



An Evaluation of the Level of Awareness of the STCW-78 as amended in Manila 2010, using Maritime Education and Training Institution as Collective Compliance Mechanism

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ARTICLE INFO

Article history:

Received 31 July 2016;
in revised form 08 August 2016;
accepted 18 November 2016.

Keywords:

STCW-78, Manila Amendments,
Awareness, Evaluation and
Implementation.

ABSTRACT

The study specifically examined the STCW-78 convention in view of identifying the 2010 Manila amendments, and assessing the level of awareness of the Manila amendments by the students, cadets and staff of the Maritime Academy of Nigeria, Oron. Two research questions were formulated and answered, using the inferential survey design. Participants were drawn using the multi-stage sampling approach comprising stratified sampling, random sampling and proportionate sampling technique. A well validated and reliable instrument consisting of 4 demographic items and 10 multiple choice questions of three options each was administered on 240 respondents. Based on data analysis and interpretations, the mean score of 3.57, percentage ratio of 30.5% and coefficient of variation of 68.6% was achieved for cadets, showing low level of awareness as well as low quality awareness. The students had mean score of 5.83, percentage ratio of 66.7% and coefficient of variation of 55.1%, suggesting good level awareness but level quality of awareness among the group. For the staff, mean score of 4.84, percentage ratio of 50% and coefficient of variation of 58.3% were achieved, pointing to low level of awareness and low quality of awareness. The results reveal low level and low quality of awareness of the STCW-78 as amended in Manila 2010 in the Academy. It was recommended that, Maritime Training Institutions should be sensitized on the provisions of the STCW as amended. Also IMO should ensure that, STCW awareness is enshrined in relevant curricular of Maritime Education and Training.

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1. Introduction

STCW convention and code is a unified International Standards for Training, Certification and Watch keeping. Its aim is to provide the minimum standards for training and certification of seafarers (Rojas, 2002; Weintrit, 2009). These standards, if effectively implemented should be able to provide the needed level of competence and professionalism require in achieving safer shipping environment, clean Ocean as well as safety of life

and property at sea. The first published International Convention on Standards of Training, Certification and Watch-keeping for seafarers, was in 1978 (Popularly called STCW, 78). Parties undertake to promulgate all laws, decrees, orders and regulations and to take all steps which may be necessary to give the convention full and complete effect. This standard (STCW, 78) was used to ensure that, from the point of view safety of life and property at sea and the protection of the marine environment, seafarers on board ships are qualified and fit for their duties. The convention was adopted by International Maritime Organization (IMO) in 1978 and came into force in 1984.

(Okonna, 2011) posited that, there was lack of quality standards in the STCW 1978, which was one of the major weaknesses identified in the convention. Therefore, the STCW 78 could not achieve its aims. Rajas (2002) reported that, the International Maritime Organization (IMO) members decided

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to amend the STCW 78 in the early, 1990s, and the amended convention is now referred to as STCW - 95. The focus of the STCW ? 95 was on practical skills and competence underpinned by theoretical knowledge. The standard set by the convention applies to seafarers of all ranks serving on sea-going merchant ships registered under the flag of a country party of the convention. According to (Young, 2002) 133 countries and shipping registries (representing above 78% of the world's merchant fleet) were parties to the STCW-78 as amended in 95. The STCW 95 amendments came into force in 1st February, 1997. However, a leeway was provided until 1st February, 2002. The STCW- 95 was not without flaws, especially in maintaining clean Ocean. For instance, (Yoon, 2011) identified lack of effective implementation and enforcement of treaty obligations as one of the challenges in the protection of the marine environment. An empirical study conducted in the coastal environment shows that, the extinction of marine life in the coastal environment of the Nigerian Niger Delta was largely due to ship borne pollutants (Evans et al., 2014). In order to address emerging issues as well as issues anticipated to emerge in the foreseeable future, the STCW- 95 was amended and adopted by the IMO at a diplomatic conference in Manila in June 2010. The amendments came into force on 1st January, 2012 (Berlingieri, 2015). Also, the 1978 STCW codes which entered into force on 28 April, 1984 had undergone amendments thereto have been adopted in 1991, 1994, 1995, 1997, 1998, 2004, 2006 and 2010 (Anish, 2010; IMO, 2011).

Awareness is the first step towards effective implementation of any policy (Atulomah et al., 2010). Therefore, for effective implementation of the 2010 Manila amendments, it is pertinent to evaluate the level of awareness of the amendments in renowned Maritime Training Institutions (such as Maritime Academy of Nigeria, Oron). The level of awareness could necessitate the training and certification of seafarers to operate technologically advanced ship with high level of professionalism and global best practices. Hence, measuring awareness or knowledge of a given concept would create a platform for optimizing responses based on collective knowledge of the concept rather than guessing or presuming that, a community or an individual is well versed with the provisions of the concept. This is similar to the provisions of the STCW convention and code, the collective knowledge of the STCW convention and code by stakeholders in Maritime Training Institutions could be away of enhancing its implementation.

2. Aim and objectives

The study aimed at determining the extent to which staff, cadets and students of the Maritime Academy of Nigeria, Oron are familiar with the STCW-78 as amended in 2010 convention (Manila amendments) after five years of its adoption. The study was achieved using the following objectives:

1. to identify the 2010 amendments to the STCW- 78 convention.
2. to assess the level of awareness of the amendments in the Maritime Training Institution using Maritime Academy of Nigeria, Oron.

2.1. Research questions

In order to achieve the purpose of the study, the following research questions were answered:

1. What were the amendments to the STCW-78 at the 2010 Manila convention?
2. What is the level of staff, cadets and students of the Maritime Academy of Nigeria, Oron awareness of the STCW-78 as amended in 2010, Manila convention?

2.2. Significance of the study

The STCW-78 convention as amended in Manila 2010 provides minimum guidelines for training and certification of seafarers. This is to promote safety of life and property at sea. Not only this but also for the protection of the marine environment through high technology shipping. This study therefore, will be of benefit to staff in the area of updating curricula to meet the training demands of the 2010 amendments. To the students and cadets, the study will help them to understand the new standards and training requirements under STCW-78 as amended in 2010 as well as the necessary skills. To the Maritime Training Institutions, the study will serve as a pointer towards staff development and certification.

2.3. Assumptions of the study

In conducting the study, the following assumptions were made:

1. Sample was representative of population
2. Instrumentation/data collection was as free as possible from avoidable errors and biases.
3. Respondents' responses to items were their true understanding of the STCW-78 as amended in 2010.

2.4. Operational definition of terms

Party: This means a state for which the convention has entered into force.

Administration: This means the Government of the party whose flag the ship is entitled to fly.

Certificate: This means a valid document by whatever name it may be known, issued by or under the authority of the administration or recognized by the Administration authorizing the holder to serve as stated in the document or as authorized by national regulations.

Certificated: This means properly holding a certificate.

Sea-going vessel: This means a ship other than those which navigate exclusively in inland waters or in waters within, or closely adjacent to sheltered waters or areas where port regulations apply.

3. Research methodology

3.1. Research design

The research design adopted for this study was the inferential survey design. According to Kerlinger in Akpabio and Ebong (2009) the inferential survey design is a process of extracting information from a target population through the use of observation, questionnaires or interviews, and subjecting the data obtained to statistical analysis for the purpose of drawing conclusion. The main aim of inferential survey design is to measure knowledge, attitude and value (Kothari and Garg, 2014). Inferential survey design could be used in studying large and small population through careful selection and studying of samples of the population to determine the frequency of the event. The inferential survey design is considered suitable for this study because the study seeks to measure the level of awareness (knowledge) of the target population about a physical concept (2010 Manila amendments to STCW-78 convention).

3.2. Research Area

The study area is the Maritime Academy of Nigeria, Oron, Akwa Ibom State. It is located in the Eket Senatorial District of Akwa Ibom State and sited in the water front of the Atlantic Ocean. Geographically, the study area is located approximately between Latitude 4o45/8// and 4o50/9// North of the equator and Longitude 8o15/30// and 8o48/52// East of the Greenwich Meridian. The Academy was established in 1978 as Nautical College and in 1995 was upgraded to her present status with further expectation of being upgraded to a University status.

The Academy is the centre of excellence for training of seafarers for Global Maritime Operations. There are four schools in the Academy namely School of Nautical Studies (SNS), School of Marine Engineering (SME), School of Maritime Transport and Studies (SMTS) and School of General Studies (SGS). The Academy trains seafarers and would be seafarers to acquire academic and professional knowledge. The Specialized Seaman-ship Training Centre (SSTC) and the Mandatory Course Centre are for professional and proficiency based trainings. Upon successful completion of training, trainees (Cadets and Students) are awarded, Higher National Diploma or National Diploma, Certificate of Competency, and Certificate of Proficiency or Documentary Evidence by the appropriate Authority. In addition, the Academy also admits students Post Graduate Diploma (PGD) in Marine Engineering, Shipping Technology as well as Transport Management.

3.3. Population of the Study

The target population used for the study comprises all Academic Staff, HND Cadets (of SNS & SME) and students for the Short Courses in the Maritime Academy of Nigeria, Oron with an estimated population size of 570. The above defined populations were used because they have the need for the STCW convention in their various careers. The accessible populations were the selected maritime trainers and seafarers and they represented all the staff, cadets and students of the Maritime Academy of Nigeria, Oron within the time frame of the study.

3.4. Sampling Technique

The study adopted a multi-stage sampling approach to select the sample size for the study. This approach combined stratified sampling, simple random sampling and proportional sampling techniques. The researchers at first stage employed the stratified sampling to select academic staff from the non-academic staff, and two schools from the four schools in the study area. The stratified sampling technique was also used to select students of short courses from other students (PGD) in the study area. The stratified sampling enabled the researchers to identify and take care of heterogeneity in the population. Thereby reducing sampling error, but facilitate the selection of maritime curriculum developers and trainers as well as seafarers into the sample size.

Within the two schools selected, the number of cadets that participated in each school was determined using the proportionate sampling technique. Within each school, every cadet was accorded equal opportunity of participation as the researches adopted simple random sampling technique at this stage. Similarly, the simple random sampling technique was adopted for the academic staff and students (short courses and CoC programmer). At the end, a total of two hundred and forty (240) people were used for the study. The distribution of the population and sample are presented in Table 1.

Table 1: Distribution of population and sample size for the study

S/N	Status/school	Population size	Sample size
1	Academic staff	75	32
2	Nautical studies cadets	105	44
3	Marine Engineering cadets	260	110
4	Students	130	54
Total		570	240

3.5. Sample

The sample for this study was made of 240 people drawn from academic staff, cadets and students of the Maritime Academy of Nigeria, Oron. The scientific statistical justification for this number is informed by the minimum sample size required for a study of this nature. Yamane (1967) provided some scientific basis for computing the minimum sample size for a study of known population given thus:

$$n = \frac{N}{1 + N(e^2)} \quad (1)$$

where N is the population size, e is the allowable error level usually 5%, and n is the minimum sample size to justify the precision of any study. In the light of this, the required minimum sample size for this study at 95% level confidence (and 5% error margin), with the population size of 570 is approximately 235. Therefore, the sample size of 240 participants was considered very adequate for eliciting data for the study.

3.6. Instrumentation

The Instrument used for data collection for this study was a structured questionnaire which was developed by the researchers.

The questionnaire had two sections (A & B). Section 'A' measured respondents' background information which included name of school, years of experience in the maritime institution or industry. While section 'B' was a 10 structured multiple choice questions with three options each. The questions were made to investigate the level of awareness of the STCW-78 convention as amended in Manila, 2010. However, there were few general questions on the STCW-78 convention.

3.6.1. Validity of Instrument

The researchers constructed the items on the instrument. These items were vetted and reviewed by experts in research and statistics as well as professional in the maritime industries. Their contributions were taken into account. Therefore, the instrument was considered comprehensive and valid for eliciting information necessary to answer the research questions.

3.7. Data collection procedure

Questionnaires were administered to selected academic staff, cadets and students of the Maritime Academy of Nigeria, Oron. The respondents randomly selected based on their population were given a copy of the questionnaire per person. Some responded immediately while others took it home. Seven days were used for the data collection, in which 252 copies of the questionnaires were distributed and 240 copies retrieved. Therefore, a total of 240 copies of the questionnaire were used for the study.

3.8. Data preparation and scoring

Table 2 was used for coding section 'A' of the research instrument, whereas, section 'B' of the research instrument was scored based on binary scale. From the three-options in each question of this section, the correct option was scored '1', while other options were scored '0'. Hence, quantitative data was generated and classified according to staff, cadets and students.

Table 2: Distribution of population and sample size for the study

	Parameter	Coding
Status	Academic staff	1
	Cadet	2
	Student	3
	General Studies	1
School	Marine Engineering	2
	Nautical Science	3
	Maritime Transport	4
Years of Experience	Less than 6 months	1
	6 Months - 4 years	2
	5 years ? 10 years	3
	Above 10 years	4

3.9. Procedure for data analysis

The mean value (\bar{x}) for each class was determined from the formula

$$\bar{x} = \frac{\sum_{i=1}^k f_i x_i}{\sum_{i=1}^k f_i} \tag{2}$$

where f is the frequency, is the sampled score and $i = 1, 2, 3 \dots k$. Based on the scoring system (0 or 1 per question) and the 10 questions in section B of the research instrument, the mean lies between 0 and 10.

The mean is the simplest and most widely used central tendency, but it gives wrong impression of other values in a data set especially with the existence of one or more extreme values in a data set (Kothari and Garg, 2014). Therefore, a better measure of awareness (coefficient of variation (CV)) according to Reed (2002) was computed from the mean score and the standard deviation for each data set.

The standard deviation (σ) obtained from Equation 3, was used to measure the dispersion in the data set.

$$\sigma = \sqrt{\frac{\sum_{i=1}^k f_i (x_i - \bar{x})^2}{\sum_{i=1}^k f_i}} \tag{3}$$

The coefficient of variation (CV) was computed according to the standard formulation for single variable setting given by (Reed, 2004)

$$CV = \frac{\sigma}{\bar{x}} 100x \tag{4}$$

The CV for a single variable aims at measuring the spread that describes the amount of variability relative to the mean in a way that does not depend on the variables measurement unit. Reed et al. (2002) posited that, CV is a standardized measure of dispersion of probability or frequency distribution of scores or feeling about performance of a method, expressed in fraction or percentage. The CV is commonly used in Physics or Engineering when conducting quality assurance studies. Reed et al. (2002) noted that, when analyzing consistency of knowledge or data at 5% cutoff threshold critical values, the higher the CV, the greater the dispersion of the measured variable and the sparse or insufficient the information measured. On the other hand, the smaller the CV the better or the more sufficient the information measured. The variable measured in this work, was the level of awareness of the STCW-78 as amended in Manila 2010.

The simple percentage ratio (PR) for $x \geq 5$ for the various groups was computed from

$$PR = \frac{\sum_{i=5}^{10} x_i}{\sum_{i=1}^k f_i} 100x \tag{5}$$

where $5 \geq x_i \leq 10$ and the 60% criteria level for awareness was considered good.

4. Results and discussion

The results for this work are presented in like manner which the research questions were stated in item 2.1.

4.1. Research question 1:

What are the amendments of the STCW-78 convention in 2010 Manila Convention?

Conventions are modified from time to time to cope with new technologies, harsh environment and safety policies and

for improvement in the current system. Similarly, the STCW-78 convention was revised in 1995, and to enable seafarers cope with the current challenges in the maritime industries as well as meeting the global needs for safety and environmental policy, STCW-78 was amended in Manila on 25th June, 2010. These amendments are known as 'The Manila amendments to the STCW Convention and Code'. With the Manila amendments, between 1st July, 2013 and 1st January, 2017 (as appropriate), all seafarers will be required to undertake additional training and hold the requisite certification. Amongst the amendments adopted at the 2010 Manila convention are a number of important changes to chapters of the STCW-78 convention and code, have been made, they include:

1. New requirements for training in leadership, management and teamwork.
2. New requirements for personnel serving on liquefied gas tankers.
3. New requirements for security training, including piracy awareness.
4. New requirements for marine environment awareness training.
5. New training and certification requirements for electro-technical officers (ETOs) and ratings
6. New requirements relating to training in modern technology (such as ECDIS).
7. Updating of competence requirements for personnel on all types of tankers.
8. Introduction of modern training methodology (eg. E-learning system.)
9. New certificate requirement for Able Seafarers.
10. New high voltage training and certification requirements for Engineers and (ETOs).
11. New training guidance for personnel operating dynamic positioning systems
12. New training guidance for personnel operating dynamic positioning systems
13. Improved measures to prevent fraudulent practices associated with CoC.
14. New training guidance for personnel serving on board ships in polar waters.

Under the new regulations, updated proficiency training in relevant courses has to be undertaken every five years. Seafarers revalidating their Certificate of Competency after 1st January, 2017 will be required to submit documentary evidence of having completed approved updated proficiency training within the last five years. To meet with the provisions in the Manila amendments, Maritime Training Institutions are supposed to be well informed of these amendments, update her staff and her curricula for effective implementation of STCW-78 as amended in 2010.

4.2. Research question 2:

What is the level of awareness of the staff, cadets and students of the Maritime Academy of Nigeria, Oron of the STCW-78 as amended in 2010 at the Manila Convention?

Based on statistical analysis of data, results obtained are presented as Tables 3, 4 and 5; for the cadets, students and staff respectively. The mean distribution for cadets' scores yielded 3.57, with a standard deviation of 2.45 and coefficient of variation (CV) of 68.6%. This indicates low level as well as low quality awareness of the STCW-78 as amended in Manila, 2010. This result was confirmed by the low simple percentage ratio (30.5%) for those scores greater than 5 in this group.

Table 3: Frequency distribution of scores for cadets (Nautical Science & Marine Engineering) on the awareness STCW-78 as amended in Manila, 2010

Score (x)	Frequency (f)	F_x	$x - \bar{x}$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$
0	0	0	-3.571	12.75	0
1	33	33	-2.571	6.61	218.13
2	38	76	-1.571	2.47	93.86
3	15	45	-0.571	0.33	4.95
4	21	84	0.429	0.18	3.78
5	20	180	1.429	2.04	40.80
6	8	48	2.429	5.90	47.20
7	5	35	3.429	11.76	58.80
8	4	32	4.429	19.62	78.48
9	3	27	5.429	29.47	88.41
10	7	70	6.429	41.33	289.31
Total	154	550			923.72

Table 4: Frequency distribution of scores for Students (CoC & Short Courses) on the awareness STCW-78 as amended in Manila, 2010

Score (x)	Frequency (f)	F_x	$x - \bar{x}$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$
0	0	0	-5.83	33.99	0
1	4	4	-4.83	23.33	93.32
2	6	12	-3.83	14.67	176.04
3	3	9	-2.83	8.01	72.09
4	5	20	-1.83	3.35	16.75
5	5	25	-0.83	0.63	3.45
6	6	36	-0.17	0.03	0.18
7	8	56	1.17	1.37	10.96
8	6	48	2.17	4.71	28.26
9	5	45	3.17	10.05	50.25
10	6	60	4.17	17.39	104.34
Total	54	315			555.64

Table 5: Frequency distribution of scores for teaching staff on the awareness STCW-78 as amended in Manila, 2010

Score (x)	Frequency (f)	F_x	$x - \bar{x}$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$
0	0	0	-4.84	23.43	0
1	5	5	-3.84	14.75	73.75
2	3	6	-2.84	8.07	24.21
3	4	12	-1.84	3.39	13.56
4	4	16	-0.84	0.71	2.84
5	3	15	0.16	0.03	0.09
6	4	24	1.16	1.35	5.40
7	2	14	2.16	4.67	9.34
8	2	16	3.16	9.99	19.98
9	3	27	4.16	17.31	51.93
10	2	20	5.16	26.63	53.26
Total	32	155			254.36

The students' mean score was computed to be 5.83, with a standard a deviation of 3.21, and the simple percentage ratio of 66.7% show good awareness. However, based on the coefficient of variation (CV) of 55.1% achieved for this group, the quality awareness was considered to be fair.

The staffers mean score was 4.84, standard deviation of 2.82, which yielded 58.3% as coefficient of variation. The simple percentage ratio of for scores greater than 5 was 50% indicating low awareness. The quality of awareness was interpreted to be low based on the CV value.

Generally, the groups studied had low level awareness and the quality of awareness of the STCW-78 as amended in Manila, 2010 was equally low. The least CV (55.1%) obtained was from the students' scores, and was closely followed by staff, while the highest (68.6%) was from the cadets' scores. It was interpreted that, students had the highest level of awareness, closely followed by staff and then cadets. The results also show strong homogeneity between staffers' scores and cadets' score as indicated by their standard deviations, 2.82 and 2.45 for staff and cadets respectively and 3.21 for students.

This result was not unanticipated because the students' group used was those from various shipping industries who were in the Academy for Certificate of Competency or to update/obtain other certificates (such Documentary Evidence in Basic Safety, Oil Tanker Familiarization or Firefighting). However, with a cut-off threshold of 5% critical value used for adjudging awareness quality, and based on the fact that the higher the CV the lower the quality of awareness, the result is a pointer to poor level of awareness of the STCW-78 as amended in Manila 2010. The level of awareness could be a setback to the effective implementation of the STCW convention and codes in the country, because the level of awareness of any policy will necessitate effective implementation of such policy.

Since no society can rise above her education system and no education system can grow above the quality of her teachers, and the STCW-78 convention and code as amended, is recognized globally as minimum standards for training and certification of seafarers. Therefore, it is important that all academic staff of Maritime Training Institutions are encouraged to have a good knowledge of it for effective training, compliance and implementation of the convention and codes. The awareness level is further displayed graphically in Figures 1 to 3.

Figure 1: Bar chart showing distribution of STCW-2010 amendments awareness level

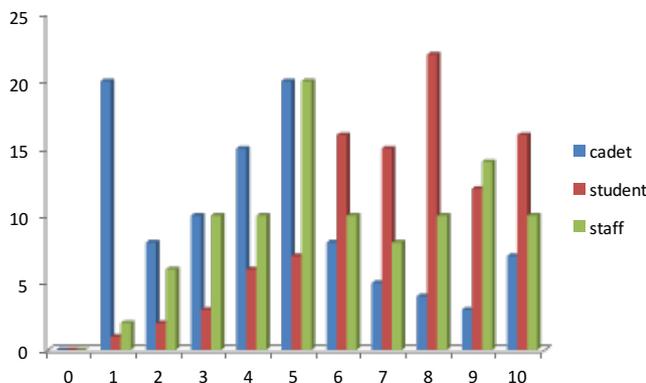


Figure 2: 3D surface for the awareness level of the STCW-78 as amended in Manila, 2010

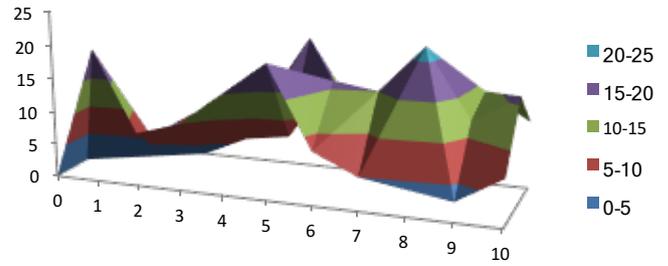


Figure 3: Doughnut showing the awareness level of the STCW- 78 as amended in Manila, 2010, from the nut centre- cadets, staff and students



5. Conclusion

This research was conceived out of the necessity to provide a better understanding of the 2010 Manila amendment of the STCW-78, a guideline for training and certification of seafarers worldwide. The study assessed the level of awareness of the STCW- 78 convention and code as amended, by the staff, cadets and students of the Maritime Academy of Nigeria, Oron. The inferential survey design was employed. Two research questions were answered and the coefficient of variation was determined. The study revealed that, cadets had low mean and low percentage ratio as well as low quality of awareness; staff had fair mean and percentage ratio values but low quality of awareness. While, the students had good and percentage ratio values, but low quality of awareness. Therefore, it was concluded that, the Academy Community did not have good quality of awareness of the STCW-78 as amended in Manila 2010.

Maritime Training Institutions have the oversight function to train manpower for the maritime industrial, therefore the level of awareness of the STCW convention and code by the institutions matters. A good level of awareness of the STCW provision will not only aid in creating awareness but could serve as a mechanism for collective implementation of the STCW provisions. Based on findings, it is recommended that, Maritime Ad-

ministrators should encourage academic staff and cadets/students of Maritime Training Institutions to become more familiar with the provisions of the STCW convention and code, because Maritime Training Institutions is considered as the first point of call towards the collective implementation of the STCW convention and code. Also, International Maritime Organization should ensure that STCW awareness is an integral part of the curricula from training in Maritime Institutions.

Appendix A.

Questionnaire on the Level of Awareness of the STCW-78 as Amended in 2010 Manila Conference.

Dear Respondent, Thank you for taking time to respond to this instrument. It is design to obtain data that could help solve problem facing the implementation of the STCW-78 as amended in 2010 Manila conference. Information collected is for research purpose and will be treated with utmost confidentiality. God will bless you for taking part in this study.

SECTION A

Please fill or tick (V) as appropriate. All abbreviations follow the standard nomenclature used in Maritime Academy of Nigeria Oron.

1. Status: Academic staff [] Cadet [] Student []
2. Name of Department
3. Name of School: SGS [] ME [] NS [] MT []
4. Years of Experience in Maritime Industry or Institution
Less than 6Months [] 6 months -5 years [] 5 years-10 years [] 10 years-Above []

SECTION B

Please continue to express your opinion on the following items. You are to choose the most correct option from the letter 'A-C'. Questions are based on familiarity with the STCW 78 as amended in Manila 2010.

1. The STCW-78 as amended in 2010 Manila convention came into force in
(A) January 2012
(B) January 2010
(C) January 2013
2. To check fatigue among crew, one of these is not the new minimum rest hour?
(A) 10hrs per 24hrs period
(B) 150hrs per 30day
(C) 77hrs per 7days
3. Which chapter of the convention deals with Master and Derek Officers?
(A) II
(B) I
(C) III
4. Certificate issued under STCW standard should be upgraded to the 2010 amendments before
(A) January 2017
(B) January 2020
(C) January 2025

5. One of these is not a recognize document/certificate in the Manila amendments
(A) Certificate of Competency
(B) Certificate of Professionalism
(C) Certificate of Proficiency
6. The presence of pilot on board is relive of duties to
(A) Master
(B) Officer in charge of the watch/Chief Engineer
(C) None of the above
7. The convention requires that, Deck officers should be trained one of these except
(A)ECDIS
(B) Appreciation of system drawing
(C) High voltage competencies
8. Mandatory security training is required for
(A) All crew
(B) Master only
(C) Officers on watch /Rating forming part of engineering watch only
9. Upon completion of training in oil tanker, trainees should be issued with
(A) Certificate of Competency in oil tanker
(B) Documentary evidence
(C) Certificate of Proficiency
10. An organization on behalf of the administration can issue the following except.
(A) Certificate of competency
(B) Certificate of proficiency
(C) Documentary evidence

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