

STCW-f 1995 : Training the Fishermen

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Abstract

Not much attention has been given to fishermen in term of maritime training. Although fishing vessels of less than 500 GT are exempted from registry under Merchant Shipping Ordinance 1952, they are subjected to some provisions under the Fisheries Act 1985. In term of certification and manning standards for the fishing vessels, Section 61 (c) of Fisheries Act 1985 provides power for Minister to make regulations for the said purpose. The need to impose a standard certification and training for fishermen is becoming important firstly to accommodate the country's advancement in distant water fishing and secondly to meet the international requirement. This paper suggests the training structure for fishermen that is consistent with the STCW-F 1995 requirement.

Keywords: T STCW-F 1995; manning ; fishermen

1. Introduction

There are about 49,756 registered fishing vessels in Malaysia categorized in accordance to their gross tonnages with total number of crews or fishermen estimated at 93,056 [1]. Fishing vessels are categorized in term of Registered Gross Tonnage (GRT) and never in length. At present, there is no fishing vessel of more than 500 GRT. Deep-sea fishing, by definition, is an activity of catching fish in Malaysian fisheries waters [2] of more than 30 nm using vessels of more than 70 GRT. On the other hand, distant-water fishing is fishing activity done beyond Malaysian waters. Another definition as described in United Nation on the law of the Sea 1982 (UNCLOS 1982) is high seas for waters other than EEZ waters, territorial waters and inland waters of the archipelagic waters of the archipelagic states[3]. Distant-water fishing is still new to local fishermen and at the moment restricted only to tuna fishing in Indian Ocean and Malaysia is a member of Indian Ocean Tuna Commission (IOTC) since 1998. Although oceanic tuna landing has decreased to about 1,350 mt in 2010 compared to 2,282 mt in 2009 [1], the future of tuna fishing is still promising as the actual target catch of 60,000 mt has not yet been achieved [4]. Presently, 59 vessels are registered with IOTC and thus are allowed to fish for tuna in Indian ocean.

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Fishing vessels less than 500 GT are exempted from compulsory registration under the Merchant Shipping Ordinance 1952 (MSO) [5], therefore, their registration is carried out by the Department of Fisheries (DOF) as the specified authority under the Fisheries Act 1985 (the Act 1985) [6]. For vessels where the registration is not exempted under Section 13 (c) of the MSO, the registration is carried out by the Department of Marine (DOM). For that purpose the DOM has specified certification standard and training for the crews following the requirement of Standard of Training, Certification and Watch-keeping 1978 (STCW 1978). On contrary, DOF has not yet developed a comprehensive training scheme for fishermen to meet the international requirement such as the STCW 1978 although some formal training relating to fishing and navigation being conducted at their Fisheries Institute in Terengganu [7].

Meanwhile, to deal with smaller vessels engaging in fishing, the STCW- F (F for Fisheries) Convention 1995 (STCW-F 1995) is adopted by the International Maritime Organisation (IMO) in 1995. This Convention is a separate from a much earlier Convention in 1978 where it focussed on the fishing vessels of more than 24 m and of engine propulsion more than 750 KW. The STCW-F 1995 is held since most vessels of the developing countries, Malaysia included, do not fall under the jurisdiction of the STCW 1978 that apparently focussed on the larger merchant ships. For even smaller fishing vessels, the FAO/ILO/IMO Document for Guidance on Fishermen's Training and Certification (FAO/ILO/IMO guidelines) gave further information on courses and syllabi [8]. Already 15 countries have ratified the STCW 1995 convention to enable it to come into force this coming 29 September 2012 [9]. Without the need to elaborate on the obligatory commitment of the member states of the Convention, Malaysia has to get ready from now to face this new maritime development so as not to be left behind especially in distant water fishing.

The objectives of this paper are to propose a standard certification for fishermen and to develop training scheme that meets the STCW-F 1995 requirements.

2. Statistics of trained fishermen

Beginning 1978, DOF had discontinued publishing the official statistics of trained fishermen. The 1977 Annual Fisheries Statistics showed that 206 individuals had been trained at various locations in capture fisheries [10]. At present, source of trained fishermen data should emanate from Fisheries Institute of Malaysia (FIM) which is managed by DOF and being the sole training institute of capture fisheries in Malaysia. The institute is located in the east coast of Peninsular Malaysia. Unfortunately, the FIM does not publish its own statistics and browsing the DOF website at www.dof.gov.my failed to locate such statistics. For this reason, statistics of trained fishermen had to be obtained elsewhere. One source of statistics obtained from [11] who reported 2,000 fishermen have been trained by DOF. Press statement made by Deputy Director-General of Fisheries in 2010 indicated 423 individuals have been trained as skipper by FIM since 2001 [12]. A more reliable source comes from the Fisheries Bulletin No.79 Mac 2011 Issue which stated 11,962 individuals had been trained by FIM since 1991. If the latter data is accepted, then it is estimated about 13% of individuals had had formal training in capture fisheries.

3. Human resource development in fishing

A very disturbing phenomena in fishing industry is the flooding of foreign crews employed either legally (registered) or illegally. The registered foreign crews reported by DOF in 2010 is 36,566 or 28% of the total workforce [1] whereas in 2008 there were only 33,052 foreign crews [13]. It also indicates an increase of 11% of foreign crews since 2008. It is expected the number of illegal foreign crews are equal to the number of legal crews [14]. Most of them are employed as crews working in the deep-sea vessels or tuna vessels. Locals are known to distant themselves from working in fishing especially that requires long working hours and travelling to very far locations [15]. More attractive job opportunity is readily available on land that turn away younger segment of work force from working at sea [11].

Fishermen training thus can be two-prong objectives; training them in new fishing technology and to prepare for phasing out of foreign crews. FIM, which was established in 1991 and located in Kuala Terengganu had the objective of training fishermen in various aspects of modern fishing. The target participants were younger aged fishermen probably who had received formal education at government schools. Between 1991-2006, 15 fishing related courses were offered by FIM. [16].

4. International obligation in fishing safety and training

4.1 Safety culture

Fishing is one of the most hazardous sectors of industry [17] and according to [18], fishing accidents mostly due to absence of safety culture among fishermen. There are numerous definitions of safety culture as gathered by [19] but a simple and yet pertinent to fishermen is given by [20] which stated that safety culture reflects attitudes, beliefs, perceptions, and values that employees share in relation to safety. In a survey, fishermen who had sought medical attention during the preceding year as a result of an accident showed a significantly less positive attitude to rules and regulations and had a less positive safety attitude in general [21]. Apparently, in Malaysia, safety culture had never been formally instilled among fishermen but introduced through regulatory approach. For example, there are safety regulations requiring vessels to be equipped with fire extinguishers, life jackets and navigational lights and annual inspection is also carried out to determine the seaworthiness of the vessels [6]. Lately, courses on safety at sea are provided by FIM to fishermen manning larger vessels.

Despite effort by the authority to instil safety discipline and culture among fishermen, accidents do occur at disturbing rate. In 2010, accidents involving fishing vessels were 55% of the total reported marine accidents [22]. In the same year, Vessel Traffic Services (VTS) based in Klang, recorded 74,136 ships that use the Malaysian waters for navigation [23]. Based on this figure, marine accidents among merchant ships is almost zero percent which perhaps are related to the level of training received by their crews.

4.2 International commitments

Historically, UNCLOS 1982 was the stepping stone for Malaysia's advancement in marine resource exploitation and sea area expansion. Beside the enactment of new law, the Exclusive Economic Zone Act 1982 which proclaims and prescribes the national waters jurisdiction, the Fisheries Act 1985 replaced the old act in order to address some provisions of the UNCLOS 1982 demonstrating explicit commitment of Malaysia upon signing the convention. With respect to safety and training in fishing, Article 94 of UNCLOS 1982 requires State to take measures to ensure safety at sea with regard to vessels safety, manning of the vessels and communication to avoid collision for vessels plying the high seas. Moreover, IMO, when referring to STCW-F, encourages national Administrations to address the training and certification standards for crew of smaller vessels through relevant domestic laws. To address these issues Section 61 of the Fisheries Act 1985 provides Minister a power to prescribe manning standards for fishing vessels and to establish board of examiners to examine candidates in their proficiency in such standards for certification, in consultation with the Director-General of the Marine Department. However, to date, the said regulation has yet to materialize.

Other international commitments are as follows:

1. SOLAS (Safety of Life at Sea)
2. Torremolinos convention and the Torremolinos protocol
3. STCW-F 1995 Convention
4. Document for guidance on the training and certification of fishing vessel personnel (FAO/ILO/IMO)
5. FAO The Code of Conduct for Responsible Fisheries (CCRF)

5. Methodology

Two documents were referred; the STCW-F and FAO/ILO/IMO Guidelines. Based on these documents, and the existing training syllabus held in FIM, the manning standards and certification, and training roadmaps are proposed.

6. The proposal: manning standards and certification

Realising the fact that level of education among fishermen is low and majority of them are in the aging segment [24], the process of transforming them into modern and competitive fishermen has to be slow and in stages. Younger individuals who are interested in fishing should be identified and encouraged. Government monetary assistance which is paramount should continue and training institute such as FIM to be upgraded with qualified trainers and facilities.

Fishermen training should transform from the conventional approach to a more modern and high technology approach to attract younger segment of fishermen consequentially with reasonable level of education. The whole training framework is to be revamped. Modernisation in fishing is one of the steps taken to invoke much safer and conducive working condition and competitive payment scheme. Moreover, training is not all about fishing but to conserve the resources at the same time. The FAO’s Code of Conduct for Responsible Fishing (CCRF) should be taught to fishermen.

Since most Malaysian fishing vessels are under 24 m long, the FAO/ILO/IMO Guidelines should be the basis of building up the training syllabus and the construction of legal framework intended for the fishermen manning the vessels.

6.1 Manning standards

The first step is to enact the manning standard regulation as provided by Section 61 (c) of the Act 1985. It is suggested that the manning standard and certification follow the groupings of vessel’s sizes and engine’s powers as formulated by ILO/IMO/FAO guideline as shown in Table 3. The equivalent of STCW-F certification is shown in brackets.

Table 3 : Manning standards and certification with equivalent certification of STCW-F

No.	Vessel length	Skipper	Engineer officer
1	“Sampan” means any fishing vessel which is less than 7 m in length and may or may not be fitted with an outboard engine.	The master of such vessel shall hold a certificate not lower than a Certificate of Competency as Fishing Skipper Class IV issued by the DOF	“Sampan” with or without outboard engine is exempted from engineer certification
2	Any fishing vessel of less than 12 meters in length and fitted with inboard engine	The master of such vessel shall hold a certificate not lower than a Certificate of Competency as Fishing Skipper Class III issued by the DOF (Mate less than 500 GT Domestic).	The officer-in charge of the engine department of a fishing vessel with propulsion power of not more than, 750 KW shall hold a certificate not lower than a Certificate of Competency as Engine Driver Class III issued by the DOF
3	Any fishing vessel of more than 12 metes but less than 24 meters in length and fitted with inboard engine shall be manned as follows	The master of such vessel shall hold a certificate not lower than a Certificate of Competency as Fishing Skipper Class II issued by the DOF (WKO-F unlimited 24m and above (SCTW-F) Regulation 2 WKO-F limited 24m and above (SCTW-F) Regulation 4	The officer-in charge of the engine department of a fishing vessel with propulsion power of not more than 750 KW shall hold a certificate not lower than a Certificate of Competency as Engine Driver Class III issued by the DOF. The officer-in charge of the engine department of a fishing vessel with propulsion power of not less than,750 KW shall hold a certificate not lower than a Certificate of Competency as Engine Driver Class II issued by the DOF (Second engineer officer of more than 750 KW -SCTW-F. Regulation 5). In addition, watch-keeping officer Engine Driver Class III issued by the DOF
4	Any fishing vessel of more than 24 meters in length and fitted with inboard engine shall be manned as follows:	The master of such vessel shall hold a Certificate of Competency not lower than a Certificate of Competency as Fishing Skipper Class I issued by the DOF (Skipper unlimited 24m and above (SCTW-F	The officer-in charge of the engine department of a fishing vessel with propulsion power of not more than 750 KW shall hold a certificate not lower than a Certificate of Competency as Engine Driver Class III issued by the DOF. The officer-in charge of the engine department of a

		Regulation 1). Skipper limited 24m and above (SCTW-F Regulation 3).In addition,the watch-keeping officer of such vessel shall hold a Certificate of Competency not lower than a Certificate of Competency as Fishing Skipper II (WKO-F unlimited 24m and above (SCTW-F Regulation 2) WKO-F limited 24m and above (SCTW-F Regulation 4).	fishing vessel with propulsion power of not less than.750 KW shall hold a certificate not lower than a Certificate of Competency as Engine Driver Class II issued by the DOF (Second engineer officer of more than 750 KW (SCTW-F. Regulation 5). In addition, watch-keeping officer Engine Driver Class III issued by the DOF
5	Any inboard engine fishing vessel in high seas	Any inboard engine of fishing vessel in high seas shall, in addition to requirement no.4, has on board the vessel, an officer who shall hold a Certificate of Competency as Fishing Skipper Class III	Any inboard engine of fishing vessel in high seas shall, in addition to requirement no.4, has on board the vessel the Engineer of such a vessel or the officer-in charge of the engine department of such fishing vessel shall hold a certificate not lower than a Certificate of Competency as Engine Driver Class II issued by the DOF and .the requirements as specified by international requirement

6.2 Training roadmaps to STCW-F 1995

Ultimately, the training syllabus should conform to the standard as provided in the STCW-F 1995. The career path of a fisherman is as follows: Competency Class III →Competency Class II →Competency Class I (STCW-F). Figure I shows how an individual may achieve the highest level of training qualifying him to man a vessel of more than 24 m in length either in domestic or international waters. In engineering training, an individual must obtain the Engine competency Class II before being admitted into Chief Engineer Officer training (Look Figure 2). For a vessel having engine propulsion of 750 KW or more, the manning in engine section requires one Chief Engineer Officer assisted by a Second Engineer Officer.

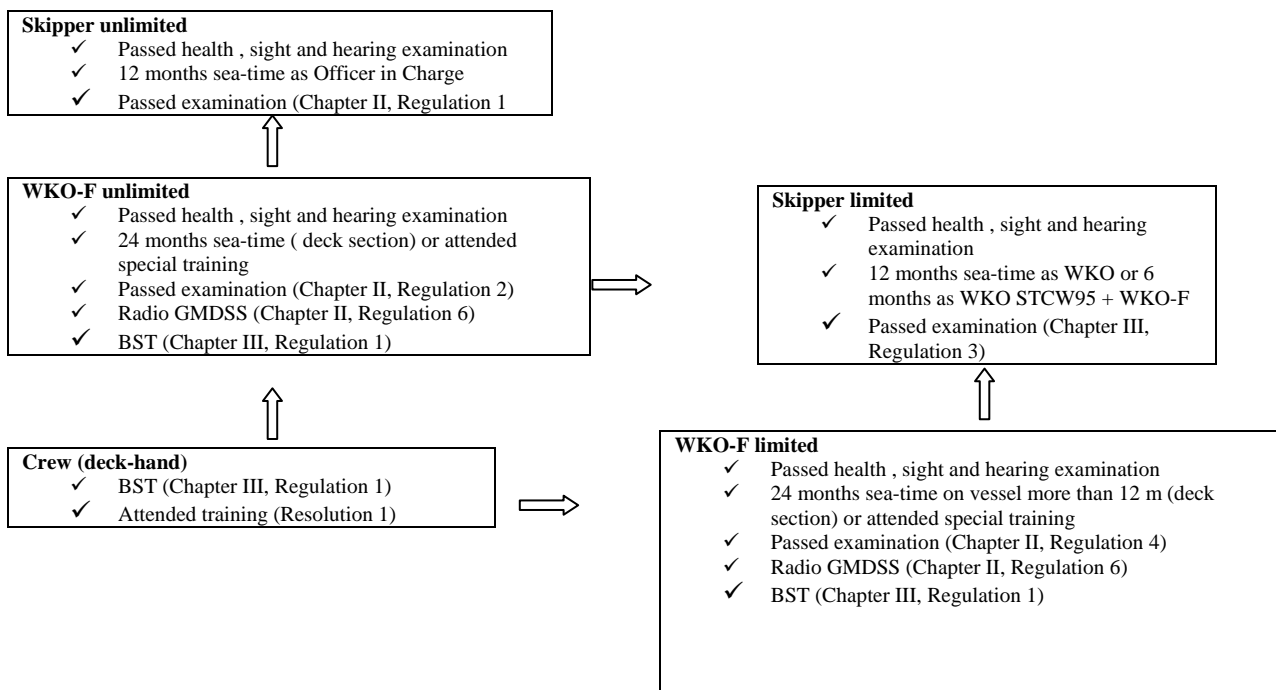


Figure I :Training road-map for deck section

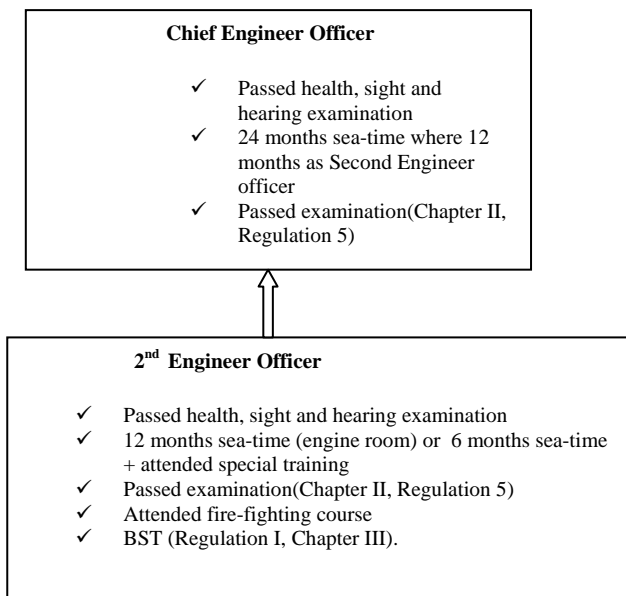


Figure 2 :Training road-map for engine section

7. Conclusion

The success of this training depends very much on the government's readiness to introduce laws that require all fishermen to acquire competency certificates. Soon, without valid certificates, no one can man the fishing vessels and of course there will be obstacles . Firstly, the acceptance of fishing community that regard the move that may change their living norms as nuisance and unnecessary. Secondly, most fishermen are having low level education and aged. The phasing out of aging fishermen is necessary but the fillers, the young individuals are reluctant to work as fishermen. It is then suggested that training should be done in stages with assistance from government .It may take a longer time to complete the whole cycle but ultimately, fishing community will be transformed into a modern and dynamic community.

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