPs and learned that it takes them half a year to get it; he said that he really need to do his part to help. So, just before Christmas 2013, when he was asked by the top people in the government to join MARINA, he agreed even if they were requesting him to stay for more than just three (3) or six (6) month-contract.

He mentioned that he told the higher ups of MARINA that he has a condition; that is to resign if we will fail EMSA. He said this because no matter how short his time here is and even if he is not yet here when all these things are happening, he believes that it is their responsibility to ensure that Filipino seafarers will continue to be called competent, continue to be accepted, continue to be relied upon to run the ships worldwide. Gladly, we did not fail EMSA, so he said that he is still at MARINA and need not leave work today.
The EU’s no non-recognition of Filipino shows two (2) things. (1) They will monitor us on a quarterly basis. He shared their strategies, wherein MARINA and their STCW Office are very quiet all these months because they cannot just announce these---Their strategy was to give specific programs for implementation. Some of these actions undertaken was that Secretary Abaya and MARINA Administrator Max Mejia went to Europe a month ago, from one country to another, to do a lot of things including enlightening and giving our vision to our European partners with respect to where the Philippines is heading.

He mentioned that he was supposed to go with them but someone had to man MARINA. He added that he was able to meet the European Ambassadors in the Philippines and had the chance to show them our plan – part of which is the phasing out some of the maritime schools and maritime programs. He was then asked, when are they going to do this exactly? How many are going to be closed down? He needs to give answers to their questions. He said that they are doing these before the end of the year. He made mention that nine (9) to 14 maritime schools will be phased out this May; five (5) still have final chance when they will be inspected while the nine (9) are already decided. This will be published before the classes start to avoid young people enrolling to these institutions.

He added that, looking were we are heading; this is the first occasion that the government is very serious about taking care of business. Before, closing is just hearsays. Jokingly, he said that they then need to wear bullet proof vests. He also mentioned that CHED is very busy now to do the inspections of those five (5) institutions for one final time - that is only for May. He mentioned that between May to end of this year, the list will increase in numbers. He added that according to CHED, they foresee that the currently 100+ maritime schools that are operating will go down to 30.

He stressed that this how serious that government is as this was their promise to the European Union so that there will be no non-recognition of Filipino certificates. He added they would like to assure that with these development, the future of Filipino seafarers/officers will be even better, stronger, more dynamic, more forward looking and really competent, reliable.

Finally, he stated, while they have other measures that they are doing, that the direction they are heading will be to make training and education easier but more efficient and effective for the Filipino seafarers.

One of the functions that will be transferred to MARINA will be PRC; so he stressed that they will ensure that the certificate issued by the Philippines will continue to be recognized worldwide.

- Awarding of certificate /Token for GOH Tormon

Dr Baylon requested VADM. EDUARDO MA R. SANTOS AFP (RET) PRESIDENT, MAAP / VICE CHAIR, GLOBAL MET to do the honour and he is to be assisted by Capt. Richard Teo, FNI and Dr. Chris Haughton while she reads the content of the plaque of appreciation as follows:

“Global Maritime Education and Training association, TK Foundation and the Maritime Academy of Asia and the pacific present this certificate of appreciation to Atty Alvin A Tormon, Ph D, MM Executive Director of STCW MARINA Office, in Grateful recognition for his invaluable support through his honorable presence as Guest of Honor.
and Speaker during the opening Ceremonies of the 1st phase of the TK Foundation Professional Development Workshop Programme 2014 with theme  “Bridging the Gaps on STCW and Maritime Course Delivery”, given this 28th day of April 2014 at MAAP Kamaya Point Brgy Alas-asin, Mariveles Bataan, signed by Vadm Eduardo Ma R Santos, AFP (Ret), MAAP President and GlobalMET Vice-Chairman”

Dr Baylon thanked everyone as she concluded the program by saying “on behalf of our MAAP President and Global MET Vice chairman VADM. EDUARDO MA R. SANTOS AFP (Ret) we extend our appreciation to you for sharing this opening session with us. We invite all participants to please proceed to Room A on the 2nd floor of this CAMS building for the seminar- workshops to be facilitated by Capt Teo and Dr Chris. Everyone was enjoined to have SERIOUS yet FUN workshop activities, for a quality global maritime education and training.

APRIL 28-MAY2, 2014 SEMINAR-WORKSHOP OUTPUTS

Objective: To come up with one simple strategy, one policy that will bring the entire work to implementation, one particular result as an end of the product –convince the stakeholders, what we want our seafarers, schools, government and industry to be.

Prior to the activity, advanced reading materials such as Australian Training package MAR 13; Blooms Taxonomy; Maslow’s Hierarchy of Needs; Standards for Training Packages; Guide to writing competency based training; Guidelines for competency based assessment in Voc Ed in Western Australia (guidelines-cba 1.2 pdf); Designing Assessment Strategies and Tools; Sample unit(s) attached and Standards for NVR Registered Training Organisations 2012 and other references have been emailed by the facilitators/ MAAP secretariat to the TKF participants, and the same have also been printed and distributed to them upon arrival at MAAP.

Activity 1: On April 28, 2014, (Getting to know the co-participants) Refer to portfolio 4 for Benchmarking. To get to know each other, the participants were paired to discuss about their present line of work and how does this align with STCW code, work Experience, Qualifications and Skills, other pertinent information like personal facts which others do not know. After a few minutes, each one introduced his/her partner to the whole group.

To start with the activities, the participants were grouped into four (4) at random by counting 1 to 4 and all of the same number were grouped together. Each group has 3 to 4 members and each member shall take turn in the presentation.

The initial groupings are composed of the following:

Group 1 (Coffee Bean Team). Capt Danilo Valera, Dr. Angelica Baylon, and 1/CL Cyrene Destreza (deck cadet) with Guest member Capt. Diofonce Tuñacoo

Group 2 (Utopian Team). C/E Fred Haboc, OIC Genesis Pasco, C/E Aris Amado Dolot and OIC-NW Ariel Cruz

Group 3 (Reformers Team). C/M Rene Garcia, C/E Jess Mendoza, C/M James Hans Romero, and 2M Jonas Gavan

On **May 2, 2014**, **Group 1** said that they are confident that the team would be able to accomplish the task; however they are concerned about a problem after the TKF workshop. Only one would be left in the group (Dr. Baylon) because Capt. Valera will be going on board in May to September whereas 1/Cl Destreza will be graduating in June. The facilitators understood and **decided on the last day** (May 2) to distribute them to the other teams. So, **Dr. Baylon** was absorbed by Group 2, however note that **OIC Pasco** from MAAP in Group 2 shall also be on board this May and will be back in November 2014 (**Utopian Team** led by C/E Haboc), **Capt. Valera** in Group 3 (**Reformers Team**) and **1/Cl Destreza** in Group 4 (**FunTasktic Team**). This would result to only 4 members per team for the 6-month project

**Activity 2: What is Competency Based Education, Training & Assessment?**
Recommended readings: (Standards for NVR Registered Training Organisations 2012 – Australia; A guide to writing competency based training materials 2012; **Refer portfolio page 5-6**; Each group has been provided assigned STCW Code for presentation. Each member must be able to define competence; dimensions of competence; How one assess competence; How one apply the competences at the work place; How one ensure consistency, know qualification and how they are maintained and sustained and finally be able to formulate a map of the trainer’s competencies against the present course of training he/she delivers.

**Example of Group 1 (Coffee Bean Output)**

Table A-II/2 Specification of minimum standard of competence for Masters and Chief mates on ships of 500 gross tonnage or more

* **Competence: Plan a voyage and conduct navigation**
  1. Voyage Planning for all conditions
     1.1 Traffic separation schemes en-route
  2. Reporting in accordance with the general principles for ship reporting systems and with VTS procedures
     2.1 Ship reporting system (AMVER/AUSREP/SISTRAM-Brazil Reporting System)
  3. Weather routeing
  4. Security/ No go zone areas
  5. International Recommended Transit Corridor and Reporting System (Gulf of Aden/Somalia)
  6. Computerized Chart Correction Software (Chart Co.)

* **Competence: Determine Position and accuracy of resultant position fix by any means**
  * Port state control requirements of establishing ships position dully marked on the chart using atleast two methods of fixing if available

* **Competence: Determine and allow for compass error**
  * Port state and vetting inspection requirements that spare magnetic compass are serviced and certificated

* **Competence: Coordinate Search and Rescue Operations**
  The procedures contained in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual
  - All covered.

* **Competence: Establish watchkeeping arrangements and procedures**
• All covered in Bridge Procedure Manual (ISM)

*Competence: Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision-making

Appreciation/review of system errors and the operational aspects of modern navigation systems including Radar and ARPA. To include Voyage Data Recorder; Ship Security Alert System and AIS

  Blind Pilotage Planning

  Note: Maritime Environmental Training Institutes to refer to IMO Model Courses 1.08 for Radar Navigation -Management Level; 1.22 Ship Simulator and Bridge Teamwork; 1.27 Operational Use of Electronic Chart Display and Information Systems (ECDIS); and 1.34 AIS Operator Course for more details of this module.

*Competence: Maintain the safety of navigation through the use of ECDIS and associated navigation systems to assist command decision-making

Note: The MARINA approved model course includes the playback function NOT FOUND in IMO model Course 1.27.

*Competence: Forecast weather and oceanographic conditions Include:

  • Computerized Weather Program (Ocean Master)
  • NAVTEX
  • Sat-C

*Competence: Respond to navigational emergencies

  • Contingency manual covering all navigational emergencies to include piracy attack.

*Competence: Manoeuvre and handle a ship in all conditions

  • Include Single Buoy Mooring

*Competence: Operate remote controls of propulsion plant and engineering systems and services

  • Include Bridge Control System

*Competence: Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes

  • All covered.

*Competence: Assess reported defects and damages to cargo spaces, hatch covers and ballast tanks and take appropriate action

  • All covered.

*Competence: Carriage of dangerous goods

  • All covered.

*Competence: Control trim, stability and stress

  • Use of Trim & Stability Software (Loadicator, MACS3, Shipsmaster, Loadman etc.)
  • Include Ballast Management System/ Ballast Exchange

*Competence: Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and the protection of the marine environment

  • Include Maritime Labor Convention 2006.

*Competence: Maintain safety and security of the ship’s crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems

  • Include ISPS Code and the 2006 STCW Amendments.

*Competence: Develop emergency and damage control plans and handle emergency situations –All covered.

* Competence: Use of Leadership and Managerial Skills

  1. Personnel Management, Organization and Training on Board Ship
  1.1. Shipboard personnel management and training
  1.1.1. Principles of controlling subordinates and maintaining good relationships
Output: The participants were able to better understand Competency Based Education, Training and Assessment with the lecture of Capt. Teo and Dr. Haughton and discussions among themselves.

<table>
<thead>
<tr>
<th>Employability Skill</th>
<th>Industry/enterprise requirements for this qualification include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Correctly and accurately complete engineering reports, running sheets and other engineering documentation relevant to the performance of engineering duties. Receive, read and clarify as required, messages concerning vessel safety and operations and correctly interpret and apply to engineering activities. Use appropriate techniques when communicating with multilingual crew to ensure communication is effective and messages are clearly understood.</td>
</tr>
<tr>
<td>Teamwork</td>
<td>Account for personnel involved and equipment used. Seek Master’s advice when challenges are beyond own scope of technical competence or when input from environmental specialist may be required. Use appropriate strategies to foster the trust and confidence of stakeholders.</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>Identify and implement control measures to mitigate risk. Identify difficult situations and negotiate solutions using collaborative approach. Respond to complaints and request for information from authorities and authorised personnel.</td>
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<tr>
<td>Initiative and enterprise</td>
<td>Identify precautions during entry to protect occupants. Recognise unusual situations, unexpected risk/hazards and potential/actual environmental incidents. Report opportunities and recommendations for improvement.</td>
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<tr>
<td>Planning and organising</td>
<td>Identify, collate and process information required to prepare verbal and written reports. Monitor the implementation of environmental management plans, policy and procedures, and specified work methods. Prepare appropriate plan for completion of work activity in confined space.</td>
</tr>
<tr>
<td>Self-management</td>
<td>Assess own work outcomes and maintain knowledge of current codes, standards, regulations and industry practices. Clarify own scope of authority/responsibility for achieving specific environmental outcomes for the vessel and the roles of other key personnel. Impart knowledge and ideas as required through oral, written and visual means.</td>
</tr>
<tr>
<td>Learning</td>
<td>Develop and provide information and training to ensure all crew members understand their environmental obligations/responsibilities. Effectively provide feedback, instruction and training on work performance to engine room crew according to vessel procedures and established marine engineering practice.</td>
</tr>
<tr>
<td>Technology</td>
<td>Use atmospheric detection equipment and interpret the readings. Use computer and relevant equipment to enter, assess and retrieve engineering information. Store records to enable easy access and review by authorised personnel according to regulatory and organisational requirements.</td>
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Activity 3 – Formulate and publish a Training Needs Analysis Recommended readings (Training needs Analysis; the first step in the training process; Research summary - Learning Styles; Blooms Taxonomy of educational objectives; How to conduct a Training Needs
Analysis (Hasan 2007) and Teaching and learning resources: Andragogy learning theory by Knowles 1980).

Each team (4) has identified local issues (What?) Which are common to them all and identify if they are old ones or new ones that never improve (So what?) and what has been done to improve the matters (What now?) These were all posted on the reality wall.

<table>
<thead>
<tr>
<th>Issues (What)</th>
<th>Old ones or new ones that never improve (So What?)</th>
<th>What has been done (What now?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and competency issues</td>
<td>From old way of teaching (lectures only), input-based there is a gradual shift to OB training and assessment</td>
<td>There is a Paradigm shift with CHED issuance of CMO 46 (Quality Assurance series of 2012) and the issuance of the RA 10635 “MARINA Single Administration” with PRC, CHED, DOH, TESDA, and MTC</td>
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<td>From the not-interesting lectures, instructors are encouraged to use visual aids/video clips or multi-media projector to make the lessons more interesting</td>
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<td></td>
<td>Before, its more on teacher -centered with concern on just the delivery of the entire lesson, now its student centered learning with students applying what they have learned</td>
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<td>Unrealistic ratio between students; lack of equipment; lack of competent instructors and assessors for the Outcomes based design and delivery and standardization of OB design of courses</td>
<td>It is a combination of the old and new challenges of the STCW. It is improving but at a slow pace</td>
<td></td>
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<tr>
<td>Curriculum design / development assessment</td>
<td>From the traditional Education (input-based) to Outcomes-based education or OBE (performance-based)</td>
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<tr>
<td>Course Delivery Accreditation of Instructors and Assessors and certification</td>
<td>Now there is a Framework</td>
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<td>Now there is an hiring process at training centers ; the Admin is replaced by the Exec Director as signatories and there is supply of certificate paper</td>
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On April 28, 2014, teams (4) have identified their respective hopes, concerns and expectations for the programme (Training needs analysis) and are summarized below:

<table>
<thead>
<tr>
<th>Hopes</th>
<th>Concerns</th>
<th>Expectations from the participants</th>
<th>Expectations from the Global MET Facilitators</th>
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<tbody>
<tr>
<td>the concern sector of the industry, training and education centers/ respective institutions be willing to accept the output of the course and invest in the needed training equipments and aids etc which are costly or expensive</td>
<td>e.g equipments to multi-gas detector cost almost Php 200,000 or 4,000USD</td>
<td>Each will share their knowledge and experiences to contribute to the attainment of the course objectives which is to bridge the gap between STCW and requirement of the industry</td>
<td>At the end of the course, both Richard and Chris walked us through the various steps in identifying the gaps between STCW and the requirement in the industry</td>
</tr>
<tr>
<td>to be able to attain the CHED curriculum</td>
<td>Sharing of</td>
<td>All participants to fulfill</td>
<td></td>
</tr>
</tbody>
</table>
Homework 1 was on Fisher’s Report (2012) wherein 4 initiatives are to be critiqued by each team: Regulatory, Training, Structures and Recruitment, and Retention. For each issue, each team provided solutions in the Philippine context. Each team presented on April 29, 2014, the 4 structures [Identify the gaps (What), Opportunities (So what) and Initiatives (So what now)] based on 4 Fisher Issues:

**REGULATORY ISSUES (Group 1)**

<table>
<thead>
<tr>
<th>GAPS (What)</th>
<th>Opportunities (So What)</th>
<th>Initiatives (What now)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Over-all standard of implementation of regulation for * accreditation of Colleges (CHED) and Training (MARINA) Assessment /examination /certification of seafarers and the standards desired</td>
<td>• REGULATION ISSUES • Group 1 • GAPs • Accreditation of colleges ◦ Education – CHED ◦ Training – MARINA The gap still exists primarily due to the lenient implementation of the requirements. The government is committed to prune down the number of accredited schools starting with 15 by the end of May and another 30 by the end of the year. • Raise standard and strict implementation of regulation. • Immediate accreditation of maritime training centers and schools with strict</td>
<td>The gap still exists primarily due to the lenient implementation of the requirements. The government is committed to prune down the number of accredited schools starting with 15 by the end of May and another 30 by the end of the year. Assessment and certifications of seafarers – the gaps still exists. We are in a state of suspended animations for the training and certifications of</td>
</tr>
<tr>
<td>GAPS (What)</td>
<td>Opportunities (So What)</td>
<td>Initiatives (What now)</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
</tbody>
</table>
| compliance to rules and regulations.  
- Standardize assessment and examination/evaluation to one system.  
- Establish a QMS guideline for accreditation and assessment/examination process.  
Accreditation of colleges  
Education – CHED  
Training – MARINA  
Accreditation of colleges – lenient implementation of qualification requirements  
Accreditation of Examiners – examiners are not accredited but they are appointed  
Raise standard and strict implementation of regulation.  
Immediate accreditation of maritime training centers and schools with strict compliance to rules and regulations.  
Standardize assessment and examination/evaluation to one system. | seafarers/ratings due to the non-issuance of the IRR for the operationalization of the transfer of TESDA to MARINA.  
March 31, 2014 termination of all assessment centers of training centers and there was no guidance | |
| Lack of QMS to support accreditation and assessment/examination process | Establish QMS guidelines for accreditation and assessment/examination process. | Lack of QMS support – the gap still exist, MARINA is yet to come out with its own QMS to be cascaded to METIS for guidance |

**TRAINING ISSUES (Group 2)**

<table>
<thead>
<tr>
<th>GAPS (WHAT)</th>
<th>Opportunities (SO What)</th>
<th>Initiatives (What now)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between overall standard of seafarers output by colleges and the competency required by employers and desired by society</td>
<td>Mismatch between the product (seafarers) and requirement of the shipping industry</td>
<td>CHED issued CMO (CHED Memorandum Order) 46, series of 2012 entitled the “Enhancement of the HEIs Program through the outcomes-based design of curriculum and typology of the Quality Assurance System”</td>
</tr>
</tbody>
</table>
| Between course structures and curricula in different countries | Philippine MET and certification is compared against IMO model courses which are based from other countries using TECH Voc Program | CMO 46 Series of 2012  
CMO 13 and 14 Series of 2013 and its supplement CMOs  
Curriculum Review of BSMT and BSMarE curriculum on May 7-10, 2014 at MAAP for consistent monitoring |
| Shortfall in the quality and quantity of trainers and lack of sustainability of supply of professional trainers due to  
* salary gap between being at sea and being a professional trainer  
* perception that all | A wide variation in the quality of maritime cadets between those members of special projects and paying students | * PAMTCI re-aligned the IMO 6.09 to an outcomes-based design to delivery  
* MARINA-SECOJ (Seamen’s Employment Center of Japan) grant for the enhancement of instructors  
* MARINA accreditation of instructors and assessors |
GAPS (WHAT) | Opportunities (SO What) | Initiatives (What now)
---|---|---
trainers must be former mariners | Outcomes-based delivery and assessment widely varied from school to school in giving general negative impact on MET certification | CMO 46 Series 2012
“fabric of classrooms” deficiencies in colleges | CMO 13 and 14 Series of 2013 and its supplement CMOs Consistent monitoring of the METIs done by MARINA-CHED competent evaluators/assessors | MARINA should come up with national policy on the cadet structured training program and a career development programme for seafarers. MARINA should expedite the MC for item no.1
Patchy integration of supply side for sea-based component of seafarer training | The responsibilities of the ship operators and Reg 1/4 and Reg 1/6 are not effectively implemented by the flag administration | Other issues raised during the discussions by the participants
- There are so many laws/rules and regulations – the problem is in the implementation
- PAMTCI reflected on 2006-2013 findings and ever since its Structure administration, QSS implementation and STCW implementation, seemingly, no wants to take responsibility.
- Seafarers are being assessed by companies on board (source of CMS) which MARINA may get, being in charge of administration. This is to ensure that the assessments are valid, reliable and flexible.
- People on ship don’t want to take additional responsibility (MM and Chief Officer)
- Another problem is the righteous interpretation of STCW; nevertheless, these are being addressed by MARINA through the help of the industry and other maritime stakeholders.
- On the question if you need a law for the industry to come up with its own device, there is no need for a law and the industry can come up with their own according to PAMTCI and cited that the domestic shipping is under MARINA that provides incentives.
- Could the training center be an influence on structure? Yes, we have influence like ASTC thru AMOSUP.
- Problem cited that on March 31, 2014, there will be termination of accreditation of all training centers. PAMTCI should be involved in the consultation on preparing Course Manuals by MARINA (not just PMMA). Assessment must be an on-going process.

STRUCTURAL ISSUES (Group3)

| Gaps (What) | Opportunities (So What) | Initiatives (What now) |
---|---|---|
Desired market structure for training is financially unsustainable
METIs are business oriented. Lecturers and assessors are underpaid | 1. Classification of METIs
2. Class A for Officers and Class B for Ratings
3. Entry Level Assessment (c/o MARINA)
4. Product of Class B with 36 months of seagoing service inclusive of 6 months watch keeping to take assessment for entry level (Class A)
5. Continuous Faculty Development (EOP) for all Class A and B
6. Salary Gap– government incentive and support from sponsors | CMOs There must be career path or progression. This is answered by CMO 2012 on OIC level |
RECRUITMENT AND RETENTION ISSUE (Group 4)

RECRUITMENT ISSUES

<table>
<thead>
<tr>
<th>Gaps (What)</th>
<th>Opportunities (So What)</th>
<th>Initiatives (What now)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor marketing strategies on the potential candidates (job preference)</td>
<td>Innovate the mode of education and training through up-to-date facilities, sufficient learning materials, and highly qualified Instructors/Assessors; let the customer satisfaction be the marketing tool.</td>
<td>CMOs</td>
</tr>
<tr>
<td>Qualifying exams for the potential candidates; many are aspiring to be accepted in the maritime schools but cannot pass the qualifying exams</td>
<td>Review the assessment tools used in assessing the candidates’ aptitude;</td>
<td></td>
</tr>
<tr>
<td>Uncertainty of employment after graduation</td>
<td>Strengthen the education-to-employment mechanism by entering into agreement with various companies, and Limit the entry of students taking into consideration the absorptive capacity of the industry</td>
<td></td>
</tr>
<tr>
<td>Examination scheme to obtain COCs; there is a gap between the learning outcomes and assessment tools.</td>
<td>Review and validate the instrument used; make sure that the required competences per identified capacity are met</td>
<td></td>
</tr>
</tbody>
</table>

RETENTION ISSUE

<table>
<thead>
<tr>
<th>Gaps (What)</th>
<th>Opportunities (So What)</th>
<th>Initiatives (What now)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of the seafarers want to spend time with their families while ashore</td>
<td>Foster work-life balance of the seafarers through distance education; Shorter contracts; Counseling and Family activities on shore</td>
<td></td>
</tr>
<tr>
<td>Various problems encountered on-board and ashore</td>
<td>Information of piracy HRA and how the Government and Shipping agency assures the seafarer and family of their security/safety and compensation if worst scenario happens;</td>
<td></td>
</tr>
<tr>
<td>Internet connection; On and Off the ship in port; Liberty to go ashore; Security level impose at port, place of berth too far from the city/gate/ shopping malls</td>
<td>Rotational work task at the company while on vacation and send them back after few months;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Encourage Marine Officers to become an Instructor/Assessor while on vacation</td>
<td></td>
</tr>
</tbody>
</table>

Other issues on Retention and Recruitment provided during the discussion by all concerned

- Schools must have strict admission which is not observed in maritime. If medical schools can adopt strict admission and is neither being questioned nor challenge in court, why can’t we do this in maritime.
- There is difficulty in retaining seafarers on Sea because when seafarers are on vacation, they are undergoing training instead of being with family. Some training courses are paid by the company while others are paid by seafarers themselves. One Captain shared his experience that after his 4-month contract, he is paid 25% of the salary while on
Most shipping companies or agencies have identified schools that don’t pass entry requirements. One says that while students are given a chance, normally they don’t pass the entry requirement provided by the shipping companies.

Is there an entry and exit policy for seafarers? If none, can MARINA be an instrument to put together? The participant from MARINA stated that they are working on that direction.

Manning is not represented in the group (key players must be involved)

The Law cannot stand alone, the implementing rules and regulations (IRR) must be in place.

Activity 4: Learning Points Diary (Read portfolio 6) Each group formulate and start writing up a learning point’s diary The Teams Learning Experience: A Reflection Each group present their recapitulation expressing their: Learning experience, what each will do on return to their own work place, and how will they continue to work as a consolidated team for phase 2. Evaluation & recommendations

UTOPIAN TEAM: On AREAS OF LEARNING: Reading Materials: should have read all before the workshop; FISHER REPORT: confirmation of the findings on training issues; MARITIME PROGRAMS: Support Level, Operational Level and Management Level (STCW and Industry standards); LEARNING AND ASSESSMENT STRATEGIES: for Maritime academies and training centers and MARITIME ADMINISTRATION: for Certification issue.

On READING MATERIALS: Learned (1) different definitions of COMPETENCE and the appropriate definition based on the industry requirements; (2) difference between COMPETENCE and COMPETENCY; (3) the similarity of the Competence-Based Teaching and Learning and Assessment between the Australian Model and the Philippines (TESDA – TECH VOC); and (4) the difference between Pedagogy and Andragogy and the most methodology to adopt for Maritime Academies and Maritime Training Centers.

On FISHER REPORT findings confirmation on Training Issues: The Curriculum programs need enhancement in order to match the requirement of the maritime industry; The Overall training of seafarers should be enhanced; the Professionalization of Instructors and assessors and the need for sustainability; the Appropriate ratio of students/trainees and equipment/simulators where needed; the Improve partnership working between colleges/employers /regulators and to Develop shipboard structured training program and continuing professional development capability.

On Maritime Programs: Management, Operational and Support Levels: The Enhancement needed to fully comply with the competence required under the STCW and address the updated requirements of the maritime industry – SOME ELEMENTS OF COMPETENCE.

LEARNING AND ASSESSMENT STRATEGIES: The Philippines practice is similar to the Australian but needs enhancement in the design, delivery and assessment.

On MARITIME ADMINISTRATION ON CERTIFICATION ISSUES: The Philippines practice has to be reviewed in order to fill the gaps identified i.e. Certification for ships
trading in NCV areas and less than 500 GRT and the certification of the Operational Level to Management level.

**Reformers Learning Reflection**

On learning experience: In the span of the 5-days workshop with the cohorts, we found out that there is a lot to learn especially about the outcomes-based education and competency based assessment. With the help of our facilitators, we were enlightened about the gaps of our teaching and learning strategies when it comes to outcomes-based education. We learned how to identify the gaps between the current curriculum and the 1978 STCW as amended. Also as an educator, we learned some regulations that governs for the better training of seafarers to be more competitive. Thus, we now have the knowledge how to decode the 1978 STCW as amended in analyzing the missing competencies to be included in our curriculum. Moreover we learned what is competency based education, training and assessment (CBETA) in making a learning and teaching activities and assessment strategies. On the presentation of other cohorts, we also learned how to prepare a project and useful is the Gantt chart in making a timetable of the said activity. Also, we learned how to cooperate, collaborate, and delegate the task and resolved any weakness or concerns during discussion.

On what we do?: Continue our job, adopt all the learnings from our workshop that could help us improve the standards of maritime education and training in the institution. To follow the action plan that we have agreed from our preliminary meeting and we will ask our boss if we could use the resources of the company for the project, then and only there that we could jump start the making of the project.

On Evaluation and recommendation: The knowledge and experience we have gained in the workshop are indeed beneficial and we recommend to offer the same workshop to non-members of GLOBAL MET to maintain the supremacy of the Philippines as the leading suppliers of competent seafarers worldwide.

**Activity 5 – Unpacking the STCW Code & Identifying missing competences in delivery of Training & Assessment** (Refer to portfolio p 11 using the following reference materials: STCW (2010) Manual; National Curriculum; Standards for Training Packages (Australian); AUSTRALIAN Training package MAR 13; Standards Policy Framework (The Australian Vocational Qualification Framework 2013); A Guide to writing Competency Based Training Materials 2003 2012 and the Andragogy + Pedagogy, (Conner updated) On April 29, the teams have decoded the STCW as they were able to identify the Competency/ Knowledge/skills and Decide Missing Competencies that need to be included (STCW Decoded)

**FUNTA$Tic Team:** On Table A-III/1 (Officers in Charge of Engineering Watch)

<table>
<thead>
<tr>
<th>Competency</th>
<th>Knowledge, understanding and Proficiency Skills (Missing Competencies)</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage the operation of propulsion plant machinery plan and schedule operations</td>
<td>1. Design features and operative mechanism of the following machinery and associated auxiliaries: Marine diesel engine 2. Thermodynamics and heat transmission (Overlapping Appendix 3 of Model Course 7.04, subjects divided over different subjects) 3. Mechanics and hydromechanics</td>
<td>Competences from Table A-III/2 ML Marine Engineering</td>
</tr>
<tr>
<td>Competency</td>
<td>Knowledge, understanding and Proficiency Skills (Missing Competencies)</td>
<td>References</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
</tbody>
</table>
| Manage fuel, lubrication and ballast operations | 4. Propeller and load diagrams  
5. Propulsion characteristics diesel  
6. Refrigerators and refrigeration cycle  
Technology of materials | Competences from Table A-III/2 ML Marine Engineering |
| Manage fuel, lubrication and ballast operations | 1. Operation and maintenance of machinery, including pumps and piping systems  
2. Prevention of the sea by oil | Competences from Table A-III/2 ML Marine Engineering |
| Manage operation of electrical and electronic control equipment | 1. Marine electro technology  
2. Automatic control engineering and safety devices  
3. Design features and system configuration of operational control equipment for electrical motors  
4. Features of hydraulic and pneumatic control equipment | Competences from Table A-III/2 ML Marine Engineering |
| Manage safe and effective maintenance and repair procedures | Marine engineering practice | Competences from Table A-III/2 ML Marine Engineering |
| Contribute to the operation of equipment and machinery | Safe operation of equipment, including:  
1. hoists and lifting equipment  
2. proper use of knots, splices and stoppers (from A-II/5)  
3. Ability to use and understand basic crane, winch and hoist signals | Competences from Table A-III/5 Able Body Engine |
| Monitor and control compliance with legislative measures to ensure safety of life at sea and protection of the marine environment | Knowledge of relevant international maritime law embodied in international agreements and conventions | Competences from Table A-III/2 ML Marine Engineering |
| Plan and schedule operations | Physical and chemical properties of fuels and lubricants | Competences from Table A-III/2 ML Marine Engineering |
| Prevent, control and fight fires on board | Competencies per Table A-VI/1-3 | Chapter VI/3 |
| Operate life-saving appliances | Competencies per Table A-VI/2-1-4 | Chapter VI/2 |
| Apply medical first aid on board ship | Competencies per Table A-VI/4-1-3 | Chapter VI/4 |
### Reformers Team: On Table A III / 1 (Deck Officer Operational Level)

#### Table A III / 1 (Deck Officer Operational Level)

<table>
<thead>
<tr>
<th>Competency Function 1</th>
<th>Knowledge &amp; Skills</th>
<th>Decide missing competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and conduct a</td>
<td>• Celestial navigation</td>
<td>Forecast weather and oceanographic conditions to plan a safe passage</td>
</tr>
<tr>
<td>passage and determine</td>
<td>• Terrestrial and coastal navigation</td>
<td>Use bridge equipment to determine vessel position</td>
</tr>
<tr>
<td>position</td>
<td>• Electronic systems of position fixing and navigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Echo-sounders (and speed logs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compass – magnetic and gyro</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Steering and control systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Meteorology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Celestial navigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Terrestrial and coastal navigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Electronic systems of position fixing and navigation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Echo-sounders (and speed logs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compass – magnetic and gyro</td>
<td></td>
</tr>
<tr>
<td>Maintain a safe</td>
<td>• Watchkeeping</td>
<td>Use wheelhouse equipment for safe navigation</td>
</tr>
<tr>
<td>navigational watch</td>
<td>• Thorough knowledge of the collision regulations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Principles in keeping a navigational watch</td>
<td>Apply command navigation procedures on vessels limited by tonnage or near coastal operations</td>
</tr>
<tr>
<td></td>
<td>• The use of routeing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The use of information from navigational equipment for maintaining a safe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>navigational watch (Including IMO MC 1.34)</td>
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<tr>
<td></td>
<td>• Knowledge of blind pilotage techniques</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The use of reporting in accordance with the general principles for a ship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reporting system and with VTS procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bridge resource management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Radar Navigation</td>
<td></td>
</tr>
<tr>
<td>Use of RADAR and</td>
<td>Radar Navigation</td>
<td></td>
</tr>
<tr>
<td>ARPA to maintain</td>
<td></td>
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<tr>
<td>safety of navigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of ECDIS to</td>
<td>Navigation using ECDIS</td>
<td></td>
</tr>
<tr>
<td>maintain the safety</td>
<td></td>
<td></td>
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<tr>
<td>of navigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respond to</td>
<td>Emergency procedures</td>
<td></td>
</tr>
<tr>
<td>emergencies</td>
<td></td>
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<tr>
<td>Respond to a distress</td>
<td>Search and Rescue</td>
<td></td>
</tr>
<tr>
<td>signal at sea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use the IMO SMCP and</td>
<td>English language</td>
<td></td>
</tr>
<tr>
<td>use English in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>written and oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmit and receive</td>
<td>Visual signaling</td>
<td>Transmit and receive information by the Global Maritime Distress and Safety System</td>
</tr>
<tr>
<td>information by visual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>signaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maneuver the ship</td>
<td>Ship maneuvering and handling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contribute to berthing, anchoring and other mooring operations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contribute to the safe operation of deck equipment and machinery</td>
<td></td>
</tr>
<tr>
<td>Competency Function 1</td>
<td>Knowledge &amp; Skills</td>
<td>Decide missing competencies</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contribute to shipboard maintenance and repair</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Apply general purpose hand skills aboard a vessel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Operate remote controls of propulsion plant and engineering systems and services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Operate deck machinery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Perform basic vessel maneuvers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Maneuver a vessel within near coastal waters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Steer a vessel under direction of the Master</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competence Function 2</th>
<th>Knowledge &amp; Skills</th>
<th>Decide missing competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes</td>
<td>Cargo handling, stowage and securing</td>
<td>• Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Manage loading, discharging and stowage of cargo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contribute to safe cargo operations on liquefied gas tankers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contribute to safe cargo operations on oil and chemical tankers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Operate deck machinery, cargo handling gear and equipment on a vessel</td>
</tr>
<tr>
<td>Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks</td>
<td>Damage and defects commonly encountered</td>
<td>Carriage of dangerous goods</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competence Function 3</th>
<th>Knowledge &amp; Skills</th>
<th>Decide missing competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure compliance with pollution prevention requirements</td>
<td>Prevention of pollution of the marine environment and anti-pollution procedures</td>
<td>• Follow environmental work practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monitor environmental management on a vessel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Manage compliance with environmental management legislation</td>
</tr>
<tr>
<td>Maintain seaworthiness of the ship</td>
<td>Ship stability Ship construction</td>
<td>• Manage vessel’s trim, stability and stress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Maintain vessel stability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Assist with routine maintenance of a vessel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Perform routine maintenance and repairs on a vessel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implement vessel planned maintenance system</td>
</tr>
<tr>
<td>Prevent, control and fight fires on board</td>
<td>Fire prevention and fire fighting appliances</td>
<td>• Maintain fire fighting appliances</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Manage fire fighting and fire prevention activities on board a vessel</td>
</tr>
<tr>
<td>Operate life-saving appliances</td>
<td>Life-saving</td>
<td>• Operate inboard and outboard motors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Operate survival craft and other lifesaving appliances</td>
</tr>
<tr>
<td>Competence Function 3</td>
<td>Knowledge &amp; Skills</td>
<td>Decide missing competencies</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Apply medical first aid on board ship</td>
<td>Medical aid</td>
<td>Manage provision of medical care on board a vessel</td>
</tr>
<tr>
<td>Monitor compliance with legislative requirements</td>
<td>Basic working knowledge of the relevant of IMO conventions concerning safety of life at sea, security and protection of the marine environment</td>
<td>• Control compliance with legislative measures to ensure safety of life at sea and protection of the marine environment • Comply with regulations to ensure safe operation of a vessel • Observe regulations to ensure safe operation of a vessel</td>
</tr>
<tr>
<td>Application of leadership and teamworking skills</td>
<td>Working knowledge of shipboard personnel management and training</td>
<td>Manage safety and security of vessel crew and passengers • Work effectively as part of a crew on a vessel • Manage a small crew • Supervise a crew • Provide leadership to crew • Manage a vessel and its crew</td>
</tr>
<tr>
<td>Contribute to the safety of personnel and ship</td>
<td>Knowledge of survival technique</td>
<td>• Manage safety and security of vessel crew and passengers • Work safely in confined spaces on a vessel • Survive at sea in the event of vessel abandonment • Control safe access to and on vessel</td>
</tr>
</tbody>
</table>

**Activity 6. Homework 2:** Each group prepared one of the following areas for presentation and Q&A; *Key features & significance of STCW 1978 (as amended) in layout, presentation & structure; Levels of responsibility & functions* P.84 – *Assessment of Competence – critique STCW against what the team worked on Assignment No. 1* and to what extent is the effective training (CBETA) are being conducted in the respective institution with an example to be provided;

**UTOPIAN Team** presented an Overview of STCW as amended thru (a powerpoint)
Shared Responsibility
for Seafarers’ Competence

Company
Seafarers’ Competence
Crew Management
Flag State

Shared Responsibility
for Seafarers’ Competence
SEA IS DANGEROUS

2 TRUTHS in Shipping

WE CAN’T CHARGE THE LAW OF NATURE

PEOPLE commit MISTAKES

Shared Responsibility
for Seafarers’ Competence

SHIP FIT FOR PURPOSE

IMO MESSON STATEMENT; BC CODE OBJECTIVES

Shared Responsibility
for Seafarers’ Competence

STCW KEY FEATURES AND SIGNIFICANCE:
- Includes all agreed changes in 1995;
- Addresses new technology, inconsistencies, interpretations and outdated provisions;
- Emphasis on improving control and communication provisions of certification in Chapter 1;
- Addresses the specific requirements of offshore and short sea shipping;
- Overall commitment to harmonize the amended STCW Convention, where practical, with the provisions of the 2006 ILO MLC; and
- Continued to emphasize competence rather than sea service or period of training.

Shared Responsibility
for Seafarers’ Competence
Layout of the Convention: The STCW Convention book consists of three sections:
- The Article: Outlines the legal responsibilities a Party has to meet;
- The Annex: Gives technical details on how the legal responsibilities referred to in the Articles should be met; and
- The STCW Code: Specifies in more detail the technical details contained in the Annex. It contains Part A & Part B.

The Regulations in the Annex should be used in conjunction with the relevant section of the STCW Code (Part A).

Shared Responsibility
for Seafarers’ Competence

Minimum Level of Competence

DECK DEPARTMENT
- SECTION A-II/1
- SECTION A-II/2
- SECTION A-II/3
- SECTION A-II/4
- SECTION A-II/5
- SECTION A-II/6
- SECTION A-II/7
- SECTION A-II/8
- SECTION A-II/9

ENGINE DEPARTMENT
- SECTION A-III/1
- SECTION A-III/2
- SECTION A-III/3
- SECTION A-III/4
- SECTION A-III/5
- SECTION A-III/6
- SECTION A-III/7
- SECTION A-III/8
- SECTION A-III/9

Minimum Level of Competence

SOLAS
MARPOL
STCW
MLC

Level of Responsibility

<table>
<thead>
<tr>
<th>FUNCTIONS</th>
<th>1st</th>
<th>2nd</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck Navigation</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Cargo Handling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine Control</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Engine Control</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Maintenance/Repair</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Electrical/Engineering</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Radio/Communication</td>
<td></td>
<td></td>
<td>YES</td>
</tr>
</tbody>
</table>
UTOPIAN Team summarized the key features and significance of STCW 1978 (as amended): Its Layout, Presentation and Structure

- includes all agreed changes in 1995;
- addresses new technology, inconsistencies, interpretations and outdated provisions;
- Emphasis on improving control and communication provisions of certification in Chapter 1;
- addresses the specific requirements of offshore and short sea shipping;
- overall commitment to harmonize the amended STCW Convention, where practical, with the provisions of the 2006 ILO MLC; and
- Continued to emphasize competence rather than sea service or period of training.

Whereas the layout of the Convention: The STCW Convention book consists three sections
- THE ARTICLE outlines the legal responsibilities a Party has to meet;
- The ANNEX gives technical details on how the legal responsibilities referred to in the Articles should be met; and
- The STCW Code specifies in more depth the technical details contained in the Annex. It contains Part A and Part B

The Regulations in the Annex should be used in conjunction with the relevant section of the STCW Code (Part A)

The Funtastic Team provided comprehensive features of STCW. That the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) is considered one of the four pillars of maritime conventions and sets forth the minimum standards to seafarer’s competence on board vessels plying international route. It was adopted on 7 July 1978 and has been amended 8 times, the most significant of which were amendments in 1995 and 2010.

The Convention consists of Articles, Annex and STCW Code (Part A which is mandatory and Part B serves as Recommendation or Guidance to Part A). The Articles and Annex provide the legal framework within which mandatory technical standards contained in Part A of the Code are applied.

The 1995 amendments introduced the STCW Code. The 2010 amendments (a.k.a. Manila Amendments) updated the standard of competence required in the light of emerging technologies, introduced new training and certification requirements and methodologies, improve mechanism for enforcement of its provisions, detail requirements on hours of work and rest, prevention of drug and alcohol abuse, and medical fitness standards.

The layout, presentation and structure are actually intended to be user friendly and easy for cross referencing.
* The annex has 8 chapters and each chapter is further subdivided into regulations
* Chapter I is general provisions
* Chapter II is master and deck department
* Chapter III is engine department
* Chapter IV is radio communication and radio operators
* Chapter V is special training requirements for personnel on certain types of ships
* Chapter VI is emergency, occupational safety, security, medical care, and survival functions
* Chapter VII is alternative certification
* Chapter VIII watchkeeping

The Code has the same number of chapters as in the annex but instead of regulations it has now sections. Section A for Part A (Mandatory) and B for Part B (Recommendatory/Guidance). It has also tables that shows the functions and of each section, with its corresponding competence, KUP, method of demonstrating competence and criteria for evaluating competence.
The Reformers Team summarized the STCW significance into 8 parts namely: (1) **Safety** – presentation of life cargoes, property and environment; (2) **Quality Assurance**, Efficient and Safe Operation of the Ship; (3) **Standardization**, International Recognition and Acceptance; (4) **MARPOL**, Protection of the Marine Environment; (5) **Medical**, Standard Formal for all Seafarers Regarding Medical Fitness; (6) **Living Condition** – assurance that seafarers are well rested and minimize fatigue and stress; (7) **Security**, avoidance of harm and minimize threats of the ship and (8) **Polar Navigation** – safe passage in polar waters.

**On Levels of Responsibility and Functions**

The Utopian Team presented the levels of responsibility and functions comprehensively through a table which is clearly defined and understood.

<table>
<thead>
<tr>
<th>Level of Responsibility</th>
<th>Functions</th>
<th>Management</th>
<th>OIC</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck</td>
<td>Navigation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Cargo Handling and Stowage</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deck and Engine</td>
<td>Controlling the operation of a ship and care for persons on board</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Engine</td>
<td>Marine Engineering</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Maintenance and Repair</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical Electronics and Control Engineering</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>Radio Communication</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

The FunTaskTic Team presented the levels of responsibility and functions comprehensively through a table which is clearly defined and understood.

<table>
<thead>
<tr>
<th>Concerned Agency</th>
<th>Responsibility</th>
<th>Functions in the Implementation of STCW</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARINA (with 5 agencies: CHED, PRC, DOH, MTC, TESDA and NTC)</td>
<td>Ensure proper implementation of the provisions of the STCW</td>
<td>Administration, supervision, and monitoring of training and assessment in accordance with the provisions of section A-I/6 of the STCW Code</td>
</tr>
<tr>
<td>Maritime Education and Training Institutions (METIs)</td>
<td>Implement the provisions of the STCW in accordance with the standards set by the administration (MARINA)</td>
<td>Ensure the quality of training and assessment as delegated to them by the Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comply with the regulations imposed by the Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintain the quality of services through a quality standards system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work hand-in-hand with the government and private</td>
</tr>
</tbody>
</table>


| Private Sectors and company | Assume the responsibility for the operation of the ship from the ship owner and agree to take over all duties and responsibilities imposed on the company by the STCW regulations | Support the government and the maritime education and training providers in the shipboard training | Involvement in the formulation of the national standards |

The **Reformer team** presented Level of Responsibility and Function Ref page 75 (table of competency) as to: Management Level; Operational Level and Support Level—associated with assigned duties (operation or management).

**On Assessment of Competence**

The **Utopian Team** on Assessment of competence as per STCW minimum level of competence for the **deck department**: SUPPORT LEVEL-DECK (SECTION A-II/4 and SECTION A-II/5); OPERATIONAL LEVEL-DECK (SECTION A-II/1 and SECTION A-II/3) and MANAGEMENT LEVEL-DECK (SECTION A-II/2) whereas for the **engine department**: SUPPORT LEVEL-ENGINE (SECTION A-III/4; SECTION A-III/5 and SECTION A-III/7); OPERATIONAL LEVEL-ENGINE (SECTION A-III/1 and SECTION A-III/6) and MANAGEMENT LEVEL-ENGINE (SECTION A-III/2 and SECTION A-III/3)

The **Funtasktic Team** on assessment of competence referred to Recruitment and Retention. **On Retention**: The Technical Assessors conduct assessment based on the checklist provided by Owners (areas specific for their requirements). Even if the assessors are provided with guided questions, still the following difficulties are encountered such as: Type of vessels; Experience in cargoes or engine type; GRT or KW and relationships or acquaintances. The possible solutions are provided: Hire competent personnel for specific requirement and use simulators. **On Retention**: Senior Officers such as Captain and Chief Engineers conduct assessment of the work performance of the seafarers using Company tools like: Appraisal Report; Promotion Booklet whereas the Marine and Technical Superintendents assess the performance of the Captains and Chief Engineers. The following difficulties are encountered: Senior Officers are too busy with their work; Bias of giving report and Time spent with the seafarer. Possible solutions are provided: Senior Officer should conduct appraisal of crew prior disembarkation/finishing contract and for the promotion of seafarers is to remove bias report document assessment with video recordings

The **Reformer Team** on Assessment of competence as per STCW says that assessment of competence is not applicable to structural issues, however structural issues contributes to incompetence of seafarers due to non compliant of the regulations

**On to what extent you are conducting effective training (CBETA) in your institutions, provide example.**

The **Utopian Team** says that they are conducting effective training CBETA in their respective institutions thru provision of Level 1 for STCW minimum courses; level 2 for the additional training requirements, TRB for support level, operational level and management level as documented evidence for revalidation; competitive advantage is the implementation
of the “competence management system for all ranks and the onboard structured training program – instructors /facilitators / assessors with approved training. The Utopian Team sees to it that the certificates of the seafarers are re-validated a proof that the seafarers: meet medical fitness; approved seagoing service – performing functions; performed functions considered to be Equivalent to the Sea Service; Passing an Approved Test; Approved Training Course or Courses; Super-numerary Capacity or in a Lower and Refresher or Updating Courses.

The FunTasktic Team says that METIs are implementing paradigm shift from a norm to criterion based assessment; implementing a centralized I. G. system (O.B.E.) anchored on the STCW 78 as amended; centralizing periodical exam with all the questionnaires based from the table of specification or T.O.S; implementing post examination questionnaires analysis with the provisions for intervention for those who got low result. Known as “enhancement program”, i.e. identifying weaknesses and finding topics to fill in the gaps as part of the enhancement processes; utilizing support equipment like Bridge Simulator for laboratory training, mock-up bridge with real equipment like Gyro Compass, Magnetic Compass, live RADAR, VHF, GPS, Weather fax, SSB radios, ECDIS laboratory and GMDSS laboratory equipment and providing cadets theoretical knowledge plus the hands on operation for all of the equipment found on board the vessel for a Competency Based Education system.

The Reformers team says that they are conducting effective training CBETA in their respective institutions thru: the course manual with OBE with performance criteria (teacher/learner activities; lesson plan and assessment – written, oral, practical (simulator, laboratory, workshop, training ship); Comprehensive exam (Competency Management System; Peer mentoring; Reflection; Remediation and Consultation –hour); Assessment of students before and after shipboard training to identify how many of those tasks can be done while on board and Per subject / examination.

From the scale 1-10, the teams were required to rate their team as to FOCUS, ENERGY, Honesty and openness.

Utopian Team (Focus- 8, Energy-10 and Honesty-10)

Reformers Team (Focus- 8, Energy-8 and Honesty-10)

Funtasktic Team (Focus-10, Energy-9 and Honesty-10)

Activity 7 – Introduction to CBETA design (for competency-based education design); Refer Portfolio page 29 wherein Groups will each design the competences using the following guide; Modification history; Unit Descriptor; Application of the unit; Licensing/Regulatory information; Pre-requisites; Employability Skills information; Elements & Performance Criteria & pre-content; Elements describe the essential outcomes of a unit of competency; Performance criteria describe the required performance needed to demonstrate achievement of the element; Assessment of performance is to be consistent with the evidence guide. Required skills & Knowledge – Describes the skills and knowledge required for this competence; Assessments and Evidence Guide, The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, the required skills and knowledge, the range statement and the Assessment Guidelines for the Training Package. Range Statement – relates to the unit of competency as a whole. It allow and situations that may affect performances for a different work environment; Unit sectors
Competency Field: Each group will present their work to the peers for constructive critique. Refer portfolio page 19 to Develop and Design training, learning and assessment programmes and curriculum (Competency Based Education Training & assessments- CBETA) that will close or eliminate the Gaps; Delivery of training & assessment; Administration of the marine qualifications; Units of competence – Competency Standards and titles. Elements of competence and performance criteria; Skills sets or Clusters to STCW Qualifications Framework (MQF)- formulating for delivery Unit Description/Descriptor; Alignment to STCW; Learning & Assessment strategy; Assessment tools and materials and Professional development materials.

Reformers Team

Course Description: This course involves the skills and knowledge required to monitor the loading, stowage, securing and care of cargo during the voyage and the unloading of cargo according to the cargo plan, organizational procedures and vessel stowage limitations. This course applies to the work of an OIC-NW for 500 gross tonnage or more in ocean going and Near Coastal. This course has links to legislative and certification requirements.

Pre-requisite: Not applicable.
Function: Cargo handling and stowage at the operational level.
Foundation Skills: This section describes those languages, literacy, numeracy and employment skills that are essential to performance. Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Elements and Performance Criteria

<table>
<thead>
<tr>
<th>Elements describe the essential outcomes.</th>
<th>Performance criteria describe the performance needed to demonstrate achievement of the element.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Review cargo plan</td>
<td></td>
</tr>
<tr>
<td>1.1 Cargo plan is interpreted to determine required cargo operations</td>
<td></td>
</tr>
<tr>
<td>1.2 Cargo plan is checked to ensure cargo is evenly distributed</td>
<td></td>
</tr>
<tr>
<td>1.3 Cargo plan is assessed to ensure incompatible cargo stowage is avoided</td>
<td></td>
</tr>
<tr>
<td>1.4 Cargo plan is evaluated to ensure regulations relating to hazardous materials/dangerous goods are observed, where appropriate</td>
<td></td>
</tr>
<tr>
<td>1.5 Cargo plan is checked to ensure unloading sequence is effective</td>
<td></td>
</tr>
<tr>
<td>2 Prepare for loading</td>
<td></td>
</tr>
<tr>
<td>2.1 Holds are checked to ensure they are clean, dry and free of smell</td>
<td></td>
</tr>
<tr>
<td>2.2 Safety arrangements in holds are verified to ensure they are operational</td>
<td></td>
</tr>
<tr>
<td>2.3 Supplies of cargo protection and securing material are reviewed to ensure there are sufficient available</td>
<td></td>
</tr>
<tr>
<td>2.4 Bilge suctions are protected before loading</td>
<td></td>
</tr>
<tr>
<td>2.5 Checks are made to ensure cargo is correctly identified, inspected and confirmed against documentation</td>
<td></td>
</tr>
<tr>
<td>2.6 Preparations for loading are monitored according to stowage plan and organizational procedures</td>
<td></td>
</tr>
<tr>
<td>2.7 Ballast discharge plan is identified and understood and appropriate actions to support this plan are undertaken</td>
<td></td>
</tr>
<tr>
<td>3 Supervise loading/unloading</td>
<td></td>
</tr>
<tr>
<td>3.1 Instructions are given to crew and stevedores involved in cargo loading/unloading according to cargo stowage plan</td>
<td></td>
</tr>
<tr>
<td>3.2 Compliance with regulations, procedures and instructions pertaining to type</td>
<td></td>
</tr>
</tbody>
</table>
### Cargo

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>Loading/unloading is monitored to ensure the loading rate is not exceeded in the case of bulk or liquid cargo</td>
</tr>
<tr>
<td>3.4</td>
<td>Vessel stability is observed during loading/unloading operations</td>
</tr>
<tr>
<td>3.5</td>
<td>Loading/unloading operations are checked against stowage plan</td>
</tr>
<tr>
<td>3.6</td>
<td>Cargo is secured and lashed according to lashing plan</td>
</tr>
<tr>
<td>3.7</td>
<td>Cargo handling documentation is completed according to organizational procedures and regulatory requirements</td>
</tr>
</tbody>
</table>

### Monitor Care of Cargo During Voyage

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Vessel plan for care of cargo during voyage is implemented according to organizational and customer requirements, and relevant regulations</td>
</tr>
<tr>
<td>4.2</td>
<td>Ventilation and humidity control systems are checked</td>
</tr>
<tr>
<td>4.3</td>
<td>Actions required to maintain the wellbeing of cargo during the voyage are initiated according to customer requirements and organizational procedures</td>
</tr>
<tr>
<td>4.4</td>
<td>Compliance with safety and hazard minimization procedures and regulations related to cargo care is managed at all times during the voyage to maintain the safety of personnel, cargo and vessel</td>
</tr>
<tr>
<td>4.5</td>
<td>Appropriate action is taken when defects or damage to cargo are detected</td>
</tr>
</tbody>
</table>

### Establish and Maintain Effective Communication During Loading and Unloading

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Use VHF to contact the shore facility</td>
</tr>
</tbody>
</table>

### Range of Conditions: Specifications different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Range is restricted to essential operating conditions and any other variables essential to the work environment.

<table>
<thead>
<tr>
<th>Cargo plan must include:</th>
<th>cargo weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>correct description and stowage of hazardous and dangerous goods</td>
</tr>
<tr>
<td></td>
<td>description of cargo to be loaded</td>
</tr>
<tr>
<td></td>
<td>load/discharge port</td>
</tr>
<tr>
<td></td>
<td>segregation of non compatible cargo</td>
</tr>
<tr>
<td></td>
<td>stowage of refrigerated containers</td>
</tr>
</tbody>
</table>

**Incompatible cargo stowage includes one or more of the following:**
- cargo liable to taint dangerous and hazardous goods

**Hazardous materials/dangerous goods includes one or more of the following:**
- any cargo described in the International Maritime Dangerous Goods (IMDG) Code as hazardous or dangerous

**Cargo includes one or more of the following:**
- bulk cargo
- containerized cargo
- deck cargo
- heavy lift cargo
- liquid cargo
- refrigerated cargo
Cargo handling documentation includes one or more of the following:
- cargo gear register
- cargo receipts
- Cargo Securing Manual
- logbook entries
- Note of Protest
- Notice of Readiness to load or discharge
- operation orders and instructions
- safety data sheets (SDS)/material safety data sheets (MSDS)
- safety management system relating to cargo carriage
- ship/shore safety checklists

Actions required to maintain the wellbeing of cargo include one or more of the following:
- maintaining adequate ventilation
- monitoring cargo spaces
- temperature control of refrigerated or cooled cargo

Defects or damage to cargo include one or more of the following:
- damage caused by cargo movement
- deterioration of perishable cargo
- water ingress

**Performance Evidence:** Evidence required demonstrating competence in this unit must be relevant to and satisfying all of the requirements of the elements and performance criteria on at least one occasion and including:
- Carrying out cargo operations according to cargo plan or other documents and established safety rule/regulations, equipment operating instructions and shipboard stowage limitations
- Establishing and maintaining effective communications during loading and unloading
- Handling dangerous, hazardous and harmful cargo to comply with international regulations, recognised standards and codes of safe practice
- Identifying and solving problems associated with loading, unloading, stowage and care of cargo
- Initiating timely action in response to defects or damage
- Monitoring and anticipating problems and risks associated with loading, unloading, stowage and care of cargo
- Monitoring use of equipment in loading, unloading, stowage and care of cargo
- Reading, interpreting and applying instructions, regulations, procedures and information associated with loading, unloading, stowage and care of cargo.

**Knowledge Evidence:** Evidence required demonstrating competence in this unit must be relevant to and satisfying all of the requirements of the elements and performance criteria and including knowledge of:
- Ballast management issues and procedures
- Cargo handling documentation requirements
- Cargo lifting equipment and safe working loads
- Container position numbering
- Effect of cargo, including heavy lifts, on the seaworthiness and stability of the vessel
- Effects of different types of cargo operations on vessel trim and stability
- Effects on cargo handling of sea conditions, wind and weather
- Effects on stability during loading and discharging operations including heeling moments from gear and loads
• Methods of caring for various types of cargo
• Methods of handling various types of cargo
• Operational characteristics of different types of shipboard and terminal-based cargo handling equipment and facilities
• Principles of cargo care
• Procedures for carrying out calculations involving weights, capacities, stowage factors
• Relevant sections of applicable maritime regulations
• Relevant work health and safety (WHS)/occupational health and safety (OHS) and cargo handling legislation, codes of practice, policies and procedures
• Safe handling, stowage and securing of cargo including dangerous, hazardous and harmful cargo, and their effect on the safety of life and the vessel
• Standard stowage position numbering systems used on container vessels
• Typical cargo handling problems and hazards, and appropriate preventative and remedial actions and solutions
• Typical types and sizes of shipping containers
• Usual methods of container packing, loading and discharging, stowage, dunnaging
• Various types of cargo likely to be carried; their peculiar characteristics, liability to damage, decay or deterioration; their measurements, hazards and problems; appropriate preventative and remedial action and solutions
• Ways of restricting vessel stress levels within permitted levels within permitted limits during loading/discharging cargo.

Assessment Conditions: Assessors must satisfy the administration (MARINA) requirement. Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate. Resources for assessment must include access to:
• tools, equipment, machinery, materials and personal protective equipment currently used in industry
• applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
• range of relevant exercises, case studies and/or simulations

UTOPIAN TEAM

Course Code / Descriptive Title: MACHINE SHOP 1, STCW 78 as amended complied: Table A-III/I Function 3: Maintenance and Repair at Operational Level Appropriate Use of Hand Tools, Machine Tools and measuring instruments for fabrication and repair onboard.

Credit Units: 2  Lecture Hour(s): 1  Laboratory Hour(s): 4
Pre-requisite(s): None

Course Description: The course includes the Safe Working Practices, Hand Tools and Measuring Equipment for Dismantling, Maintenance, Repair and Re-Assembly of Shipboard Plant and Equipment and Fabrication and Repair.
**Course Outcomes:** At the end of the course, cadets should be able to:

1) Use properly hand power and measuring tools to carry out normal maintenance, repairs and fabrication works onboard ships with safety as the primary concern;

2) Perform Benchwork and Tinsmithing and joining of metals

### Equipment:

- **E1. Safety helmets**
- **E2. Eye protection**
- **E3. Protective footwear/safety shoes**
- **E4. Skin protection/Cover-alls**
- **E5. Cotton gloves**
- **E6. Rubber gloves**
- **E7. Leather gloves**
- **E8. Surface plate**
- **E9. Vee blocks**
- **E10. Odd-leg calipers**
- **E11. Penetrating punches**
- **E12. Scribers**
- **E13. Dividers**
- **E14. Odd-leg calipers**
- **E15. Punched pens**
- **E16. Hacksaw**
- **E17. Files**
- **E18. Scraper**
- **E19. Chisels**
- **E20. Tap and dyes**
- **E21. Pedestal grinder**
- **E22. Drilling machine**
- **E23. Hand riveter**
- **E24. Metal cutting shear**
- **E25. Oxy-Acetylene gas cutter**
- **E26. Steel ruler, Try square (steel)**
- **E27. Inside & outside vernier caliper**
- **E28. Adhesive**

### Materials:

- **M1. Galvanized iron sheet 3 ft x 6 ft (metal sheet forming exercise)**
- **M2. Round bar, 8 mm x 10 cm, 1 per student (Drill bit exercise)**
- **M3. Steel plate 5 mm x 100 mm x 200 mm, 2 pieces per student (drilling exercise and gas cutting exercise)**
- **M4. Hacksaw blade**
- **M5. G.I. Pipe ½”; 15 cm length**

### Teaching Aids:

- **A1. Visual Aid/Drawings/Photo**
- **A2. Video Presentation**
- **A3. Power point Presentation**

### References:

R4. Felicito P. Dalaguete. “Machine Shop Practice 1”

CAMSHAFT

Course Outcome: The cadets should be able to know how to use the vernier caliper measuring instrument.

Title of the activity: Vernier Caliper Reading
Effectivity Date: _______________
Revision No: _____________________

Competence: Appropriate use of hand tools, machine tools and measuring instrument for fabrication and repair on board

KUP: Demonstrate the use of a vernier caliper.
ILO: knowledge on vernier caliper measuring instrument.

A. RESOURCES REQUIRED
Vernier Caliper

B. PROCEDURE OF THE ACTIVITY
Vernier Caliper

1. The Vernier caliper is an extremely precise measuring instrument; the reading error is 1/20 mm = 0.05 mm.
2. Close the jaws lightly on the object to be measured.
3. If you are measuring something with a round cross section, make sure that the axis of the object is perpendicular to the caliper. This is necessary to ensure that you are measuring the full diameter and not merely a chord.
4. Ignore the top scale, which is calibrated in inches.
5. Use the bottom scale, which is in metric units.
6. Notice that there is a fixed scale and a sliding scale.
7. The boldface numbers on the fixed scale are centimeters.
8. The tick marks on the fixed scale between the boldface numbers are millimeters.
9. There are ten tick marks on the sliding scale. The left-most tick mark on the sliding scale will let you read from the fixed scale the number of whole millimeters that the jaws are opened.
10. In the example above, the leftmost tick mark on the sliding scale is between 21 mm and 22 mm, so the number of whole millimeters is 21.

11. Next we find the tenths of millimeters. Notice that the ten tick marks on the sliding scale are the same width as nine ticks marks on the fixed scale. This means that at most one of the tick marks on the sliding scale will align with a tick mark on the fixed scale; the others will miss.

12. The number of the aligned tick mark on the sliding scale tells you the number of tenths of millimeters. In the example above, the 3rd tick mark on the sliding scale.

13. Is in coincidence with the one above it, so the caliper reading is (21.30 ± 0.05) mm.

14. If two adjacent tick marks on the sliding scale look equally aligned with their counterparts on the fixed scale, then the reading is half way between the two marks. In the example above, if the 3rd and 4th tick marks on the sliding scale looked to be equally aligned, then the reading would be (21.35 ± 0.05) mm.

15. On those rare occasions when the reading just happens to be a "nice" number like 2 cm, don't forget to include the zero decimal places showing the precision of the measurement and the reading error. So not 2 cm, but rather (2.000 ± 0.005) cm or (20.00 ± 0.05) mm.

C. ASSESSMENT

1.) _______ mm

2.) _______ mm

3.) _______ mm

4.) _______ mm

D. GENERALIZATION
(Cadet writes his own significance of learning acquired from or outcome of the activity)

<table>
<thead>
<tr>
<th>Function III/1 Maintenance and repair at the Operational level</th>
<th>Machine Shop I - Vernier Caliper and Micrometer within TWO minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence: Appropriate use of hand tools, machine tools and measuring instrument for fabrication and repair on board</td>
<td>Vernier Caliper Reading</td>
</tr>
<tr>
<td></td>
<td>The demonstrate the given task</td>
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<tr>
<td></td>
<td>Correct result within the given time</td>
</tr>
<tr>
<td></td>
<td>Ability to illustrate in writing the given task</td>
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<tr>
<td></td>
<td>Micrometer Reading</td>
</tr>
<tr>
<td></td>
<td>The demonstrate the given task</td>
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<tr>
<td></td>
<td>Correct result within the given time</td>
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<td></td>
<td>Ability to illustrate in writing the given task</td>
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<td>Total Value</td>
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<td>Total Average</td>
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<td>100.00</td>
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</tbody>
</table>

Note: Since competency is being graded – its either the student competent or not competent (no need for the ratings)

Rating Scale: 5 | 4 | 3 | 2 | 1

Excellent | Very Good | Good | Fair | Poor

**FunTaskTik Team**

**Qualification:**

**Section A-III/3**

Mandatory minimum requirements for certification of chief engineer officers and second engineer officers on ships powered by main propulsion machinery of between 750 kW and 3,000 kW propulsion power.

**Modification History**

| STCW Code, as amended: Part A Chapter III- Engine Department |
| STCW Code (Manila Amendments) Replaces STCW Code 1995 |

**Description**

This qualification is suitable for people who work in the maritime industry as officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room.

**Pathways Information**

**Pathways into the qualification**

Mandatory minimum requirements for certification of chief engineer officers and second engineer officers on ships powered by main propulsion machinery of between 750 kW and 3,000 kW propulsion power. (Management Level or A-III/3)

**Pathways from the qualification**
Specification of minimum standard of competence for officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room. (OIC or A-III/1)

**Licensing/Regulatory Information**
Republic Act 10635
MARINA/PRC

**Entry Requirement**

Every candidate for certification shall:

- Meet the requirements for certification as an officer in charge of an engineering watch and:
  - For certification as second engineer officer, have not less than 12 months of approved seagoing service as assistant engineer officer or engineer officer, and
  - For certification as chief engineer officer, have not less than 24 months of approved seagoing service of which not less than 12 months shall be served while qualified to serve as second engineer officer; and
- Have completed approved education and training and meet the standard of competence specified in section A-III/3 of the STCW Code.

Every engineer officer who is qualified to serve as second engineer officer on ships powered by main propulsion machinery of 3,000 kW propulsion power or more may serve as a chief engineer officer on ships powered by main propulsion machinery of less than 3000 kW propulsion power, provided the certificate is so endorsed.

**Activity 8 – Constructing a Unit of Competence (Standard) – Group Activity** using the following references: (Australian Training package MAR 13; Blooms Taxonomy; Maslow’s Hierarchy of Needs; Standards for Training Packages; Guide to writing competency based training; Guidelines for competency based assessment in Voc Ed in Western Australia (guidelines-cba 1.2 pdf); Sample unit(s) attached; Standards for NVR Registered Training Organisations 2012) Refer Portfolio page 43 Each group was provided respective assignments and Activity 8 – Identifying the gaps (missing competences) and design them for inclusion in the curriculum Refer portfolio page 43-44.

**UTOPIAN Team**
**TABLE A-III/2**

<table>
<thead>
<tr>
<th>UNIT OF COMPETENCE</th>
<th>ELEMENTS OF COMPETENCE</th>
<th>PERFORMANCE CRITERIA</th>
<th>FACTUAL KNOWLEDGE</th>
<th>LEARNING STRATEGIES</th>
<th>ASSESSMENT STRATEGIES</th>
<th>MISSING ELEMENTS OF COMPETENCE</th>
</tr>
</thead>
</table>
| Manage the operation of propulsion plant machinery | * Take performance evaluation of a 2-stroke diesel engine | * Indicator cocks are clear  
* Load of the engine is at least 80% or more  
* Sea condition is normal  
* Communicate with the bridge personnel when taking performance diagrams  
* Take the performance diagram  
* Interpret the results  
* Verify ship is in upright position | * Principles of 2-stroke diesel engines  
* Interpretation of the indicator diagram reading of pressure in Internationa System of Units (SI)  
* Formulas for power calculations  
* Compression pressure and peak pressure  
* Fuel oil consumption computation formulas for computing actual fuel consumption diagrams of the fuel index and turbocharger speed  
* Digital condition monitoring and evaluation system with regard to engine systems | * 30% Lecture  
* 70% Activity  
* Group study and output presentation and teacher collation and summarizing of reports/ presentation | * Oral interview  
* Actual demonstration on how to interpret indicator card diagrams | * Developed teaching/ learning activities shall undergo the processes of validation and approval |

**FunTAsktik Team**

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Knowledge, Understanding and Proficiency</td>
<td>Missing Competence</td>
</tr>
</tbody>
</table>
| Plan a voyage and conduct navigation | Voyage planning and navigation for all conditions by acceptable methods of plotting ocean tracks, taking into account, e.g.,:  
1. restricted waters  
2. meteorological conditions  
3. ice  
4. restricted visibility  
5. traffic separation schemes  
6. vessel traffic service (VTS) areas  
7. areas of extensive tidal effects | Weather routing to be integrated with the passage plan. |
| Routing in accordance with the General Principles Provisions on Ships’ Routing | Weather routing to be integrated with the passage plan. |
| Reporting in accordance with the Guidelines and Criteria General principles for Ship Reporting Systems and with VTS procedures | Weather routing to be integrated with the passage plan. |

| Competence | Knowledge, Understanding and Proficiency | Missing Competence |
| Determine position and the accuracy of resultant position fix by any means | Position determination in all conditions:  
1. by celestial observations  
2. by terrestrial observations, including the ability to use appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix .3 using modern electronic navigational aids, with specific knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing | Weather routing to be integrated with the passage plan. |

**Activity 9.1 Recapitulation of the Programme.** How each marine qualification is presented and how the competences are addressed in training and assessments aligned to the outcome(s)
for each standard. Grouping of skills sets and design to fit the purpose of the outcome(s), Show initial engagement with Marina and employers/ship operators and stakeholders Plan for phase 2; Execution methodology and Implementation strategy **Homework 3:** Read project management (communication and get the data and information thru various means).

Action Planning – Project Teams – Friday

1. Team name:
2. Your vision and mission
3. Project Plan (Project sponsorship; Leadership; Communication; Inter-group communication; Deliverables (expected to see in November); Stakeholders (industry, test your ideas with other people); Milestones - target date in 6 months; Monitoring progress – monitor the progress; Recording and reporting– formal presentation be able to present in persuasive way to CHED or to MARINA etc with evidence collection (know your customers)

**UTOPIAN Team presented action plan thru powerpoint**

The UTOPIA’s Team Category are on **Able Seafarer Deck (A-11/4) and Engine (A-11/5) + STCW Short Courses and OOW (Engine A-111-1)**

1. The team purposes are:
   1. *To identify, analyze and bridge the gap between the STCW (78) Code as amended and current course delivery for marine Qualifications in the Philippines and benchmark with Australian Administration*
   2. *to pilot test the output at MAAP, Malayan Colleges, NYK Maritime Academy and AIMS and present the same to maritime stakeholders”*

Why are we doing the project?
In support to institutional and national (MARINA) thrusts /concern towards the compliance to STCW, accomplishment of the Philippine economic development goals & ASEAN 2015 integration for:

- sustained growth
- macroeconomic stability
- international competitiveness and
- human resource development

What will success feel like?
It is the satisfaction that we have contributed to a very timely issue that is in line with the institutional thrust and concerns with national and international impact

2. STRENGTHS /WEAKNESSES
   - Strengths of the Team
     - Familiarity with the Australian Methods (1 engine, 1 deck)
     - Fresh Breed of mariners (3 active seafarers 2 engines & 1 deck)
     - Researcher willing to write the paper and present
   - Weakness:
     - Management of Time
- Other priorities or commitments - dependent on the priority tasks by respective immediate head as well as previous commitments

3. SKILLS
   - Skills less evident in the team
     - Time management
     - Focus is not 100%
   - How to manage
     - Seek permission from the Top management and its priority
     - Prepare a common time frame
     - Each of the members of the team to make their own analysis in their respective institution with leader to consolidate
     - Example: for technical (maritime professionals) for the organization of ideas etc. (Dr Baylon) in a form of a paper or publishable articles which can be done via email
   - Skills less evident in the team
     - Time management
     - Focus is not 100%
   - How to manage
     - Seek permission from the Top management for its priority
     - Prepare a common time frame

4. TEAM ROLES
   - Over-all Leader - C/E Haboc-
   - Documentation/organizing ideas of the team – Dr Baylon
   - Other SME- 2 Deck and 1 Engine (for technical, in identifying the needed sub-competence, etc)

5. Leader (C/E Fred Haboc)
   - Yes, we need a leader, for command responsibility
   - Professional Mariner with track record, connections and ability to influence stakeholders
   - Attributes : Knowledgeable in Training Regulations and Australian Models, good in negotiating and an action man to assume and delegate tasks until its accomplishment

6. Performance Measurement
   - Accomplishment of the Objectives with contributions by each members of the team with various expertise and roles
   - Done within the target time
   - Utilized by the Institution
   - Pilot tested by other Institutions
   - Presented and disseminated to concerned entities
   - Published for wider dissemination

7. Action Project Plan
   - Seek Clearance from respective institutions for their support as the outputs shall be pilot tested or used in the institution
   - Consult with stakeholders from maritime industry
     - PAMTCI c/o C/E Haboc – May 9, 2014 during the General Assembly with Dr Baylon to present about the TKF programme
     - MARINA, etc
- AMOSUP /NI / etc
- Used Linkedin and other social media like Facebook to solicit feedbacks etc

Benchmark against other practices - June 2014, review and analyze reading materials. C/E Haboc to provide the template for review by all mariners in the group. All can be done via email.

Communicate regularly via emails the contributions of each groups based on the template provided by the team leader (the inputs must be color-coded * black (leader), inputs in red, blue and other colors and the emails must specify if revision 1, 2, 3 or 4 to avoid confusion

Regularly report to the respective institution who shall serve as respective sponsor for the project in terms of official time, transport allowance, etc

All data completed by September 2014 for validation, pilot testing, etc

Write and submit the paper (Oct 24, 2014)

Present the findings (Nov 25)

8. GHANT CHART

<table>
<thead>
<tr>
<th>Research Activity</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of concept paper, action plans, and various communications for approval of respective management for support</td>
<td></td>
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<tr>
<td>Benchmarking (reading materials c/o C/E Haboc to be distributed to everyone), write learning and assessment strategies to bridge the perceived gaps between STCW/MLC and current practice</td>
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<tr>
<td>Consultation with stakeholders, meetings and focus group discussions and exchange of notes via emails to reach consensus over the validity of gaps identified, pilot test in respective institutions (at least in 3 competencies), evaluate and report (Oct 24)</td>
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<tr>
<td>Analysis and writing the report and presentation c/o Dr. Baylon and C/E Haboc for review by the team (Nov 25 presentation)</td>
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</table>

9. MONITORING (HOW)/ Communication Strategies

- Via Emails
- Meetings as the need arises- everything can be done via email
  Meeting will be in Manila (AMOSUP) or in Makati (PTC)
  (transportation courtesy of the institution and meals courtesy of the host institution)

10. Project Sponsor Attributes

- Share similar passion, concern and interest on the project at hand
- Respective institutions who would like to spend and benefit in the result or outcomes of the project as a return of investment
- Willingness to approve the project as a special task of the members of the team

11. Managing the Sponsor
• Submit regular reports
• Solicit suggestions and advise
• Acknowledge the sponsor at the end of the project

12. BARRIERS to PROJECT SUCCESS
• IDEAS presented not related to the project (wrong purpose – to develop a course manual and wrong deliverables: training regulations, CBC, AL, TLA) not required by the project activity – 1 hours meeting became useless as the minutes of the meeting is not related to the agenda provided
• Other commitments (personal, other associations or projects etc etc)
• Priority duties and other functions at the workplace
• No support from the institution

HOW to remove barriers
• Use your own judgement based on the handouts and guidelines provided
• As the saying goes –if interested there are many means, if not willing there are many reasons
• Seek clearance first from the boss, if YES – GO and if NO – STOP

13. Coping with Setbacks
• Pray
• Do the best that can be done within the respective spheres of influence

14. Celebrate Success
• Thanksgiving Mass
• Acknowledging each and everyone’s contribution by writing and informing respective institutions
• Submit report documenting the accomplishment of the Team

15. Other Considerations not in the Agenda
• To prepare at least 2 papers (one for Able Seafarers and the other one for OOW both for Deck and Engine
• Paper with research findings, conclusions and recommendations with policy implications towards accomplishment of the Philippine development goals and in line to 2015 Integration after benchmarking with the Australian administration system

16. TEAM MOTTO
• To Bridge GAPS, to Build Bridges
The UTOPIAN Team is the Strongest Bridge to the next generation of an ideal maritime society

17. Date and Venue of Next Meeting
- JUNE 2014, in PTC (Makati) or AMOSUP (Manila)
- Each members to bring outputs of identified sub-competencies per functions (finalized via emails) that have been validated already per institution

18. FINANCIAL ARRANGEMENT

<table>
<thead>
<tr>
<th>Personal Services</th>
<th>Amount (Php)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(as per NRCP/DOST allowable amount for a 6 month project)</td>
<td></td>
</tr>
<tr>
<td>Project Leader (Hon.), P8,800/mo.</td>
<td>52,800.00</td>
</tr>
<tr>
<td>Research Assistant, P23,928/mo.</td>
<td>143,568.00</td>
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</tbody>
</table>
### Maintenance and Other Operating Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Transportation, contractual services, supplies and materials</td>
<td>103,632.00</td>
</tr>
<tr>
<td>Validation, exploratory meetings, focus group discussions, communications, meals, etc</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>Php 300,000.00</strong></td>
</tr>
</tbody>
</table>

#### Reformers Team with motto “Walk the Talk and Reform.”

The suggested meeting every Saturday form 1400H-1700H) via email and chats with monthly meeting at SM North Marina restaurant including sponsor if possible with feedback of output (project plan, gantt chart and monitoring) to be sent to Dr. Haughton and Capt. Teo. Identified sponsors: VAdm Santos, DOST Region II, PJMCC, Mrs. JJF, Capt. Quijano, Mr. Marquez and Capt Jess Morales.

#### FunTaskTikTeam with motto “do the task with Fun until it ticks.”

Prepare the working documents and equipments, time frame would be in the 1st two weeks of May, leadership issues which the group agrees that there will be no leader for the entire 6 months and leadership would be on rotation basis among themselves, means of communication and sponsorship.

**Activity 9.2 Preparation for Phase 2/Final phase (taking on board Activity 8)** - to complete your project at least 2 weeks before Phase 2. Each team identifies each team requirements.

#### Utopian team

Requires 6 Cs (cooperation, commitment, collaboration, coordination, co-existence, patience, open-mindedness and flexibility through discussion anchored on mutual respect and trust in order to achieve common VMGO.

#### FunTaskTik team

Requires full coordination to one another, communication between members, putting time and dedication to project, commitment, time, consultation and perhaps lots of patience, encouragement and support for each other, fun tasks, respect, understanding and flexibility and all these things won’t be possible without team spirit to achieve the final output.

References:
- www.tlisc.com.au
- transport and logistics council
- www.training.gov.

### ANNEX A

**TKF Forms to Accomplish**

<table>
<thead>
<tr>
<th>Logo</th>
<th>Name of School</th>
<th>Address</th>
<th>Logo</th>
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</table>
MISSION

Institutional Outcomes:
1.
2.
3.
4.
5.
6.

Prepared by:  Reviewed/Noted by:  Approved by:

Course Code:  Course Title:
Credit Units:  Lecture Unit(s):  Laboratory Unit(s):
Course Description:  Pre-requisite(s):  Co-requisite(s):

Course Intended Learning Outcomes:
At the end of the course, the students will be able to:
A.
B.
C.
D.
E.
F.

<table>
<thead>
<tr>
<th>STCW Function / Competence</th>
<th>STCW KUP / Topics</th>
<th>Intended Learning Outcome</th>
<th>Teaching/ Learning Activities</th>
<th>Assessment Method/Task</th>
<th>References / Equipment Materials Used</th>
<th>Time Frame</th>
<th>Date Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A.1 A.2</td>
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<td>i.e. BOOKS SIMULATORS TRAINERS</td>
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<td>(Refrigeration, Electro Mechanics,</td>
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<td>Electro Hydraulics, Cargo Handling</td>
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<td>Simulator, ERS, ECDIS, ARPA, RADAR,</td>
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<td>Load Manager… etc)</td>
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<td></td>
<td>CBT Laboratory (Actual Engine, Pumps,</td>
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<td>Compressors, … etc)</td>
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</table>
May 2, 2014. **CLOSING CEREMONIES**

- The program started with the emcees **OIC Genesis Pasco** (MAAP) and **1/Ci Cyrenne Deztreza** (MAAP) acknowledging the presence of MAAP President/GlobalMET Vice-Chair, the facilitators – Capt. Richard Teo and Dr. Chris Haughton, Dr Baylon, other MAAP officers as well as the 14 participants representing 11 institutions, and guests.

- The **Opening Prayer** was led by Atty. Ruben Maceda of NMP

- **Reflection from the Team Leaders**
  - UTOPIA Team (with motto “to bridge gaps, to build bridges”) by **C/E Fred Haboc, PhilCAMSAT Director & PAMTCI President** (Members: OIC Genesis Pasco, C/E Aris Dolot, OIC NW Ariel Cruz, Dr Angelica M Baylon and with guest member Capt Diofonce Tuñacao)
    - C/E Fred Haboc greeted everyone and acknowledged the participants, faculty and staff of the 5-days workshop.
    - As the first speaker, C/E Haboc said that he is privileged to re-echo what were stated in the morning during their presentations. He shared that all of the teams were asked to summarize the 5-day seminar workshop with one word and the FUNTASTIC Five (team) said that the workshop is FUNTABULOUS; REFORMERS said that it is BENEFICIAL and; the UTOPIA said that it is AWAKENING!
He further explained that this awakening is the decoding of the STCW code for MET and the certification issues in the Philippines. First is the STCW interpretation of the table of competencies which are the basis of curriculum design of the operation level program, BSMT and BSMarE, as well as the management courses.

He added that they were able to realize that there are things to improve; that we are not saying that the present curriculum is not good but we can make it better. He also stated that they were able to confirm the validity of the Fisher Report on training issues and expressed his gratitude for being part of the team that gave inputs to that Fisher Report under the ADB program.

After the 5-day seminar workshop that sapped their energy, C/E Haboc said that he is looking forward in revitalizing their energy on the fellowship prepared by MAAP in the evening.

Finally, he thanked MAAP under the leadership of VADM Santos for being a “kapamilya” and “kapuso” who is always there to support, offering a helping hand to the maritime industry. He also expressed his appreciation for the two (2) facilitators whom he jokingly said that he hope they would not make their lives so miserable.

- REFORMERS Team (with Motto: “Walk the Talk and Reform”) by C/M Rene Garcia, MAAP Dean of Academics (Members: Capt Danilo Valera, C/M James Hans Romero and 2/M Jonas Gavan and C/E JessMendoza)
  - After greeting everyone, C/M Garcia stated that, in his mind, C/E Haboc has already mentioned all their reflections but he would just like to say one thing – that is hopefully the workshop that they have done will sink in. He said that although this workshop sapped their days and nights with assignments, they have learned from that and there are still more things to learn which can be used in their respective institutions for the betterment of the maritime education and training as per the Fisher Report. He stressed his group’s motto - “not just to talk but to walk the talk and be able to reform.”
  - In closing, he expressed that while they will part ways tomorrow, they will see each other again for the development of their group projects. He said that they shall be communicating with each other for the development and success of their projects to be presented on November 25 which is the birthday of Ms. Gravador of MARINA, one of their co-participants.

- FUNTASKTIC Team (with Motto “do the task with fun”) led by Ms. Catherine Marie F. Labador, MARINA Maritime Industry Development Specialist II (Members: Atty Ruben Maceda, Capt Nestor Rasco, Engr Joselito Palomo and 1/Cyrene Deztreza)
  - After greeting and acknowledging the presence of the two (2) facilitators, Dr. Haughton and Capt. Teo, the top management of MAAP and the rest of the team, Ms. Gravador expressed that she is honored to be standing in front of everyone after the seminar-workshop.
  - She said that having reflected on the things they have done in the past days, she stated that her team is really satisfied with the outcomes. She expressed that actually it feels like they were on board a ship and they need to sustain this kind of energy to get them going.
  - Addressing his teammates and the other groups, she added that whenever they feel burned out, they will remember to ask themselves the 5 why’s because this is their destination; keep asking why why why why why are we doing this things and then from then they can move along. Thank you so much!
• **Messages from Global MET facilitators**
  o **Capt. Richard Teo**
    - “What can I say? What can I say? What a wonderful bunch of people that we have!”
    - Capt. Teo stated that every one of them put in so much work, so much effort – the synergy is absolutely great and the results to their hard work will be brought forward to the next phase which he said he is very confident, absolutely confident, that they reach the steps to go. He said that the rest is up to them, the work is just the beginning.
    - He thanked MAAP – to Dr. Baylon for helping them so much and to Adm Santos for being always there when they want and need him.
    - To his colleague Chris, he said that “Isn’t he a wonderful fellow”? – the things that he comes up with. He said that he is sure all them have learned from this wonderful teacher.
    - He thanked everyone for bearing with the m because it is their efforts that make things done.
  o **Dr. Christopher John Haughton**
    - Dr. Haughton greeted everyone and expressed his pleasure for getting here through the efforts of everyone.
    - He thanked MAAP for its wonderful hospitality – to Dr. Baylon for organizing everything behind the scene, to the support staff who have been absolutely magnificent – he expressed his best wishes to them.
    - Dr. Haughton recalled that they came together on Monday perhaps just a little nervous, not quite sure what to expect, a little bit reticent, a little bit scared for saying anything that might be taken out of tone. He added that now, they got *funtabulousness*, awareness…He articulated that he thinks that they have a huge shift, a massive journey during the 5 days.
    - He stated that learning has been powerful. There is no doubt about that as evidenced by the learnings written in the walls, by the reports that they have made, by their feedback and their presentations. They have learned so much about STCW. He added that the participants find staff in there that nobody else does, so he also learned a great deal this week.
    - Finally, he re-emphasized that they must not underestimate the scale of the task ahead with 6 months or so because it would be worth it. He advised them to remember the question “What will success feels like?” to keep them going.

• **Recap of this 5-day activity from Dr. Angelica Baylon**
  o She greeted everyone and reported to the MAAP President and Global MET Vice-Chair MAAP President that she is to provide summary of the 5-day activities after the opening program
  o VAdm Santos kidded – Okay 5 words only
  o The five words *(SERIOUS 5-day activities yet FUN)* turned out to be 5 paragraphs
    1. Dr Baylon reported to MAAP President that his instruction at MAAP in the Execom meetings, as regards administrative support needed for the smooth conduct of the TKF workshop have been accomplished. She commended the MAAP team from the: technical support (MIITD), supplies/material (MMD), physical arrangement/accommodations/Transportation (PMGS), food (FSD) and other services. She also reported that for her recap, the MIITD prepared a
4 minute video thru photo montage showing the daily activities at MAAP, however, it cannot be presented due to problems on the connections in the room, nevertheless, they will be shown later during the fellowship dinner.

2. She further reported that as far as the participants are concerned, that earlier, everyone has heard them straight from the three teams (UTOPIAN, REFORMERS and FUNTASKTIC) thru their respective team representative/leader, about their collective reflection of the 5-day activities. On the part of the facilitators: Capt Teo and Dr. Chris, the two also presented their respective thoughts and appreciation. She further noted that initially, she was merely MAAP coordinator for the TKF workshop, however, both distinguished facilitators promoted her designation on the programme of activities as TKF administrator for MAAP, a positive indicator that they were pleased with how everything was managed and prepared: form the programme of activities (opening and closing), from the time they arrived, day to day activities, fellowship later and for sure until they depart from MAAP.

3. Moreover, Dr Baylon reported that she prepared a more than 50–page detailed report (VAdm Santos seated on the presidential seat said – I KNOW with Dr Chris seated besides Vadm Santos kidding and explaining why it may be 50-page was due to its format: its font, margins, spacing, size of the paper etc), Dr Baylon further comforted everyone that there is nothing to worry. She will not present the 50 page report as that will not make VAdm Santos happy. Having been with MAAP for 15 years, she is aware that VAdm Santos is an outcomes-based President. VAdm Santos will be happier to hear or know the results generated from the 5-day workshop. Hence a separate detailed report shall be submitted. MAAP President may just read them at his convenient time.

4. As a substitute to the 50-page detailed report, she requested permission to allow her to present three outputs, in addition to the TKF workshops which certainly would make Vadm Santos smile, in having organized and hosted the 5-day TKF seminar workshops:

✔ First, since MAAP President was requested by Nautical Institute to assist and lead in NI membership expansion in the Philippines, the TKF participants have been informed about the Nautical Institute (NI) and its objectives. Timely because the two TKF facilitators Capt Teo and Dr Chris are FNIs (Fellows of the Nautical Institute) and they both assisted in introducing and promoting NI to the TKF participants who were encouraged to join. Those who will be NI members will be informed on future NI scheduled meetings and activities

✔ Second, since the TKF participants have been tasks to prepare an action plan to accomplish the objectives of the project for the TKF 2nd phase, requiring a budget, Dr Vicentita Cervera was requested/invited by Dr Baylon. She is a National Research Council of the Philippines (NRCP) outstanding research achievement awardee and an NRCP co-officer of Dr Baylon and had explained the NRCP template (outline of the project proposal) which they can use as guide in their preparation of project proposal for submission to NRCP, respective Boss, friends and other funding agencies.

✔ Third, since 11 maritime institutions are represented, their presence were used for the Focus Group Discussion/and all had participated in answering
the survey questionnaire intended as an output for the MAAP Research project funded by NRCP.

5. Dr Baylon then concluded her recap, by informing the participants that having actively participated in the 5-day activities, she congratulated everyone that the two GlobalMET facilitators and the Global MET Vice-Chair (MAAP President) had signed the certificate of appreciation of the participating institutions/individuals for their active involvement in making the 1st TKF phase a success as everyone is preparing for the 2nd TKF phase. She then requested the master of ceremonies to call each institution for their respective GlobalMET- TKF-MAAP Certificates.

- **Distribution of Certificates** to the 11 Participating Institutions by Capt. Richard Teo and Dr. Chris Haughton with VAdm Santos and Dr Baylon
  - The certificate reads
    “GlobalMET, TK Foundation and MAAP present the certificate of appreciation for the each of the institutions in grateful recognition for its invaluable support for the first phase of the TK Foundation Professional Development Workshop Programme 2014 initiated by GlobalMET, sponsored by TKF, and hosted and organized by MAAP on April 28 to May 2, 2014. The active involvement of the participants certainly contributed to the success of this significant project which involves identifying, analysing and bridging the gap between the STCW Code (1978) as amended and the current course delivery for the marine qualifications, thereby, enhancing quality maritime education and training in the country”

- **Presentation of Certificate of Appreciation** to Dr. Vicentita Cervera for encouraging the participants to submit the project proposal on TKF project with policy recommendation to NRCP DOST and other finding agencies.

- **Closing Remarks** by MAAP President / GlobalMET Vice-Chair VADM Santos
  - VADM Santos thanked the two (2) facilitators - Dr. Haughton and Capt. Richard Teo, Dr. Baylon, MAAP VP Oca, AVP for Graduate Studies C/E Paiso, and the participants.
  - He recalled that he told the participants during the opening ceremonies that Dr. Haughton and Capt. Teo pronouncements that the workshop would be serious, it would be hard work but it could be fun. VAdm Santos emphasized the Philippine slogan “It is always fun in the Philippines”, and had manifested his hope that they were able to attain their objectives with fun.
  - VADM Santos mentioned that he was constantly monitoring their activities, even during the holiday, and was able to read one of the reports – the “Utopia Report”; so he added that he knew what they have done. He just don’t have yet a copy by the other teams
  - He relayed that he is very happy to see the template that was prepared by the facilitators, it’s a good template to follow --- especially as stated by Chris – “what will success make of it” or “what is success mean to me” so that it’s going to be part of their reflection process all the time.
  - He stressed that self-reflection is a thing that the participants should continue and make a habit of. This is not something just for here or something to learn in their schools but something to echo to everybody else. This is not just for the GlobalMET members but for the improvement of maritime education and training in the whole country.
He mentioned that he was supposed to come earlier but he had to have lunch with Dr. Mejia and Dr. Tormon of MARINA and he told them about the activity and that their representative Kathy is here but when asked about CHED, he told them that they were invited but was not able to send representative; but with CHED-MARINA team the activities should be re-echoed to other schools and let them do the same things. That is the reason for all of these. This is not just an answer to the ADB paper but also to the results of the EMSA Audits.

While it is true that EMSA or the COS (Committee on Safety) of EMSA based on the recommendation of DGMOVE (European Commission Directorate General for Mobility and Transport) that there will be no non-recognition, there is a condition that they will keep on monitoring not just for a year but it is open ended. They will continue monitoring and will be back in October.

VADM Santos mentioned that in the Utopian Report, which is a very good report, he said that he noticed in the ghant chart that the project will be finished by November; however, the EMSA Audit will be in October so he suggested that the group adjust their schedule a little bit to finish their project proposals and recommend to MARINA before the EMSA team arrives. He advised everyone to be conscious about the EMSA Audit and if there are things that need to be done should be finished before they come.

VADM Santos also mentioned that in his discussion with Dr. Mejia and Dr. Tormon, they talked about the union’s concern on having computerized walk in examination system back in 2003. He added that when they started, they used Union’s money and support from the All Japan Seaman’s Union to purchase the equipment, the computer for WES as well as paid the PRC for their licensing examination reporting, information system (LIRES). He added that with the new law, the transfer of Marine Deck and Marine Engine Examination from PRC to MARINA, they are saying that they cannot transfer the system to MARINA because they are using it with the other professions, which everyone knows that it is not true.

Further, VADM Santos relayed that in that discussion with MARINA he stated that AMOSUP, with Dr. Oca, will continue helping not only in the future requirements for system and computers but even for possible housing of walk in examination system at AMOSUP facilities in Davao and Iloilo. He added that for the last 6 years, since 2008, 25,000 examinees benefited from this walk in examination system. However, he stated we had a lot of machinery that was underutilized and there was a long queue though nobody sees the queue because they have to upload their application online and wait for three (3) months. He relayed that Dr. Mejia reacted that there is no such thing as walk in examination with three (3) months waiting time and jokingly he said that was the design. Seriously, he said that we really need to work on areas, such as this, to make our maritime education and training system in the country improve and move forward some more.

Going back to the 5-day workshop, VADM Santos said that he certainly hope that they will continue with this as this is not the end as they still have much to do. He added that they have received certificates for their respective institutions but they will have personal certificates when they come back in November.

Further, VADM Santos stated that he is looking forward to having the participants again in November assuring them that MAAP will give better support in order to have better output for the improvement of maritime education and training in the country.
Finally, he again thanked the facilitators for doing a good job as he think that everybody was impressed, everybody who were forced to work but had fun. He also appreciated the efforts of Dr. Baylon and the staff for the preparation as well as the continuation of the activities. He then also acknowledged Dr. Cervera of NRCP for coming over and for her inspiration and said that hopefully all concerned will help each other.

In closing, he congratulated everybody for a wonderful and funtastic job and bid them to go on and make things better.

- **Concluding the ceremonies.** The emcees concluded the closing ceremonies saying “on behalf of VADM. EDUARDO MA R. SANTOS AFP (ret) President, MAAP. We extend our appreciation to you for sharing this activity with us. We wish you fair winds, clear skies and following seas.” The emcees also reminded everyone that the fellowship dinner will be at the MAAP Gazebo house near the poolside.

The 2\textsuperscript{nd} Phase of the Project is scheduled on **November 25 to 26, 2014** at the Manila Yacht Club which shall be documented as the result or general outcomes of the project. The result if implemented is believed to enhance the maritime curriculum which is the concern of all MET institutions in producing competent graduates/seafarers needed for a productive manning gain cycle.