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The current status of Myanmar seafarers and their prospects for the future

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WORLD MARITIME UNIVERSITY
Malmö, Sweden

**THE CURRENT STATUS OF MYANMAR
SEAFARERS AND THEIR PROSPECTS FOR THE
FUTURE**

By

MYO THANT
Union Of Myanmar

A dissertation submitted to the World Maritime University in partial
fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

in

MSEP
(Operational)

1999

DECLARATION

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

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ABSTRACT

Title of Dissertation: **The Current Status of Myanmar Seafarers and Their Prospects for the Future**

Degree: **MSc**

Significant changes in maritime training and education have taken place in shipping due to the enforcement of revised STCW'95 amendments. This study examines the needs to develop the Myanmar seafarers' employment in world shipping and considers a new approach to education and training system in order to improve their job security. It also investigates the problems facing that may be encountered in the integration of officers and crew of Myanmar in merchant ships.

Myanmar is one of the maritime labour supplying countries in Southeast Asia, thereto the seafarers' recruitment opportunity is essential. Some discussions and review on seafarers' recruitment and labour quality have been investigated. International Labour Organization (ILO) minimum wages, hours of work & rest should highlight and it has to harmonize the different growth in shipping.

This study revealed that the existing system of maritime education and training in Myanmar and identified the needs that required by STCW Convention. The more produce the competent persons, the more jobs they secure better. Therefore, the implications of STCW'95 become the vital role to substantiate the quality standard system in training and education. The results were collated and improved the employment future of Myanmar seafarers. The study concludes with the number of recommendations are made concerning the need for further development in converting the training from knowledge-based to competence-based effectively.

KEYWORDS: Training, Education, Competence, Employment, Quality, Seafarers.

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LIST OF ABBREVIATIONS

| | |
|-----------------|---|
| ARPA | Automatic Radar Plotting Aid |
| ASEAN | Association of the Southeast Asia Nations |
| BIMCO | Baltic and International Maritime Council |
| CDC | Continuous Discharge Certificate |
| COLREG | International Convention on Regulations for Preventing Collision at Sea, 1972 |
| DC | Deck Cadet |
| DMA | Department of Marine Administration |
| EDH | Efficient Deck Hand |
| EEH | Efficient Engine Hand |
| FG | Foreign Going |
| FOC | Flag of Convenience |
| GMDSS | Global Maritime Distress and Safety System |
| GOC | General Operator Certificate |
| GTI | Government Technical Institute |
| HT | Home Trade |
| ILO | International Labour Organization |
| IMO | International Maritime Organization |
| IMT | Institute of Marine Technology |
| INMARSAT | International Mobile Satellite Organization |
| ISF | International Shipping Federation |
| ISM Code | International Safety Management Code |
| ITF | International Transport Workers Federation |

| | |
|---------------------|--|
| MET | Maritime Education and Training |
| MMSA | Myanmar Merchant Shipping Act |
| MOT | Ministry of Transport |
| MSA | Maritime Safety Administration |
| MSC | Maritime Safety Committee |
| NAVTEX | Navigational Telex |
| OECD | Organization for Economic Co-operation and Development |
| SECD | Seaman Employment and Control Division |
| STCW 78 | International Convention on Standards of Training, Certification |
| (Revised 95) | and Watchkeeping for Seafarers, as amended in 1995 |
| TCS | Training Chief Steward |
| UNCTAD | United Nations Conference on Trade and Development |
| USD | United State Dollar |
| WMU | World Maritime University |
| YASU | Yangon Art and Science University |
| YIT | Yangon Institute of Technology |

Map of the Union of Myanmar



Source: Department of Marine Administration (DMA) Publication, 1998.

Chapter 1

Introduction

1.1 General Introduction

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 has been in force since 28 April 1984. The Convention was the first attempt to establish global minimum professional standards for personnel efficiency and knowledge for seafarers. Previously, the standards of training, certification and watchkeeping of officers and ratings were established by individual Governments usually without reference to practices in other countries. This resulted in widely varied standards and procedures. Consequently, the STCW'95 amendments constitute and bring a comprehensive package of measures designed to improve the harmonised standards of competence globally.

This dissertation provides a review of the Myanmar standards of training, assessment and certification especially those areas, which lag behind the present STCW Convention's requirements. This may be result in the decrease of job security of Myanmar seafarers in future. Myanmar is one of the labour supplying countries in Southeast Asian. In addition, the problems faced by Myanmar seafarers are another barrier, which concern ILO matters, especially wages, working conditions, etc. These are one of the influential barriers, to improve most of employment opportunities internationally.

Chapter Two pertains to functions of the Department of Marine Administration (DMA) and other associated divisions of the DMA. In addition, Chapter Two also deals with the role, responsibilities and functions of the DMA and Seaman Employment and Control Division (SECD). This chapter will give an insight into the functioning to the reader by explaining the work carried out by various sections elsewhere and will briefly discuss Myanmar seafarers' problems, with special reference to the International Transport Workers Federation (ITF) and suggest some envisaged solutions.

Chapter Three deals with Myanmar seafarers' conditions of employment. A comparison with other manpower supplying nationalities is carried out on foreign flag vessels. In this chapter, the author intends to discuss the recruitment opportunities and the labour quality and potential of the labour supplying countries according to the International Labour Organization (ILO) recommendations elsewhere. The author also deals briefly with a case study, in related to recruitment of Myanmar seafarers including wages and working conditions. The findings of the case study are self-explanatory.

Chapter Four describes the present pre-sea and post-sea education and training systems in Myanmar. It also discusses the functioning of the Institute of Marine Technology (IMT) which is the only Governmental Institution in Myanmar. It also identifies the needs for changes within the IMT in order to give full and complete effect to the provisions of the STCW Convention.

Chapter Five deals with the conclusion and recommendations made by the author. This Chapter will identify the needs, which are required to be incorporated in the present maritime education and training system. The recommended methods will suggest that could be effective in order to comply with full and complete effect to the provisions of the STCW Convention for Myanmar on the "White List".

The views expressed in this dissertation are entirely the author's own personal views, and not that of the Myanmar Government or any others.

1.2 The Objectives of the Study

The principal objective of this dissertation is to identify the necessary areas in which the standards of training, education and employment for national seafarers can be promoted, and give recommended methods that will aid in giving full and complete effect to the provisions of the STCW'95 Convention. This dissertation will also examine the revised STCW Convention compare with the existing standards of training, assessment and certification in Myanmar in order to identify the areas lagging behind the Convention in respect of the Department of Marine Administration (DMA) and Institute of Marine Technology (IMT) where updating is considered essential.

The study is based on the premise that the best way to improve the employment future for Myanmar seafarers is to incorporate the requirements of the standards of training, certification and watchkeeping for Seafarers (STCW) 1995 amendments. This dissertation will also concentrate on Myanmar seafarers and their employment future on foreign vessels and the problems faced by them. To scrutinize the present standards of training, assessment and certification system in Myanmar is the vital role and observe the areas which may need the conversion of a mainly knowledge based education and training system to provide competence based training in accordance with the revised STCW Convention.

In addition, the author's desire through this dissertation, which aims to provide the measures that need to be adopted and complied with by the Myanmar Government in an appropriate way, to make it as a relevant instrument; thereby improve the

employment conditions of Myanmar seafarers and make them a potential source of labour supply for foreign flag vessels in the future.

1.3 Methodology

This research is based on information collected during various interviews held, primarily to determine the effects of the STCW'95 on Administrations, Training Institutions and the Seafarers. In doing so the author interviewed with Mr. R. Prasad, former Principal of the Maritime Training Institute, one of the premier Training Institutes in the marine field in India. An interview with the Principal of the only Training Institute in Myanmar, the Institute of Marine Technology (IMT) was held during the winter break in December 1998 in Myanmar, to survey the existing system of maritime education and training. Discussions were held on the needs of training facilities to promote quality standards in order to meet the requirements of revised STCW Convention.

Since the topic of this dissertation deals with seafarers, an interview with the Deputy Director of Seamen Employment and Control Division, Myanmar (SECD) was held to obtain his views and information on the present employment opportunities of Myanmar seafarers. The author has gathered valuable advice and guidance from Capt. F.R.Chowdhury (Maritime Safety Agency) while on the field trip to the United Kingdom. The research has also taken into account the information provided in *Competent Crews = Safer ships* by Captain Morrison. Further, information on Government publications, reports and lecture notes, handouts provided by resident Professors and Lecturers at WMU and visiting Professors have also been taken into account elsewhere. In addition, research in the library, research from internet information from field studies and others are included.

The author would like to admit that there were some difficulties in collecting further updated information within his own Department (i.e. DMA) concerning the selected topic. The DMA has no e-mail facility; the record keeping within DMA has not utilized the latest technology available. In addition, information pertaining to seafarers' records and statistics were unavailable for carrying out an indepth research for achieving the objective of this dissertation.

Chapter 2

Department of Maritime Administration (DMA) and Seamen Employment Control Division (SECD)

2.1 Department of Marine Administration (DMA)

In the Union of Myanmar, the Department of Marine Administration (DMA) was formerly formed as the Mercantile Marine Department under the Ministry of Marine and Civil Aviation until 1972. Then it changed its name to Department of Marine Administration and worked directly under the auspices of the Ministry of Transport and was headed by the Director General. DMA is the only specialised executive arm of the Government to perform the implementation of the regulatory functions, embodied in the national maritime legislation.

Its maritime policy is mainly depends on the political and economic policies of the State and administrative and legal matters. The objective is to enforce the regulatory functions laid down in the maritime legislation relating to the registration of ships, maritime casualty investigations, safety of life at sea, safety of navigation and protection of the marine environment. Besides that, it also has the responsibility to discharge the obligations of the Government relating to international conventions. In addition, DMA controls visiting vessels, including coastal ships and riverine crafts for their safety and protection of the environment in accordance with the relevant international conventions.

2.1.1 Current Structure

Basically, the structure of the Maritime Administration in any country depends upon its political system. Some have a federal and some have centralized system and so on. In a federal system, the constitution usually provides for the administrative rights and powers of its constituent states. But, the centralised system is quite different from the others and it is responsible for the whole country's administration. Moreover, in most countries the Maritime Administration is under the Ministry of Transport but in some are under the Ministry of Commerce.

For example, in the past, the UK Maritime Administration was under the Ministry of Commerce while Norway shifted under the Ministry of Foreign Affairs. At present, the Myanmar Maritime Administration has set up a centralised system. DMA is situated in Yangon and it has some regional offices along the coastline. These regional offices, namely Kawthoung, Myeik, Dawei, Mawlamyaing, Patheingyi and Sittway, execute the functions of administration to ensure the safety of vessels and prevention of marine pollution. Supervision for all inland vessels is controlled by the Mandalay region along the Irrawaddy river.

DMA is organised into five Divisions as follows:

- (a) Nautical Division
- (b) Engineering Division
- (c) Seamen Employment and Control Division
- (d) Planning and Accounts Division
- (e) Administration Division

The current structure or organisation chart of DMA is attached in “**Appendix-A**”. Furthermore, there are at present 441 employees out of which, 42 are officers. The

sanctioned and existing men power of DMA over the entire nation is shown in “**Appendix-B**”.

2.1.2 The Functions of the Department of Marine Administration (DMA)

DMA has its own functions and manner of operating. The main functions of DMA are as follows:

- Regulating, surveying, controlling and supervising of inland and ocean going vessels and coastal ships including passengers ships for safety of life at sea and prevention of marine pollution;
- Registration of all types of vessels;
- Conducting of regular examinations for certificates of competency for deck and engineer officers of sea-going vessels;
- Conducting examinations for skippers and engine driver certificates of different grades of inland waters vessels and other departmental certificates to ratings of sea-going vessels;
- Providing launch hire services to governmental bodies and other organisations;
- Registration, recruiting and placement of seamen including officers;
- Conducting inquiries and investigations into maritime casualties;
- Co-ordinating the work of classification societies to whom statutory work has been delegated;
- General supervision of maritime matters;
- Adopting and implementing of IMO Conventions;
- Advising and assisting the Government on maritime matters.
- Surveys and certification of ships;

- Port State Control;
- Inspecting and detaining of unseaworthy ship;
- Approval of various plans of new ships under construction;
- Manning of ships;
- Issuing navigational warnings to ships;
- Dealing with wreck matters;
- Participating in maritime search and rescue operations;
- Participating in combating marine pollution;
- Ensuring the safety of fishing vessels and wooden ships of primitive build.

2.1.3 Functions of the Divisions

2.1.3.1 Nautical Division

It is mainly responsible for surveying and registration of all types of vessels and also conducting examinations, issuing the different grades of inland and sea-going certificates relating to the deck department in accordance with the Myanmar Merchant Shipping Act (MMSA) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995 (STCW'95). DMA has recognised some International Association of Classification Societies (IACS) members for surveys of vessels and issuance of the relevant statutory certificates. However, the statutory authority for survey and certification of ships is only delegated to the following recognised classification societies.

- Lloyd's Register of Shipping (LR);
- Germanischer Lloyds (GL);

- Det Norske Veritas (DNV);
- Nippon Kaiji Kyokai (NKK).

2.1.3.2 Engineering Division

The main function of this Division is to undertake engineering surveys of all types of vessels. As well, drawings for new constructions of ships are examined and assessed for permission. Apart from that, this Division is responsible for conducting examinations and issuing different grades of inland and sea-going certificates in respect of engineering department in accordance with the existing Myanmar Merchant Shipping Acts (MMSA) and STCW'95 requirements.

2.1.3.3 Seamen Employment and Control Division (SECD)

Seamen Employment and Control Division (SECD) is one of the divisions of DMA and one and the only authorised crew manning department in the Union of Myanmar. Its objective is to control and prevent discrimination against national seamen by shipowners and ship manning agencies. Due to no legal associations or seamen's unions in Myanmar, this Division also takes care of seamen's social welfare elsewhere. Moreover, SECD has a full responsibility for carrying out officers and ratings' registration, recruitment, and employment on foreign vessels. SECD serves as a non-profit making governmental body, it regulates the employment of seafarers serving on ships owned by Myanmar Five Star Shipping Line (National Line) as well as foreign shipping companies.

Furthermore, seafarers' employment made by any shipping companies whether national or international must go through the regulations that are set up by this Division. In addition, the main task of SECD is to promote the employment of national seafarers internationally as well as nationally and also to protect their

entitlements, and make agreements with shipping and manning companies regarding terms and conditions

2.1.3.4 Accounts Division

The Accounts Division usually complies and maintains DMA accounts in general. It is in co-ordination with other Divisions and Branches of DMA and is also responsible for drawing the short and long term plans and preparation of the current and capital budget of DMA elsewhere.

2.1.3.5 Administrative Division

The Administrative Division mainly undertakes the personal matters of all DMA employees and often deals with matters relating to IMO Conventions. Under the supervision of the Director General, it incorporates the personnel from the Ministry of Transport.

2.2 General Statistics and Status of Seafarers in Relation to Foreign Shipping Companies

The Seamen's Employment Control Division (SECD), which operates under the auspices of the Department of Marine Administration, is the sole organisation which enters into agreements with about 198 shipping companies concerned and has total control over the recruitment, welfare, and rights of all Myanmar seafarers. There are about 44,776 Myanmar seafarers currently (up to September, 1998) registered with the SECD and more than 10,000 are being employed on around 120 foreign shipping companies according to SECD statistics. With regard to this aforementioned figure, the author wonders why the employment figure only comes out around 10,000 out of 44,776 registered seafarers. This is the vital turning point of their employment future; either it is going up or going down. Suggestions should go to the Myanmar Department of Marine Administration to find out the answer seriously and

immediately that are required to meet the STCW'95 requirements, International Labour Organisation (ILO) matters and also problems of International Transport Workers Federation (ITF) matters. The national legislation concerning seafarers should be revised and is a matter of high priority. The general statistics of current employment of Myanmar seafarers (officers and ratings) is shown in the following table according to SECD statistics (23.1.98) data.

Table 1, The List of Myanmar Seafarers' Employment on Foreign Vessels

| Serial | Country | Shipping Lines | Seafarers Employment |
|--------|--------------------|----------------|----------------------|
| 1 | Singapore | 40 | 2566 |
| 2 | Thailand | 32 | 2075 |
| 3 | Hong Kong | 13 | 834 |
| 4 | South Korea | 10 | 1023 |
| 5 | Greece | 9 | 448 |
| 6 | Japan | 6 | 390 |
| 7 | Malaysia | 4 | 118 |
| 8 | Cyprus | 3 | 784 |
| 9 | England | 2 | 65 |
| 10 | Sri-Lanka | 1 | 5 |
| 11 | Panama | 1 | 27 |
| 12 | Myanmar(Five Star) | 1 | 738 |
| | Total | 122 | 9073 |

Source: SECD paper record (23.1.98)

Table 2, Officers and ratings

| Serial | Officers | | Ratings | Total |
|---------------|-----------------|-------------|----------------|--------------|
| 1 | Deck | 2523 | 2830 | 5353 |
| 2 | Engine | 1859 | 1177 | 3036 |
| 3 | Radio | 684 | - | 684 |
| | Total | 5066 | 4007 | 9073 |

Source: SECD paper record (23.1.98)

Table 3, Currently Various Ranks' List of Seafarers' Employment on Foreign Vessels

| Serial | Deck | | Engine | | Communication | |
|---------------|-------------|------|---------------|-----|----------------------|-----|
| 1 | Master | 96 | C/E | 159 | R/O | 324 |
| 2 | C/O | 152 | 2/E | 192 | T/C/S | 360 |
| 3 | 2/O | 323 | 3/E | 394 | | |
| 4 | 3/O | 432 | 4/E | 208 | | |
| 5 | D/C | 1520 | 5/E | 38 | | |
| 6 | | | J/E | 254 | | |
| 7 | | | E/C | 165 | | |
| 8 | | | E/O,E/E | 427 | | |
| 9 | | | R/E | 22 | | |
| Total | 2523 | | 1859 | | 684 | |

Source: SECD paper record (29.1.98.)

Table 4, Ratings

| Serial | Deck (Ratings) | | Engine (Ratings) | | Communication |
|-------------|----------------|-------------|------------------|-------------|---------------|
| 1 | Bosun | 239 | Fitter | 413 | |
| 2 | Carpenter | 28 | Oiler | 645 | |
| 3 | A/B | 1224 | Wiper | 119 | |
| 4 | O/S | 445 | | | |
| 5 | Ch/Cook | 219 | | | |
| 6 | 2/Cook | 213 | | | |
| 7 | G/S | 462 | | | |
| Total | | 2830 | | 1177 | |
| Grand Total | | 5353 | | 3036 | 684 |

Source: SECD paper record (24.1.98)

Table 5, Yearly comparison of number of seafarers' employment on foreign vessels

| Serial | Financial Year | Departure | | | Arrival | | |
|--------|----------------|-------------|-------|--------------|------------|-------|--------------|
| 1 | 1989-90 | 3407 | 2168 | 5575 | 2598 | 1689 | 4287 |
| 2 | 1990-91 | 3868 | 2390 | 6258 | 2613 | 1801 | 4414 |
| 3 | 1991-92 | 3724 | 2042 | 5766 | 2628 | 2692 | 5320 |
| 4 | 1992-93 | 4428 | 2161 | 6589 | 2752 | 2929 | 5681 |
| 5 | 1993-94 | 5799 | 2284 | 8083 | 3727 | 2543 | 6270 |
| 6 | 1994-95 | 5843 | 2308 | 8151 | 3881 | 2183 | 6064 |
| 7 | 1995-96 | 6657 | 2693 | 9350 | 3813 | 2236 | 6049 |
| 8 | 1996-97 | 6643 | 3165 | 9808 | 4389 | 2536 | 6925 |
| 9 | 1997-98 | 6841 | 3146 | 9987 | 4216 | 2940 | 7156 |
| | | Off. | Other | Total | Off | Other | Total |

Source: SECD paper record (24.1.98)

2.3 The Position of ITF within the New STCW Convention

Dockers and seamen's representatives attending the London Congress of the Socialist International in July 1896 established the International Transport Workers' Federation (ITF) as the International Federation of Ship, Dock, and River Workers. The following year the organisation was expanded to include **all transport workers** and its name was changed accordingly. Railwaymen and seafarers remain the largest industrial sections within the ITF. (ITF and FOC shipping, p.3)

The International Transport Workers Federation (ITF) is an organisation that has represented the interests of transport unions for over a hundred years. It has some 380 affiliates in about 85 countries and represents some 6 million employees. While its membership covers all transport sectors - roads, rail, air, and sea - its seafarers department is perhaps the most important. The ITF is opposed to the concept of flag of convenience (FOC) and is relatively pragmatic in its attempts to discourage the operation of ships under those flags.

Its prime motive in opposing FOC is to revive jobs, which nationals of the traditional maritime countries have lost to low paid third world workers, and also to raise the standards of pay and working conditions for Third World members who could expect to be more reasonably employed upon fleets operated by their own respective States. Certainly the principal point raised by the ITF is that sub-standard wages, and working conditions exist aboard ships registered in FOC. The role of the ITF has not only been to search out sub-standard ships and its real function is to try and protect seafarers' jobs elsewhere. (ITF and FOC shipping)

The revised Convention on Standards of Training, Certification and Watchkeeping for seafarers gives ITF inspectors another powerful weapon in their fight against sub-standard shipping. Coming into force from 1 February 1997, the new convention

strengthens the old STCW Convention of 1978, which had begun to lose credibility in the wake of lower crewing levels, multinational crews and increasing technological change in the shipping industry. (ISF, 1995)

For the first time, the convention also gives power to Port State Control officers to enforce its provisions on all ships entering their jurisdiction, not just those which have accepted the convention. Ships, which deliberately or accidentally pose a 'danger to persons, property or the environment' will not be allowed to sail. ITF officials will be able to alert the port state authorities to any deficiencies they uncover in the standards of training and certification of the crew and abuse of watchkeeping hours and rest periods.

2.3.1 Problems Faced with ITF

At the present moment, there is no formal link between the Seamen's Employment and Control Division (SECD) and the ITF elsewhere. There are many questions behind why SECD should not ask the ITF to be the membership at all. The author simply understands one main point of the barrier is that it depends on the political situation and on the economic structure. Another barrier is the shipowners who wanted to contribute their investments only to FOC for their vessels. On the other hand, ITF opposed substandard ships as a campaign so that the problems would never end and probably last forever. Indeed, during and after the recent political disturbances (1988) the ITF launched a blistering campaign against the Myanmar Government that accusing it of harassing and imprisoning certain seafarers. The government has firmly rejected and requested the right to reply to these allegations in the union's Bulletin, but so far this request has not been acceded to.

Therefore, SECD always faces a problem with ITF concerning seafarers' wages. Sometimes the ITF requires shipowners to pay the union the balance of what it would have cost to hire the crew. But there is no seamen's unions within the country. This

is the typical shuttle problem among the SECD, shipowners and the ITF. Here are some examples of cases against SECD, which are already reported to the International Labour Organisation (ILO) by ITF concerning Myanmar seafarers.

2.3.2 M.V.Trans Dignity case

The ITF states that on 29 September 1988 in Sundsvall, Sweden, (14) Myanmar seafarers working on board the Liberian-flag Trans Dignity contacted the ITF-affiliated Swedish Seamen's Union (SSU), requesting their help in improving their working and living conditions on board the ship. A local official of the SSU, Peter Rundqvist, went on board to listen to the crew's complaints. The ship was technically covered by an ITF agreement, but Peter Rundqvist found evidence that the crew were not being paid in accordance with it.

There was a new agreement, which was signed on 1 December 1988, awarded a total of US\$ 176,845 in back-pay to the Myanmar crew after the ship was boycotted for a period of six days. After that, quick punishment were posted on these seafarers by SECD (Government body) declaring them as troublemakers, their passports seized as well as their seamen's books.

Source: ITF (1995). The Trade Union Rights of Burmese Seafarers, p. 7

2.3.3 M.V.Angelic Faith case

It happened on 3 June 1993, on the Greek-flag Angelic Faith. (11) Myanmar seafarers received assistance from the ITF when their vessel docked in Dalrymple Bay, Queensland, Australia. Industrial action by the ITF-affiliated Maritime Union of Australia (MUA) resulted in a back-pay settlement of nearly US\$ 100,000. The ITF reported later that Myanmar authorities threatened the crew with forcible repatriation to Myanmar and they have been effectively under house arrest so far.

The above noted conflicts and cases highlight to some degree the decrease in the employment of Myanmar seafarers even though they are educated in marine fields and have good qualifications because of the ITF and the Myanmar Government problems. There are also some cases with port state control in some European ports concerning the endorsement of (4) certificates, which needed to be updated according to the STCW'95 requirements.

Source: ITF (1995). *The Trade Union Rights of Burmese Seafarers*, p. 8

2.3.4 Envisaged Solutions

The author's point of view is not only with regard to Myanmar, but also other South East Asian countries. This is because the world's major labour supplying countries come from the Southeast Asia region. The life of their respective issues on employment future is relied upon the sharing of modern technology, exchanging of updated maritime information and how authorities can afford to contribute the necessary gap which is really the standards needed for competent seafarers in accordance with the STCW'95 requirements. Otherwise, while Maritime Education and Training in major maritime countries are moving into a new phase, the South East Asian countries are still in the early stages of development in Education and Training of seafarers. Even there are some rapid developments both in tonnage and types of ships, these developments had not been matched by the marine education and training in most of these regions. That indicated significantly why the differences in salaries as well as in opportunity for employment have the big gap between them.

The introduction of the new STCW'95 amendments have posed some problems in South East Asian countries in maritime education and training, national administrations, seafarers, and as well as on employers. Apart from others, development of educational and training systems and courses concerning inadequate teaching staffs, training facilities and lack of statistical records, coordination and

planning still exist. The author's opinion is that even the new STCW'95 amendments should cure hopefully some developing countries problems. It takes more time than what the IMO expected due date because of both have some financial problems. In other words, they are definitely left behind and will suffer up to a certain time is the problem of the IMO's so called 'White List'.

Suggestions and Recommendations

- * A Suggestion should go to DMA to revise the national legislation especially concerning the seafarers' part and apply it as early as possible;
- * The author's opinion is that this is the right time to consider Myanmar Government itself to be a membership of the ITF and participate in important ILO Conventions like No. 180, for the benefits of the future employment of national seafarers;
- * A Seafarers' Association or Union is essential. Every worker should be free to belong to a legitimate association that gives voice to his or her concerns. A right that is affirmed by ILO Convention No. 87 and 98;
- * Shipowners should provide for worker participation in the decisions that affect seafarers' lives. Workers need to have information and some control over the recruiting process and to participate in the decision-making process on board ship, which would help them feel free that they are not just replaceable parts of a machine;
- * Seafarers should be given greater opportunity to participate in the corporate policies of their employers if possible;
- * Registering countries should not protect the identity of phantom owners. They should clearly identify a responsible decision-maker, for what chance does the seafarer have of achieving justice when the employer remains anonymous and unavailable;
- * SECD promotes its standards of recruitment and employment of national seafarers in accordance with ILO requirements and IMO guidance;
- * A Suggestion should go to SECD to review and revise the articles of agreement between the seafarers and the shipowners;
- * Co-operation is essential between the regional countries and IMO.

Chapter 3

Foreign Flags Vessels and Myanmar Seafarers

3.1 Myanmar Maritime Legislation

Merchant Shipping Legislation is a body of laws adopted to control maritime activities and the extent of these laws adopted by the nation depends on the extent of maritime activity to which a nation is involved and its state of maritime consciousness. Myanmar maritime legislation is aimed at the protection of the public and common interest, inter alias, the aspect of safety of ships, safety of navigation, carriage of goods by sea, control of shipping operations, registration of vessels and protection of the marine environment. The most important maritime legislation is elaborated in international conventions, legislation, codes, and resolutions. Maritime legislation may be influenced by a large number of International Conventions, Resolutions, Agreements and Practices in existence, which will have an impact on a country's maritime legislation.

This is especially true with regard to technical, nautical and safety aspects of shipping. Also, the specific economic circumstances of a country may require that legislation in the field of shipping and maritime activities are developed in the interest of national economic policy. At the same time, it is to be noted that such legislation does not necessarily have to be in accordance with legislation that has been developed elsewhere. However, if national legislation is substantially different

from other foreign legislation, conflicts may arise between States as a result of application of different legal requirements to their respective shipping interests.

In Myanmar, DMA is responsible for the enforcement of the undermentioned Acts, i.e., (Merchant Shipping Acts - Section F and H of Part VIII) as well as the Rules and Regulations made under these Acts. All these Acts need to be revised and necessary amendments should be carried out to update Myanmar maritime legislation and also to avoid inconsistency with the legislation of other States. In this regard, the attention of the Myanmar Maritime Administration should specially be drawn to the following factors.

- A wide knowledge of international Conventions, Resolutions, Agreements and legal practices is required to keep national legislation in line with international requirements.
- The personnel of the Administration concerned with legislative work should also be aware of national policies and interests.
- In drawing up legislation, the administration should be aware of possible conflicts with foreign or national interests, which may arise from the introduction of the proposed national legislation.

3.1.1 The Burma Code and Shipping Act

Every Governmental Administration must have primary laws or codes to carry out their function. Based upon the primary laws, there are also secondary laws that define exact procedures to discharge the duty of administration. In the field of Maritime Administration, there is a body of law adopted or framed to control maritime activities. This basic law has different names in different countries known as Merchant Shipping Laws, Maritime Laws, Maritime Code, and so on. These laws in any country need to be in the nature of regulatory or developmental and must be in conformity with relevant international conventions. The most important of the laws should be consistent with the traditions of a respective country. Unfortunately, the

former colonist countries influence the laws in most developing States. Therefore, some of these laws are not harmonised with the national culture and traditions.

The Burma Code (Myanmar Code) Volume VII is the code, which applies presently as the National Maritime Law in Myanmar. In other words, DMA is responsible for full compliance with national maritime legislation that has been incorporated into the Burma Code Volume VII under the heading of Part VIII, Communications and Carriers of this Code. It is easy to consult the legislation as it is contained in a single text. The negative side of this is that the passing of new legislation may be done for each new piece of legislation. Section C, H and F, are the relevant sections for the maritime legislation, under the heading of Part VIII.

The relevant maritime acts includes in the following sections:

Section C Carrier

1. Carrier Acts.
2. The Myanmar Carriage of Goods by Sea Act.
3. The Bill of Lading Act.

Section F River Transport.

1. Inland Steam Vessels Act.
2. Obstructions in Fairways Act.
3. Defile Traffic Act.

Section H Merchant Shipping.

1. Myanmar Merchant Shipping Act.
2. Myanmar Registration of Ships Act.
3. Controlling of Ships Act

There are many amendments, manuals and notifications under these Acts. In 1987, some amendments were made to the registration of ships section to attract foreign investment by allowing nationals from other nations to register their ships under the Myanmar flag. DMA has responsibility to deal with sub-headings F and H.

3.1.2 Myanmar Merchant Shipping Act (MMSA)

Myanmar Merchant Shipping Act (1894-1932) is based upon the British Merchant Shipping Act. Therefore, it was inherited from a combination of the British legal system and International Convention and Codes. These Acts have been revised since 1954 and divided into nine parts and two schedules. Some of the amendments were added by notification of the President of the Union of Myanmar.

Part I (Section 4) deals with the introduction and exemptions from these Acts.

Part II (Section 5-124) concerns masters and seamen, shipping offices, certificates of competence, official log books, the employment of crew and other crew affairs.

Part III (Section 125-145) deals with passenger ships.

Part IV (Section 147-213) deals with unberthed passenger and pilgrim ships.

Part V (Section 213A-245M) deals with safety relating to prevention of collision, life saving appliances, load line and other safety measures.

Part V A (Section 245N-245Q) relates to navigation.

Part VI (Section 246-271) lists special shipping inquires and courts.

Part VII (Section 272-279) deals with wreck and salvage.

Part VIII (Section 280-288) relates to legal proceedings.

Part IX (Section 289- 296) deals with supplemental matters and ship surveyors.

The provisions of this Act have been laid down to ensure the safety of ships, the manning of ships with qualified and competent crew, labour or working conditions of crew and the safety of navigation. However, it might still need to be revised and updated to meet the requirements at the international level, which are progressing with constant modification.

3.2 Conventions to which Myanmar is a Party

The IMO slogan “Safer Shipping and Cleaner Oceans” serves the whole maritime industry as a good guidance and alert signal for both safety and environmental protection. In this respect, IMO has adopted many conventions, codes, resolutions and protocols. Some are already amended. Many of the conventions have been adopted nationally by many countries to meet the requirements of IMO Conventions. Conventions and protocols are binding as legal instruments. They depend on entry into force, contracting State parties are required to implement them in time. On the other hand, recommendations have no legally binding effect but they give a lot of support to respective governments for framing their national regulations.

Since the Union of Myanmar is a member of the International Maritime Organisation (IMO), DMA is also responsible for submitting to the Government proposals relating to accession to important International Conventions of IMO. The Government of the Union of Myanmar has already acceded to the following IMO Conventions.

| <i>CONVENTION</i> | <i>DATE OF ENTRY</i> |
|---|----------------------|
| • Convention on the International Regulations for Preventing Collisions at Sea, 1972 as amended (COLREG'72) | 11 November 1987 |
| • International Convention for the Safety of Life at Sea, 1974 as amended (SOLAS) | 11 November 1988 |
| • International Convention on Load Lines, 1966 | 11 February 1988 |
| • Protocol of 1978, relating to the International Convention for the Prevention of Pollution from Ships, 1973 as amended (MARPOL 73/78) | 4 August 1988 |
| • International Convention on tonnage Measurement of Ship, 1969 | 4 August 1988 |

- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 4 August 1988

3.3 Bareboat Charter Registration

An increasingly widespread and somewhat controversial practice is that of bareboat charter registration (parallel or dual registration) whereby a vessel registered in one State (State A) is permitted to fly the flag of a second state (State B) for a determined period. The primary registration in State A is temporarily suspended during the term of the dual registration, but becomes fully effective once again upon termination of the charter. State A is known as the “flagging-out” State while State B is known as the “flagging-in” State. In this sense, Prof. Mukherjee has stated that “the flagging-in State enjoys economic gains from more tonnage added to its national fleet and employment for its national seafarers.” (Flagging Option: Legal and Other Consideration by Prof. P.K.Mukherjee)

It is clear that flagging-out has become increasingly attractive to shipowners in traditional maritime countries. To appreciate why, it is helpful first to look at market conditions in world shipping and then to examine the relative costs of operating under a traditional or open registry flag. The prime reason for flagging-out appears to be to reduce manning costs. (Conference Proceedings, annually published by IMLA, vol.4, No.4, 1995. p-13)

Most ships in Myanmar ports, are not owned by the world’s major maritime and trading countries. Nowadays, most of the world fleet is registered in open registry countries due to in a sense of economic circumstances. Therefore, some of the developing countries have become part owners of the world fleet. In this sense, Myanmar can benefit from the open registry countries since most ships calling at

Myanmar ports are under the flag of open registry, i.e., from developing countries. As such, bareboat charter registration is increasingly popular. Thus, national seafarers of Myanmar have an opportunity to obtain employment on such foreign vessels.

Any organisation or person of any nationality can register a ship temporarily in the Myanmar Department of Marine Administration (DMA) under Bareboat Charter basis, furnishing particular requirements. This is one of the job securities for Myanmar seafarers on foreign vessels and also increases the foreign exchange earnings for the country. This business is not only beneficial to the owner but also the world shipping community on the whole. There are at present about (39) vessels temporarily registered in Myanmar under Bareboat Charter basis. According to the Lloyd's Register of Shipping, World Fleet Statistics 1997, the number of Myanmar Flag's Ships, is (134) and total Gross Tonnage (GT) is 687,220.

3.4 Employment Conditions of Myanmar Seafarers

Myanmar seafarers serve both on national flag vessels and on many foreign flags' ships including those of Liberia, Panama, Cyprus, Singapore and Greece. There are currently about 44 thousand registered seafarers and approximately one-third of the total are serving on foreign flag vessels. Seafarers engaged for service are employed under a crew agreement, which is signed between the SECD and the companies employing such seafarers.

The main conditions of employment are standard to all agreements, with the main features such as leave pay, hours of work, tours of duty, public holidays, and family allotments. Examples of conditions are set out as follows:

Leave pay. This is the rate of between 2 to 5 days per month, depending on rank.

Hours of work. The standard working week is 44 hours, with overtime being paid for all hours in excess.

Tours of duty. The standard tour is 12 months, although it is customary for repatriation to be arranged after nine months' service.

Public holidays. There are 14 annual public holidays for which overtime payments are made for non-essential duties.

Family allotments. All seafarers are required to remitting at least 10% of their basic wages to their families at home. (Institute of Southeast Asian Studies, 1989. Seafarers in the Asean Region)

In Myanmar, the problem of seafarer exploitation by commercial employment agencies is still acute. The seafarers still have to pay in order to seek a job out of turn. In some cases, they wait for months and at times for years in order to secure a placement in a routine manner. Many of them are forced to incur additional charges for many reasons given by the agencies. The Government of Myanmar should initiate measures to remove bureaucratic wrangles and make the functioning of the SECD more transparent by installing a Board of Directors that comprise of officials from the Government, Crew Supply Industry, and Owners Associations. Foreign shipowners should be invited to Myanmar for negotiations on future employment of Myanmar Seafarers.

In this sense, the Placing of Seamen Convention No. 9 (1928) and the newly adopted Convention No. 179 (1996) has a vital role to play. The main aim of these conventions is the elimination of commercial agencies that charge fees for finding employment for seafarers. The ratification of these Conventions should be suggested for the benefit of national seafarers by SECD (the government body) as quickly as possible. There is no mandatory requirement for public employment agencies. This means that the governments ratifying the Convention will not be expected to set up agencies for finding seafarers employment and will also ensure that the rights of

people employed on board are observed. This will also encourage more people to pursue a seafaring career and minimise the exploitation of seafarers elsewhere.

3.5 Review of Seafarers' Recruitment Opportunities on Foreign Vessels

In the 84th (Maritime) Conference of the International Labour Organisation (ILO), which was held in Geneva in October 1996, the agreement on the proper regulation of recruitment agencies reached out as one of the key agreements for the seafarers. On the other hand, developments in International regulation, notably the revision of the IMO STCW Convention, which is intended to improve standards of training and certification of seafarers, could also have an impact on the future supply of seafarers.

Significant new obligations have been placed on governments with regard to the control of training institutes, the standard of training and seafarers and the administration of examinations' systems and the issue of professional qualifications. While the industry has welcomed these developments as a means of improving standards, some governments may conclude that they are unable to comply with them. If this proves to be the case, the result will be to reduce the number of seafarers who are qualified to serve internationally. (ISF, 1995)

On the other hand, with the growth and development of the open registry system, the demand for foreign seafarers has increased considerably. But it is somewhat difficult to obtain employment figures internationally. According to the International Shipping Federation (ISF) report, published in 1995 on *'The World-wide Demand for and Supply of Seafarers'* stated that in 1995 the total demand for officers is around 427 thousand while that for ratings is 606 thousand. These represent increases of 4 and 6 % respectively from the 1990 figures. But for all groups, there still remains a world-wide shortage of officers (-18) and a surplus of ratings (+219) for 1995. (BIMCO/ISF, 1995)

Table 6, Supply and Demand in 1995

(000s)

| | Supply | Demand | Balance |
|----------|---------------|---------------|----------------|
| Officers | 409 | 427 | -18 |
| Ratings | 825 | 606 | +219 |

Source: Manpower Update, BIMCO/ISF 1995

Table.7, Forecasting of Future Supply-Demand Balances for Officers and Ratings

| | 1995 | | 2000 | | 2005 | |
|----------|-------------|----------|-------------|----------|-------------|----------|
| | 000s | % | 000s | % | 000s | % |
| Officers | -18 | -4 | -30 | -7 | -42 | -10 |
| Ratings | +219 | +27 | 249 | +29 | +305 | +33 |

Source: Manpower Update, BIMCO/ISF 1995

Note: Figures expressed in thousands.

Even forecasting the situation over the next decade, a number of assumptions need to be made. The above two tables indicate that the clear message is that officer shortage will escalate unless corrective action is taken. The forecast is quite sensitive to a variety of factors, such as growth in world trade and the development of new technology. However, the level of recruitment and the quality of training, which is provided, are of prime importance to the individual employer seeking to influence events. In addition, the impact on the future supply or recruitment of seafarers could be very significant unless the industry acts quickly.

3.5.1 A Case Study on Recruitment of Myanmar Seafarers

The engagement and supply of merchant marine personnel is regulated by the provisions of the Merchant Shipping Act 1923, the application of which lies with the Department of Marine Administration (DMA). The Seamen Employment and Control Division (SECD), which is under the management of DMA, is the only source of supply for Myanmar crews and officers. SECD supplies both ratings and officers and initial contact must be made first with them for approval. The employing company is required to pay a processing charge to SECD, which is levied on a per head basis and thereafter, the services of a local supply agent can be utilised. It is emphasised, however, that government approval must first be obtained. Certain requirements must also be forthcoming from the principal, including a bank guarantee and other references, and only after these formalities have been completed, will a licence be issued. The employing company is required to provide details of vessel registration, tonnage and classification.

Any person wishing to be employed as a seafarer (officer or rating) on a vessel, is required to be registered at SECD after meeting the requirements prescribed by the Division. Attendance at the Institute of Marine Technology to undergo safety and first aid training (four certificates) is a prerequisite for registration as well as the requirement of STCW'95 amendments. Medical examination for both mental and physical fitness is essential before a seaman joins a ship. Seamen trainees, after successfully completing the basic seaman course, conducted at the Institute of Marine Technology, have an opportunity to be registered with SECD for employment as an officer or rating on vessels.

The SECD normally requires 3-7 days for processing formalities for officer/crew engagement, although in urgent cases, and provided airline seats are available, it is possible for processing to be completed within 48 hours.

3.6 Labour quality and potential of the labour supplying countries.

Article 1 of ILO recommendation No. 139, regarding “ Employment of Seafarers ” recommends that -

1. Each member, who has a maritime industry should ensure the establishment of national manpower plans for that industry within the framework of its national employment policy.

2. In preparing such manpower plans the following should be taken into account:

(a) The conclusions drawn from periodic studies of the size of the maritime labour force, the nature and extent of employment, the distribution of the labour force by such characteristics as age and occupational group and probable future trends in these fields.

(b) Studies of trends in the evolution of new techniques in the maritime industry both at home and abroad, in relation, among other things, to structural changes in the industry in the form of -

(i) Changed methods of operation of ships, technically and organisationally, and

(ii) Modification in manning scales and job contents on different types of ships

(iii) Forecasts, in the light of the foregoing studies, of the probable requirement, at different dates in future, for various categories and grades of seafarers.

3. Such manpower plans should be designed to obtain for shipowners and seafarers as well for the community as a whole for the greatest benefits from technical progress, and to protect from hardship seafarers whose employment is affected.

Article 2, of the same recommendation states that the recruitment of seafarers into the maritime industry should take account existing manpower plans and the forecasts contained therein. *Article 5* recommends that, to avoid hardship to such seafarers employed in foreign ships as are likely to be affected by technical changes aboard

ship, the Governments, Shipowners and Seafarers' organisations concerned should undertake early consultation and should co-operate with a view to -

- (a) Adjusting the supply of these seafarers gradually to the changing requirements of the foreign countries on whose ships they are employed and
- (b) Minimising the effects of redundancy by the joint application of relevant provision of this recommendation.

From the above stated *articles of the ILO recommendation*, the author see that it is the primary responsibility of the respective maritime countries to make a specific plan for meeting local as well foreign requirements for the seafarers so that they can serve properly in their respect fields. However, from the shipowners' point of view, the seafarers of the developing countries are no longer efficient, the critics of the open registry allege that these seafarers are not competent enough to ensure the safe operation of ships. Generally speaking, this is one of the reasons why the new STCW'95 was created. Its objective is to convert a mainly knowledge based education and training system to a competence based system.

3.6.1 Southeast Asian Region

In general, seafarers of the Southeast Asian region have played a vital role in the maritime labour market for a long time. According to ISF statistics, a huge number of Filipino, Indonesian and Myanmar seafarers are found to be engaged on foreign vessels in these days. The ISF survey of 1990 (p. 121), remarks that Myanmar seafarers should be seen as steady, reliable workers and many foreign employers express satisfaction regarding their on-board seamanship qualities. In fact, it is indicated that Myanmar seafarers are versed done in their employment and are recommended by many shipowners and foreign employers.

In this view, questions are often asked as to why governments should not have a better deal with foreign shipowners world-wide instead of only with a few. It may depend on how they should provide seafarers' standards of training, assessment and certification. On the other hand, the political situation may be a barrier to get more employment as well as good earnings.

Apart from that, as to the Indonesian seafarers, the ISF has stated that in respect of those seafarers serving on foreign-going vessels, skills levels are reported to be of a higher than acceptable standard. It is well known that the Filipinos are dominating the international labour market. The ISF survey indicates that Philippine seafarers are experienced and trained on all vessel types, with no major exceptions. Filipinos are adaptable to multi-national complements and there are no obstacles to mixing with other seafarers. In view of this, Myanmar Department of Marine Administration should find a good solution for the question of how to overcome efficient and effective competition for Myanmar seafarers in the future shipping business.

3.6.2 Far East Region

Traditionally, this region is treated as being a major seafaring area of the world. Particularly, the Republic of Korea and the People Republic of China have significant contributions to the merchant shipping industry. As to the quality and of seafarers of the region, S. Korea has had an established maritime-based training programme for many years. Thus skills levels are of a high standard. But they have communication problems in English language with mixed crews onboard. Moreover, with an impressive overall prosperity in their country, Koreans are nowadays increasingly reluctant to sail since they can obtain good wages ashore. Despite all these obstacles, if any shipowner is willing to pay the high wages and have a full Korean crew on board, these problems can easily be overcome. [LLL (1992), *Leading Development in Ship Management*, p-90].

According to the ISF survey referred to earlier, Chinese ratings are good and eligible. They are well disciplined and will work many hours without complaint. For many years, China has been training hundreds of thousands of men to be seafarers. If China were to implement an aggressive policy to place these hundreds of thousands of trained mariners on international ships, the world wide recruitment situation would be radically altered. [P K. Chapman (1992), Trouble on Board, p. 21]

3.7 Wages and Working Conditions of Seafarers on Foreign Vessels

The shipping industry is perhaps the first truly international industry. So maritime wage rates need to be considered not only by comparison between one country and the next. But also in the context of the fluctuations of national currencies against the US dollar in which, most seafarers including Myanmar seafarers on foreign vessels are paid. Although the open registry system has opened the door for national as well as non-national seafarers, it is alleged that some of the ship owners do not comply with the national or international rules and regulations in terms of ensuring the service benefits and facilities for seafarers. This is the case which Myanmar seafarers mostly face in open registry vessels. Therefore, there are often major allegations raised against open registry shipowners.

Some examples are as follows:

- Wages are not paid for long period: it is not unusual for crews to remain unpaid for six months.

- Delays in sending allotments, the proportion of a seafarer's wages which goes directly to his family. When seafarers are thousands of miles away from home this can lead to the worst kind of worry.
- Double wage accounts, one set to show to international union inspectors and one real with lower wage levels.
- Non-payment of overtime where it is stipulated in the contract.
- Seafarers being offered two kinds of contract when they sign on a job before leaving their home countries, or one being forced to accept a completely different contract with less favourable conditions.
- Poor living conditions, such as inadequate food, lack of laundry facilities, etc.
- No access for medical care in event of illness or injury.

The ITF or their affiliated western seafarers' unions are raising all these charges and it is difficult to address these issues all at once. It is true that there may be some grievances prevailing among the seafarers of the foreign crews. For these grievances or differences in wages or working conditions, according to the ILO Convention No. 109, government policies and regulations of the labour supplying countries are also responsible to a certain extent. In this regard, S R Tolofari wrote - "since the government regulations (as to the fixation of wages and service contracts) vary from country to country and the degree of adherence can also vary among companies operating under the same flag, the crew's contracts of service significantly affect the level of crewing cost under different registries." (S R Tolofari, 1989)

The ISF Wages Survey for 1997 revealed that -

- The wage rate of the highest paid Chief Officer is ten times that of the lowest paid, and the highest paid Able Seaman receives over twenty times more pay than the lowest paid.
- Even within particular nationalities there are considerable differences in pay rates: The highest paid Filipino Chief Officer receives twice the pay of the lowest paid and the highest paid Indian Able Seaman earns four times as much as the lowest paid.
- Pay rates for Chief Officers from India, the Philippines and Poland are beginning to catch up with Western pay rates, although pay rates for ratings show that most seafarers from the Far East still earn only about one third of the wage of similarly qualified seafarers from Organisation for Economic Co-operation and Development (OECD) countries. (ISF year, 1998)

3.7.1 International Labour Organisation (ILO) minimum wages

As long ago as 1958, the International Labour Organisation (ILO) first published a recommendation that the minimum monthly basic wage for an Able Seaman should be not less than **£25** or **\$70**. As of 1 January 1995, the amount set by the Joint Maritime Commission was **\$385** per month (R187 Seafarers' Wages, Hours of Work and the Manning of Ships Recommendation, 1996). The latest figure, effective from 1 January 1998, is for a basic wage of **\$435** per month. The ILO minimum wage is no more than a recommendation, particularly in developing countries. The ILO minimum wage only refers to the basic wage, excluding overtime or other payments, and it only covers ABs and not other ranks or ratings. This occasionally creates difficulties when unions apply their own interpretation of a total wage package for all seafarers, which they claim to be based on ILO provisions. (ISF year, 1998)

However, we can compare the existing wages and other benefits of the seafarers, which are shown in the following tables, before the new ILO minimum wages.

Table 8, Wages and other benefits for the Chief Officers as per month (in USD)

| Nationality | Basic wage | Leave pay | Over time | Others | Total wages | Days leave | Voyage months |
|--------------------|-------------------|------------------|------------------|---------------|--------------------|-------------------|----------------------|
| Australian | 3528 | 3528 | Nil | Nil | 7057 | 27 | 2 |
| Bangladesh | 1566 | Nil | 4 | Nil | 1571 | 3 | 9 |
| British | 3325 | 1108 | Nil | Nil | 4433 | 10 | 5 |
| Bulgarian | 1350 | 270 | 405 | 135 | 2160 | 10 | 6 |
| Canadian | 2768 | Nil | 4442 | 1155 | 7317 | 10 | 30 |
| Croatian | 1444 | 421 | 490 | 513 | 2868 | 6 | 6 |
| Filipino | 1490 | 421 | 954 | 89 | 2954 | 8 | 7 |
| German | 3811 | 4001 | 495 | 1707 | 8951 | - | - |
| Indian | 1354 | 451 | 749 | Nil | 2554 | 10 | 6 |
| Russian | 953 | 263 | 360 | 449 | 2025 | 6 | 6 |
| Japanese | 3564 | 1225 | 1304 | 3564 | 9656 | 10 | 9 |
| Hong Kong | 2117 | 271 | 1131 | 106 | 3526 | 3 | 2 |
| Greek | 881 | 445 | 1103 | 1790 | 3634 | 8 | 7 |
| Norwegian | 2756 | 2756 | 789 | 1103 | 6301 | 30 | 4 |
| S. Korean | 1053 | 379 | 1623 | 595 | 3556 | 5 | 3 |
| Sri-lankar | 2420 | 209 | 285 | Nil | 2914 | 3 | 12 |
| E.U | 3899 | 3089 | Nil | 1477 | 7966 | 3 | 12 |

Source: ISF Earning Survey 1994

Table 9, Wages and other benefits for the Able Seamen's as per month (in USD)

| Nationality | Basic pay | leave pay | Over time | Others | Total wages | Days leave | Voyage months |
|--------------------|------------------|------------------|------------------|---------------|--------------------|-------------------|----------------------|
| Australian | 2349 | 2137 | Nil | 305 | 4524 | 27 | 2 |
| Bangladesh | 177 | Nil | 71 | Nil | 248 | 6 | 12 |
| British | 1688 | 592 | 281 | 200 | 2473 | 12 | 3 |
| Burmese | 346 | 46 | Nil | 15 | 392 | 4 | 10 |
| Chinese | 360 | 36 | 72 | Nil | 468 | 3 | 12 |
| Danish | 1806 | 1892 | 419 | 55 | 4131 | 21 | 6 |
| Filipino | 370 | 70 | 200 | 31 | 650 | 6 | 10 |
| German | 1807 | 2474 | 1139 | 961 | 5673 | 19 | 6 |
| Greek | 624 | 331 | 421 | 900 | 2104 | 8 | 7 |
| Hong Kong | 962 | 117 | 443 | Nil | 1522 | 3 | 10 |
| Indian | 320 | 93 | 334 | 116 | 785 | 6 | 10 |
| Indonesian | 303 | 30 | 91 | Nil | 424 | 3 | 1 |
| Japanese | 2762 | 955 | 1089 | 4126 | 7870 | 10 | 9 |
| S. Korean | 600 | 113 | 300 | 225 | 1238 | 6 | 12 |
| Polish | 550 | 110 | 340 | 60 | 1060 | 6 | 6 |
| Russian | 448 | 162 | 221 | 180 | 1011 | 6 | 6 |
| Italian | 1401 | 445 | 613 | 1239 | 2522 | 10 | 5 |
| Pakistan | 86 | 19 | 82 | 157 | 301 | 7 | 3 |

Source: ISF Earning Survey 1994

Table 10, Wages Comparison (In Malaysian Ringgit)

| Rank | A | B | C | D | E | F | G |
|-------------|----------|----------|----------|--------------|----------|----------|----------|
| Master | 4,000 | n.a | 3,985 | 3,719 | 4,250 | 4,800 | 6,279 |
| C/Off. | 1,900 | n.a | 2,920 | 2,524 | 2,657 | 2,800 | 4,301 |
| 2nd Off. | 1,300 | n.a | 1,695 | 1,860 | 1,691 | 1,800 | 3,666 |
| 3rd Off. | 1,000 | n.a | 1,224 | 1,142 | 1,401 | 1,250 | - |
| R/Off. | 1,200 | n.a | 1,695 | 1,541 | 1,932 | 1,800 | - |
| C/Eng. | 4,000 | n.a | 3743 | 3,719 | 4,009 | 4,600 | 5,867 |
| 2nd Eng | 1,900 | n.a | 2920 | 2,524 | 2,657 | 2,800 | 4,301 |
| 3rd Eng | 1,300 | n.a | 1695 | 2,046 | 1,691 | 1,800 | 3,335 |
| 4th Eng | 1,000 | n.a | - | 1,222 | 1,401 | 1,250 | - |
| E/Eng | 1,100 | n.a | - | 1,408 | 1,111 | 1,800 | - |
| Bosun | 450 | 952 | 845 | 555 | 1,111 | 550 | n.a |
| A/B | 320 | 664 | 700 | 447 | 894 | 350 | n.a |
| Seaman | 280 | 599 | 483 | 398 | 773 | 280 | n.a |
| Oiler | 450 | 918 | - | 483 | 1,111 | - | n.a |
| Greaser | 320 | 664 | - | 447 | 894 | 350 | n.a |
| Rating | 280 | 599 | - | 386 | 749 | 280 | n.a |
| C/Cook | 450 | 1,094 | - | 555 | - | - | n.a |
| Cook | 380 | 867 | - | 507 | 1,807 | 1,110 | n.a |
| Steward | 280 | 630 | - | 362 | 725 | 280 | n.a |

A. Malaysian (Authorities) F Singapore(Owner+M/operator)

B Indonesian (Association) G United Kingdom (Owner)

C Philippines (Ship Management)

D Burma (Authorities)

E Taiwan (Ship Management)

Source: Institute of Southeast Asian Studies, 1989. P 58

In this research, the author found a wide disparity in the range of wages between countries within the Association of the Southeast Asia Nations (ASEAN) region. In as far as the officers are concerned, wages in the European countries, e.g., United Kingdom, far exceed those of Asia in general, and ASEAN in particular. The above mentioned information collected from other countries and neighbouring ASEAN could be cleared and perhaps it might be useful in the way of improving the Asian seafarers' wages in the future.

Moreover, seafarers are most dissatisfied with their working conditions as well as with their pay, their promotion prospects, the lack of recreational facilities on board ship and their overall stress levels. Fewer problems are also encountered with time for sleep, accommodation or food. According to the ITF survey, levels of satisfaction with working conditions do not vary greatly between FOC and national-flag ships. The most dissatisfied seafarers are Romanians (dissatisfied with 12 of 19 categories), while the happiest are the Norwegians (satisfied on 13 of 19). (ITF seafarers' bulletin 1998). However, Seafarers' Hours of Work and Manning of Ships Convention, 1996, ILO (C180) had been already adopted by ILO to solve these problems even this Convention has not yet come into force.

Furthermore, this Convention 180 has an agreement, which was reached on restricting the limits on hours of work or rest in Article 5, to a maximum of 14 hours of work in any 24-hour period, and to 72 hours in any seven-day period. There must be a minimum of 10 hours rest in any 24 hours or 77 hours in any seven-day period. Most importantly the standard of an eight hours day with one day of rest per week has been stipulated. This Convention will apply to all sea-going ships except wooden vessels of traditional build such as dhows and junks. In addition, STCW'95 has produced a new chapter VIII on watch standards which spells out the hours of rest required for the watchkeepers.

Chapter 4

4.1 Compliance with STCW'95: Introduction

The IMO Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 was substantially revised by a diplomatic conference in July 1995. The Convention as amended has become known as **STCW'95**. The amendments entered into force on 1 February 1997 and entail major new responsibilities both for governments and shipping companies. STCW'95 will be enforced through flag and port state control and companies will need to ensure that they can demonstrate that they are in full compliance. Since the Union of Myanmar has already acceded and signed the STCW'78 as a party in 4 August 1988, it has responsibilities to raise the standards of competence and professionalism of seafarers in order to comply with full effect to the STCW'95 requirements. The intention is to ensure that the new STCW standards are actually put into effect and that the competence of seafarers is improved world-wide.

4.2 The Total STCW Package

The 1995 amendments to the STCW Convention represent a comprehensive package of interrelated measures. They are designed to address the inadequacies of the 1978 Convention and improve overall standards of seafarers' competence world-wide. In the interests of understanding, the main features of this complex package of improvements can be seen as covering three essential areas as follows:

(a) The revised Convention incorporates measures designed to help ensure that all Parties to the Convention actually implement STCW requirements and that certificates are only issued to seafarers that meet the minimum competency standards in accordance with Article VI and Regulation I/2 of the STCW'95 amendments. It also clarifies the responsibility of flag States regarding the competence of seafarers serving on their ships, no matter which country has issued the seafarer's certificate.

(b) For the first time, uniform standards have been established for the attainment of competence in particular maritime skills. The new Convention contains precise criteria detailing the standards of knowledge, understanding and proficiency to be achieved in each element of competence by candidates for certification, and the criteria for evaluating them. The revised Convention also extends elementary standards of competence to categories of shipboard personnel not addressed by the 1978 STCW Convention.

(c) The next issue is new responsibilities for all shipping companies. Every shipping company shall require to comply the provisions said in Regulation I/14 of the Convention. These stipulate the explicit responsibilities of shipping companies for ensuring that the seafarers they employ meet minimum international standards of competence, that ships are manned in accordance with flag State requirements and that detailed records are maintained of all seafarers. Companies will also have to ensure that all new seafarers undergo familiarisation on board and that measures are adopted to ensure effective co-ordination between seafarers in emergency situations. These provisions will be enforced by requiring governments to apply penalties to companies found to be in breach of the Convention and by expanding the circumstances in which port state control inspectors can question the operational competence of seafarers.

4.2.1 Summary

The revised Convention contains a wide range of other provisions, the most significant of which includes the use of simulators in training, the qualifications of training instructors supervisors and assessors; measures to prevent fatigue, and principles governing alternative arrangements for issuing certificates which depart from conventional departmental divisions. Together with the three major components outlined above, these provisions form part of the total STCW package intended to ensure that the principal factors determining standards of training and crew competence concerning with the safety of life at sea, property, and environmental protection will be sufficiently, safely and effectively regulated internationally.

4.3 Impact of STCW'95 on Department of Marine Administration (DMA) and Institute of Marine Technology (IMT)

The greatest challenge created by the 1995 Amendments is the speed with which its new provisions have to be implemented. Administrations, training institutes and companies have to accomplish a great deal within a very short period.

This impact has been felt on DMA and IMT very rapidly. Therefore, DMA has extensively revised national legislation, covering seafarers' training, competence assessment and certification activities. DMA submitted the information to IMO the details of legal, technical and administrative arrangements and procedures including credentials of persons involved in training and certification on 24 July 1998 in accordance with Regulation I/7 of the STCW'95 amendments. In this sense, the Department of Marine Administration (DMA) has exercised its full responsibility and control on that, regarding especially the recognition of certificates (Regulation I/10), the revalidation of certificates (Regulation I/11), training and assessment

(Regulation I/6), and continuous monitoring through quality standards (Regulation I/8) to ensure that seafarers' training and certification are maintained to the utmost elsewhere.

Consequently, the Institute of Marine Technology (IMT) has also been involved in implementing, applying and enforcing its measures under the supervision of DMA. DMA put the framework on the training courses and programmes and training objectives according to IMO model courses as well as on assessment of seafarers, as required under the provisions of section A-I/6 of the STCW Code. Its main task is to provide the conversion of a mainly knowledge based education and training system to a competence based training outcome in accordance with the STCW'95 requirements.

4.3.1 The 'White List'

The revised Convention does not mention or discuss the white list. However, it should start announcing the 'white list' of countries that fully comply with the STCW 1995 Amendments from May/June 1999. The author feels something on this issue there has been some loophole and inconsistency. For example, Regulation I/10, provision for recognition of certificates do not take into account the outcome of the Regulation I/7 (so called 'white list'), it will remain the prerogative of a flag State to recognise or not to recognise the certificates issued by another party State (on the basis of its own inspection and finding). It will be a mockery, should a flag State happen to recognise certificates issued by a State, which fails to make the IMO white list. (**Appendix "H"**)

It is, therefore, suggested *to add a new (.3) to paragraph 1 of Regulation I/10 as "the recognition of certificates shall be restricted to those states which have been listed by IMO as having giving full and complete effect to the provisions of the Convention"*.

4.4 The Existing Myanmar Maritime Education and Training System

The Institute of Marine Technology is established with the power and functions to educate maritime students to become future certificated officers of appropriate international standards in accordance with the revised STCW 1995. The existing Myanmar maritime education and training system is a step-by-step system, (British System), commencing with pre-sea training, followed by post-sea training after requisite sea-service at the prescribed appropriate levels and prior to the examination for each grade of certificate. The Institute of Marine Technology (IMT) established under the auspices of the Ministry of Transport, in 1 October 1971 is based at Sinmalike, in Yangon, the capital city of Myanmar. It is a full-fledged government organisation. It is the sole authority responsible for the training and education of all ranks and grades of seafarers and is the only maritime training institution in the country. Before 1971, such training for maritime occupations had to be accomplished in various universities and institutes of the European countries, especially at Southampton in England.

At present, the IMT conducts courses covering Nautical and Marine Engineering as well as academic subjects relevant to the maritime occupations from basic seaman to Master and First Class Marine Engineer in different trades. The IMT also provides consultant and technical services in the maritime field to interested individuals, shipping companies and organisations within the country.

Since 1971, certificates of competency awarded to all nautical officers, marine engineers and other ranks whose have been trained by IMT have been recognised by DMA. The Institute provides both pre-sea and post-sea refresher and upgrading courses for deck and engine personnel of the merchant navy as well as pre-sea courses for personnel of the inland watercraft, port craft and fishing vessels. Courses

are conducted in residential and day return patterns. It is compulsory for pre-sea cadet trainees and seaman trainees training to be conducted in residence. Basic pre-sea courses for seamen on ocean going vessels and inland watercrafts are also conducted.

The Institution is housed in two storied buildings having eight classrooms and an engineering workshop; a radar simulator room and electronic navigation equipment room, a mini planetarium, and a wave generation tank. Hostels are also provided for the pre-sea course students. However, financial support is still required for some courses that should include new technology improvement and upgrading.

Deck cadets are presently being recruited by IMT on behalf of the Government for the Myanmar Five Star Line as well as for private agencies for employment on foreign registered vessels. Those recruited cadets are required under 18 years of age and to have passed the Tenth Standard (high school or matriculated) with high marks to meet the entrance examination. Then the Government recruits receive a formal pre-sea cadets' education and training of one year residential course at the IMT. Courses have been carefully designed and conducted to be responsive to the real needs of the International Shipping Industry, in accordance with IMO model courses and STCW'95 amendments. (**Appendix "I"**)

4.5 Faculty

The Institute of Marine Technology (IMT), that is headed by the Principal who reports the progress activities directly to the Minister of Transport. The Institute has a nautical department and an engineering department, apart from administrative, accounts, housekeeping and security sections. Presently, the strength of staff is 16 officers and 34 other staffs. (**Appendix 'C'**)

The Nautical Department functions under the Head of the Department who is a Master Mariner and holds an M.Sc. in Maritime Education and Training from the World Maritime University (WMU). The sanctioned strength of the faculty in this Department is as follows:

- Head of Department 1
- Lecturers (Master Mariner, F.G.) 2
- Lecturer in Electricity (M.Sc.) 1
- Assistant Lecturer (M.Sc., Phys./Maths.) 1
- Demonstrators (B.Sc., Phys./Maths.) 2
- Demonstrator (Second Class P.M.G.) 1

In addition to the above, visiting lecturers are also utilized to impart education in Nautical subjects, Meteorology, Law and English.

The Engineering Department functions under the Head of the Department who is a former experienced Chief Engineer (First Class Marine Engineer) and holds an M.Sc. in Maritime Education and Training from the WMU. The sanctioned strength of faculty in this Department is as follow:

- Head of Department 1
- Lecturers (First Class Engineer) 2
- Assistant Lecturers (B.E.Mech.) 2
- Demonstrators (B.Sc. Maths/Physics) 2

The flow chart of training programmes and sea service requirements from (a) Inland cadet to Inland Master (b) port and fishing cadet to Master (H.T.) and (c) from seaman and nautical cadet to Master (F.G.) are provided in ‘**Appendix D**’.

The flow chart of training programmes and sea service requirements from dockyard service and marine engineer cadets to First Class Engineer is provided in **Appendix 'E'**.

4.5.1 Syllabus

The old syllabuses are outdated, of low standard and do not reflect the level of knowledge or additional areas of knowledge required by the new STCW'95 amendments. Therefore, all these have been revised and upgraded gradually to a level equivalent to those of IMO's 'Model Courses' since the revised Convention entered into force in 1 February 1997. In fact, the IMT will, with the approval of the DMA, on behalf of the Ministry of Transport, continue to prescribe the syllabuses for the following Certificates of Competency in conformity with the provisions of the IMO's 'Model Courses' and publish them through Government Notification 1/98.

- Mate of a Home Trade ship
- Master of a Home Trade ship
- Second mate of a Foreign-going ship
- First Mate of a Foreign-going ship
- Master of a Foreign-going ship
- Officer in charge of an Engineering Watch
- Second Class Engineer Certificate of Competency
- First Class Engineer Certificate of Competency
- Ratings forming part of a Navigational Watch or an Engine room Watch

4.5 2 Mode of Instruction, Training Equipment and Library

The instructions are mainly imparted through the 'chalk and talk' method. It indicates that the facilities in the classroom are very basic - desks, chairs and

blackboards. The institute has only a few overhead projectors, or slide projectors, 35mm projectors and some TV, VCR with relevant tapes. There is a dearth of charts and parallel rulers for chart work practice. The textbooks and reference publications books still require to be kept updated having modern marine technology and recommendations in the library to give effective support readings as well as for courses. The author's suggestion is that the government authorities should request the IMO to provide for such support facilities.

However, the Institute, itself does have a radar simulator with two own ship facilities and 20 targets with three radar displays in one cubicle and two in the other, one of which is an Automatic Radar Plotting Aid (ARPA) Radar. Both positions are provided with bridge controls (steering and telegraph). Also provided are simulators of a Directional Finder, an Echo Sounder, a Satellite Navigator, a Loran, a Decca Navigator and an Omega receiver. A mini-planetarium, two loadometer computers for cargo, stability and strength calculations, ship models to demonstrate stability and free surface effect, a wave generation tank and an engineering workshop are also available in the Institute at the present time.

4.6 Training

Maritime training in Myanmar has administered by the Ministry of Transport (MOT). The basic structure and general arrangements are clearly defined in national notification 1/98 in order to transform the training from a knowledge based training system to a competence-based one. The lists of existing IMT training facilities are introduced in '**Appendix F**'.

The Institute of Marine Technology (IMT) has been brought under MOT, and it has emphasized the need to find new instruments for controlling training and assessment activities in accordance with Regulation I/6 of the revised STCW. Both the IMT and

the Department of Marine Administration (DMA) have found, that the most useful instruments are based on national objectives and quality standards which are mentioned in section A-I/8 in STCW Code A as the minimum standards of requirements. Moreover, independent external evaluation of knowledge, understanding, skills and competence acquisition and assessment activities are required to be conducted at intervals of not more than five years for improvement of training. IMT takes these provisions into account in constructing the training structures under the supervision of DMA. But they still need technical co-operation in providing the basis for the proper independent external evaluations required under section A-I/8, paragraph 3 of the new STCW Convention. However, all these are planned to operate as a national scheme upon the advice of IMO, and by IMT incorporating with DMA, during the transitional provisions period.

The Myanmar Maritime Administration (DMA) has also plans for issuing the new special training scheme for passenger ships to seafarers because the revised STCW'95 has introduced new training requirements for service on the ro-ro passenger ships and other passenger ships.

Certification

The Myanmar Government has reviewed the training and certification of seafarers' Part in the Merchant Shipping Act and promulgated that Part as its national legislation in order to meet with the requirements of STCW'95. Consequently, a new official notification 1/98 has been adopted on training, certification and watchkeeping for seafarers, in 1998.

Myanmar certificates should be based on Myanmar maritime training. Before notification 1/98, certificates of competency were issued by the Department of Marine Administration (DMA) according to Myanmar Merchant Shipping Act, Part

II under the heading of Certificates of Competency to Myanmar Seafarers. The DMA now continues to issue not only certificates but also endorsements to all seafarers in accordance with the requirements of Regulation I/2, Regulation I/10, and Regulation I/11 of the revised STCW Convention.

Article VI requires certificates for masters and officers to be endorsed by the issuing Administration in the form as prescribed in regulation I/2. This provides the leverage to the Administration for the endorsements not to be issued unless the holder of the certificate meets the specified standards and the requirements.

The author observes that some shortcomings of STCW'78 have been addressed by STCW'95. For instance, STCW'78 did not require the parties to maintain any central record of certificates and endorsements. STCW'95 now requires such records to be maintained so that authenticity can be confirmed. Moreover, the formats of Certificates and Endorsements have been given in the STCW'95 to remove any confusion. In addition, to capacity and limitations, certificates and endorsements will now also include the level, either as Management, Operation or Support and a range of functions elsewhere.

4.6.1 Training of Deck Officers

Nautical cadets are selected by the Government as per requirements of the Myanmar Five Star Line. The trainees are required to have passed the Tenth Standard of the general education system. The average number of recruits per year is around 25. They undergo a pre-sea course of one year at the IMT for which a remission of 9 months' sea service is granted. After a sea service of 3¼ years, they attend a 4 months course at the IMT prior to taking the Second Mates Examination. This is followed by 1½ years' sea service and a 6 months course at the IMT to take the Master (F.G.) Examination.

The Myanmar Five Star Line owns 21 vessels. About 29 vessels are employed on bareboat charter with various private Myanmar organizations. These are also manned by Myanmar officers and ratings. In addition, a large number of recruiting agencies in Myanmar recruit and supply officers and ratings to various vessels on foreign registries. Thus, the number of deck officers and marine engineers required to be trained is much in excess of the requirements of the Myanmar Five Star Line. This is reflected in the output of the IMT during the year 1997-98, which is attached in “**Appendix G**”.

Furthermore, in view of the above, a large number of cadets and seamen are recruited directly by such agencies. They proceed to sea after a two-week survival course. After completion of 3¼ years’ of sea service, such cadets also undergo the 4 months course at IMT before taking the Second Mate (F.G.) Examination. Thus, presently the majority of the inductees follow this system.

4.6.2 Training of Marine Engineers

The flow chart at Appendix E indicates the training programme from dockyard service to First Class Engineer’s Certificate of Competency. The duration of dockyard service varies with the level of education at induction level and the parallel courses pursued.

Exemption from the Second Class Part A Examination is afforded to inductees who have passed the second year of Yangon and Mandalay Art and Science University (YASU, MASU), Yangon Institute of Technology (YIT) or possess a diploma from a Government Technical Institute (GTI) and have undergone the one-year Marine Engineering cadet Course at the IMT followed by dockyard service of two years and a sea-service of one year. Thereafter, with a further 1½ years’ of sea service they

undergo a 6 months course at the IMT and take the Second Class Part B Examinations. They may take the First Class Part A Examination immediately thereafter. This is followed by a further sea-service of 1³/₄ years and a 6 months course at the IMT prior to taking the First Class Part B Examinations.

4.6.3 Training of Seamen

Consistent with demand, the trainee seamen for inland waterways' craft are selected by the Inland Water Transport Authorities. Trainee seamen for ocean-going vessels are selected by the Seaman Employment and Control Division (SECD). Both categories receive a basic course of three months at the Institute of Marine Technology (IMT). Seamen on ocean-going vessels may undergo the Oil tanker Familiarization Course after a year's sea service. There are no upgrading courses available for Efficient Deck Hand or Efficient Engine Hand (E.D.H. or E.E.H.).

4.6.4 Training of Inland Officers

After a year's training at the IMT, *Inland Waterway Cadets* do 2¹/₂ years' service on inland watercraft before attending a 4 months course at the IMT prior to taking the First Class Inland Master Examinations. After a year's training at the IMT, *Port Cadets* do 3¹/₄ years of sea service on coastal vessels prior to attending the 4 months course at IMT to take the Master (H.T.) Examinations. After a year's pre-sea course at the IMT, *Fishery Cadets* do 3¹/₄ year's service on fishing vessels prior to attending a 4 months course at the IMT to take the Master (H.T.) examinations. Subsequent requirements to take Master (H.T.) Examinations are similar to those for port cadets.

There are no examinations or training conducted for Second Hands or Skippers of fishing vessels. The Ministry of Transport and DMA need to discuss this aspect with the Department of Fisheries and the Myanmar Fisheries Enterprise, to bring more

improved fishing technology in future. The fishery cadets undergo a course in fishing technology from DMA. Mainly the Myanmar fishing fleet consists of small boats, fishing along the coast. Very few larger fishing vessels are manned by officers holding Home Trade Certificates of Competency. All the above categories of cadets are inducted at the level of Tenth Standard of the general education system. All of them receive 9 months of remission of sea service for the year's pre-sea course attended at the IMT.

4.6.5 Refresher and Updating Courses

Refresher and updating courses for Home Trade and Foreign-going Certificates of Competency in the navigation stream and those for Certificates of Competency in the engineering stream are conducted based on the required amount of students at IMT. These courses need to be run effectively and efficiently. IMT must formulate or promote these courses properly in accordance with the formulation of refresher and updating courses as provided for in Section A-I/11 of the STCW Code.

Sea-going officers of today and the future have to be educated and trained with the knowledge, understanding and skills necessary to efficiently operate modern ships which incorporate a high level of technology in their design and operation. There is, therefore, an imperative need to improve the level and standard of training of the Myanmar marine officer.

The author also suggests that there should be regular and compulsory courses of studies for all refresher and updating courses at the IMT, leading to the certificate of competency examinations.

4.7 GMDSS Training

Since quite a large number of Myanmar ships are equipped with the Global Maritime Distress and Safety System (GMDSS) equipment and its employed on international trade and further, as many Myanmar officers are employed on vessels of foreign registry, on international voyages. It is necessary that the navigating officers are trained in the use and operation of GMDSS equipment. Training is conducted using personal computers and software programmes that simulate International Mobile Satellite Organization (INMARSAT) operating procedures. Several maritime software marketing companies have produced software which will run a network of PCs, simulating an INMARSAT Ocean region with a number of Ship Earth Stations (SES), Ship to Ship, Ship to Shore and Network Co-ordinating Station, enabling the lecturer to programme the training session.

Similar software is available, that will enable the lecturer to compose any sequence of Navigational Telex (NAVTEX) messages and have them “transmitted” to the NAVTEX receiver. Telex over radio procedures can be practised if two High Frequency (HF) transceivers with their respective telex units can be operated ‘back to back’, both operating on low power into dummy loads in place of antennas. Similarly, operating two or three digital selective calling units connected ‘back to back’ will provide operational practice on this equipment. These provisions have been already established in DMA, IMT, and the Myanmar Five Star Shipping Line (MFSSL); Training and certification of seafarers under the supervision of DMA has been taking place since November 1995.

4.8 Examinations

4.8.1 The Systems of Examinations

An examination is a prerequisite for issuing the certificate of competency. The Department of Marine Administration (DMA) has a full responsibility for conducting examinations and issuing certifications in accordance with the old Burma Merchant Shipping Act, Part II, section 15/16. Revised provisions were adopted in a new notification 1/98 concerning examination of masters, mates and engineer officers, last year. A step-by-step system of maritime training and examination is conducted, commencing with pre-sea training followed by post-sea training after requisite sea-service at the prescribed appropriate levels and prior to the examination for each grade of certificate. Written examinations for each grade is mandatory, followed by the oral examination, which is of a practical nature and a very comprehensive one to test the overall knowledge of the candidate and his or her ability to apply it. The advantage claimed for this system is that theoretical study, training and practical experience are well timed and harmonised.

However, the existing maritime examination system still needs to shape up with the full range of studies, from knowledge based to competence based system for Myanmar seafarers to enable them to receive quality academic qualifications as well as the high standards of competency required by the new revised Convention. In this regard, Professor Vanchiswar has stated as follows:

“ to adopt and harmonise both the main MET systems described above, in parallel, so as to be able to serve all interests. However, as regards the system whereby the full range of studies are to be covered at the pre-sea stage itself over a long period - he would wish to propose the following:

Provision of appropriate links to academic systems to relevance, so that the seafaring officers can also obtain academic qualifications.

After the performance of requisite sea-service for each level of certification, the seafaring officers attend short refresher courses at an MET Institution, followed by appropriate limited examinations, prior to the award of the relevant certificates.”

Source: The Nautical Institute, Maritime Education and Training, Chapter 22, p 165 by Professor P.S. Vanchiswar.

4.8.2 Types of Examinations

In respect of the mechanisms used for “Examination of Seafarers” DMA has conducted the following main types of variations:

- Examination conducted entirely by the Maritime Safety Administration (MSA);
- Examination conducted entirely by the Maritime Education and Training Institution (MET) concerned;
- Examination conducted by an external body, which is neither the MSA nor MET concerned;
- Examination conducted by joint arrangements between the MSA and the MET

4.9 Quality Standards System (QSS)

The STCW’78 was a good effort considering it was the first international instrument in the field of training. However, it had no reference to quality control and it had no means to ensure compliance. But STCW’95 addressed both these shortcomings and made the Convention more effective. Though it will only be a paper exercise, IMO now has the power to evaluate and assess submissions by member states with regard to giving effect to the provisions of the Convention. States can even operate a simple

endorsement regime as referred to in Regulation I/10 but still under a quality standards system.

STCW'95 has introduced the need for a Quality Standards System (QSS) for the Administration, which was not there in STCW'78. It is good for the Administration as well as the training Institutes to have a quality standard like ISO 9002 but according to STCW '95 it is not a mandatory requirement. Regulation I/6 requires the Administration to control, supervise, assess, approve and monitor training programmes conducted by approved training centre. The Administration will still need to carry out its obligation for supervision and enforcement of a QSS. In addition, Regulation I/8 requires the Administration to have a QSS in place in respect of all functions (related to STCW'95) carried out by the Administration and the same is to be audited by an independent body.

4.9.1 The Key Components

Education and training objectives, whether they are related to the training of officers, or ratings or special courses must be encompassed under one framework. These objectives must be addressed in accordance with the provisions of Section B-I/8 of the STCW Code as follows:

- Quality standards, the key elements;
- Quality standards model for assessment of knowledge, understanding, skill and competence;
- The need for an independent evaluation;
- The need to submit a report on that evaluation to IMO.

4.9.2 Monitoring of Quality Standards

Government must ensure that all training, procedures and the administrations of the national certification system should be effectively regulated, independently monitored and periodically audited through a quality standards system.

In Myanmar, these are still lacking behind rather than the progress of a QSS properly because of political influence. Therefore, the author likes to suggest two main ways of achieving a QSS for DMA acting on behalf of the Government. One is to go for the ISO 9002 through the National Standards Institute (NSI) or equivalent and the other is for the Government to appoint a panel of competent persons, who are not associated or connected with the Administration in carrying out its obligations under the STCW(not exceeding 5 years) requirements. A audit must be carried out to ensure that a QSS is maintained.

These quality assurance requirements apply irrespective of which organization performs them, whether done ashore or on board ships. It must be noted that these requirements also apply to activities regarding the issue, endorsement and revalidation of certificates (Regulation I/11) under the transitional provisions (Regulation I/15).

4.9.3 Independent Evaluation (IE)

Parties are to ensure that all aspects of their national training and certification procedures and processes are subjected to independent evaluation regularly. The full evaluation report required by Regulation I/8 must include the terms of reference for the evaluation and the qualifications and experience of the evaluators elsewhere. Each independent evaluation should include a systematic and independent

examination of all quality activities, but should not evaluate the validity of the defined objects (Section B-I/8. para. 6).

The author's opinion and suggestion, which should go to DMA are as follows:

- State in the national legislation that the Minister may appoint the National audit or National Standards Institute (NSI) or a panel of competent persons to make IE:
- IE must ensure that a QSS has been developed with documented procedures;
- The DMA should maintain each function referred to in Regulation I/6 and I/8 and the relevant Codes attached to the Convention;
- Submit the final report together with management level's comments to the Organisation

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This chapter contains the conclusion and recommendations of the study based on the vital issues, presented in the preceding chapters. The recommendations were identified to support the Government's efforts to promote the standards of competence of Myanmar seafarers through maritime training and education. The future of employment opportunities of Myanmar seafarers on foreign vessels will improve and their job security will become much better.

The study has been directed towards the development of a future for Myanmar seafarers' employment, which is incorporated into their training, assessment, and certification. The implications of STCW'95, in respect of DMA and IMT should become a vital role and to comply fully is essential. Various cases on problems faced by seafarers were presented in Chapter two and Chapter three. The author mentions the review and comparison of Myanmar seafarers' employment, recruitment opportunities, wages, working conditions on foreign flag vessels. The author has identified some areas where it is necessary to comply with the ILO Conventions and ITF requirements by Seamen Employment and Control Division (SECD) in order to get the national seafarers' job security sufficiently and effectively.

The effective standard of competence of seafarers has been changed gradually and globally since 1 February 1997. In chapter four, it is stated that there is a need to scrutinize the present standards of training, assessment and certification system in Myanmar. Otherwise, Myanmar seafarers will lose jobs in the future. Therefore, the Government has a full responsibility to fulfil its necessary measures in order to give full and complete effect to the provisions of the STCW Convention for the benefits of its national seafarers' employment. In addition, Capt. Morrison stated the important issue that "Competent crews = Safer Ships" in his book. Once the seafarers become competent persons, they might be able to protect more the safety of life at sea, property and marine environment than the maritime accidents in the future. At the same time, their jobs' security will also become increased, sound and safe elsewhere.

In this sense, with the coming into force of STCW'95 the Myanmar Department of Marine Administration (DMA) has drawn out the new legislation for compliance in accordance with Regulation I/5 (National Provision) of STCW'95. The same requirement in accordance with Regulation I/7 (Communication of information) has been submitted to the International Maritime Organisation (IMO) on 24 July 1998 on behalf of the Myanmar Government. This will ensure that the Myanmar is on the "White List", thereby ensuring the employment of Myanmar seafarers on foreign flag vessels in the future.

Furthermore, statistics indicate that well over 70% of the marine accidents relate to human error or omission. Training in conjunction with documented procedures and check lists can improve human performance and help to reduce accidents. In the words of the Secretary-General of IMO " *We sometimes forget that regulations can only be effective if they are properly implemented. And this can only be done by skilled people.*" Similarly, trained and competent seafarers are required to make the

best use of advances in ship technology to ensure the highest possible degree of operational safety and protection of the marine environment.

5.2 Recommendations

The following recommendations are based on the discussions presented in the preceding Chapters.

- To formulate and promote a new national maritime policy for the improvement of maritime training and education. The system should be set-up by joint co-operation between DMA and IMT under the supervision of MOT and should be periodically reviewed.
- The Myanmar maritime legislation needs to be revised again in order to meet the requirements of other international conventions. The Myanmar maritime legislation should be divided into primary legislation and subsidiary legislation so that all technical matters of international conventions are incorporated in subsidiary legislation, thus not requiring the whole legislation to be amended.
- For the purpose of a Quality Standard System, the following two-tier provision is suggested to include in the revised national maritime legislation;
 - “(a) The Administration may authorise a training institute or centre to conduct any of the training programmes required under the Convention, providing that such training programme shall be evaluated against criteria set by the Administration prior to the approval and that the training programme conducted at the approved centre shall be supervised and monitored by the Administration at periods not exceeding 5 years in accordance with the provisions of Regulation I/6 and Regulation I/8 of the Convention and the relevant Codes attached to the Convention.
 - (b) The Minister may appoint the National Standards Institute or a panel of competent persons, other than those involved in the routine operation of functions related to training, certification, issue of endorsement or maintenance of record to make an independent evaluation to ensure that a Quality Standards System has been

developed with documented procedures for each of the functions and the same is followed and maintained by the Administration in respect of functions and activities referred to in Regulation I/6 and Regulation I/8 of the Convention and the relevant Codes attached to the Convention. The audit should take into account the audit of the training institutes undertaken by the Administration. The copy of the report of such inspection, which should take place at intervals not exceeding 5 years, and be forwarded to the Organisation”.

- Myanmar has failed to ratify some vital ILO Conventions. Thus, the suggestion should go to Government authorities to ratify the important ILO Conventions as a matter of high priority for the benefit of the national seafarers’ wages, hours of work, hours of rest, manning and future employment sufficiently, efficiently and effectively.
- It is recommended to Seaman Employment and Control Division (SECD), to consider seriously the membership of the ITF in future in order to solve or minimise seafarers’ problems.
- In any education and training enterprise, teachers are the foundation on which the training structure depends. The employment of competent teachers with adequate qualifications and experience is the most important factor in the success of training establishments. Therefore, the endemic shortage of faculty at IMT may prevent the conduct of mandatory courses of training in accordance with the STCW Convention requirements. It is recommended that the sanctioned strength of the IMT’s faculty needs to be revised. It is also of paramount importance that the qualifications of instructors, supervisors and assessors in the Institute should be a matter of high priority. Suggestions should go to the Government authorities to provide the possibility of modern courses for instructors, supervisors and assessors, to explore more donors to fund towards the fellowships for marine lecturers in future.
- Adequate training facilities are still needed for the education and training of Myanmar mariners in order to provide them with a standard of competent training with new technologies. Thus, it is recommended that priority be given to the

procurement of essential aids for Seafarers' Education and Training at the Institute of Marine Technology.

- There is a need to introduce a system to disseminate information on the latest developments in shipping and maritime education and training among the countries, especially within the Southeast Asian region. It is recommended to establish a regional maritime institution, which will serve as a forum for exchanging ideas and views on the education and training of seafarers.
- Approved simulator training is now mandatory. The value of simulation in navigation, engineering and cargo operations has been recognised and is implicitly encouraged in the revised Convention. Thus, there is a need to build up modern simulation system incorporated with modern structural interactive operational scenarios that allow particular training as well as instructors and assessors elsewhere. It is highly recommended to the Government authorities that the technical assistance, funding support and promotion of technical co-operation should request to IMO as a high priority, to promote the effective use of ship simulators for the training and certification of seafarers, required by the revised STCW Convention.
- The activities related to the maritime examination and certification system is covered by the Myanmar Merchant Shipping Act (1954) and Inland Steam Vessel Act (1917). But both of which were old and inherited from the British Merchant Shipping Act (1894). Thus, it is recommended that, these should be revised and updated to meet the requirements of the revised STCW in a uniform manner.

BIBLIOGRAPHY

American Bureau of Shipping (1997). Safer Ships Competent Crews. *International Conference, Halifax, Nova Scotia, Canada, 24-25 October 1996*. New York: American Bureau of Shipping.

Bimco Review (1998). *Manning and Training*. London: BIMCO.

Chowdhury, F R (1999). Interview by the author on Field Trip. Marine Surveyor, Seafarer's Standards Branch. Southampton, United Kingdom. Maritime Safety and Coast Guard Agency.

Department of Marine Administration, (1998a). *Complete Information as Required in Article IV and Section A-1/7 of the STCW Code*. (Marine Research Report No.1). Yangon: Department of Marine Administration.

Department of Marine Administration, (1998b). *Rules for Granting of Certificates of Competency and the Examination of Masters, Mates and Engineers*. (Notification No. 1/98). Yangon: Department of Marine Administration.

Department of Marine Administration, (1986c). *Introduction of Myanmar Ship Registry*. Yangon: Burma Navigation Corporation.

Department of Marine Administration, (1993d). *The Role and Functions of Department of Marine Administration*. Yangon: Department of Marine Administration.

Department of Marine Administration, (1990e). *Organization and Functions of DMA*. Yangon: Department of Marine Administration.

Department of Marine Administration, (1989f). *Informations relating to International Maritime Organization*. Yangon: Department of Marine Administration.

Government of the Union of Myanmar, (1956). *The Burma Code, Volume VII*. 7th Series. Yangon, Myanmar: Ministry of Justice.

Hlaing , M T (1984). *A New Approach to Education and Training of Mariners with Special Reference to Southeast Asian Countries* . Ph.D. Thesis . Cardiff: The University of Wales.

Holder , L A (1996). *Training and Assessment on Board* . London: Witherby & Company Limited .

Institute of Southeast Asian Studies, (1989). *Seafarers in the Asean Region*. Singapore: Institute of Southeast Asian Studies.

International Maritime Lecturers' Association (1995). Proceedings of Seminar on Seafarers Training and Certification, vol 4, No.4, p-13.

International Maritime Organization (1996a). *STCW Convention, Resolutions of the 1995 Conference and STCW Code*. London: IMO Publication.

International Maritime Organization (1996b). *"The New STCW Convention"*. Focus on IMO. London: IMO Publication.

International Shipping Federation (1995a). *The Revised STCW Convention*. London: The International Shipping Federation Ltd.

International Shipping Federation (1998b). *International Wage Rates and Labour Costs, Implementation of STCW'95*. London: IMO Publication.

International Shipping Federation, (1990c). *ISF Guide to International Maritime Labour Supply*. London: Lloyd's of London Press Ltd.

International Shipping Federation, (1995). *The World Wide Demand For and Supply of Seafarers, BIMCO/ISF*. London: International Shipping Federation.

International Transport Workers' Federation, (1996). 'The regional implications of the revised STCW Convention'. *African seafarers meeting*. Agenda item 5, December 10. International Transport Workers' Federation, London: UK.

Intertanko (1996). *Legal Implications of the ISM Code* . Oslo: INTERTANKO

ISM and STCW: safety first, (1996). *Lloyd's Shipping Economist*, December, page 12.

ISM and STCW workshops, (1996). *Bimco Bulletin*, vol. 91, no.6, p-10.

Kasoulides ,G C (1993). *Port State Control and Jurisdiction* . The Netherlands: Kluwer Academic Publishers.

Lloyd's of London Press Ltd, (1992). *Leading Development in Ship Management*. London: Llyod's Of London Press Ltd. p-20,90.

Lloyd's Ship Manager , (1996). *Guide to World Maritime Training 1996*. London: Lloyd's Ship Manager.

Lane , T (1996). *Crewing the World's Merchant Ships*. Cardiff: Seafarers International Research Centre (SIRC).

Lucca, M J (1998). *The Official Guide to Ship Registries 1998*. Stamford, USA: International Ship Registry Review.

Morrison , W S G (1997). *Competent Crews = Safer Ships*. Sweden: World Maritime University.

Muirhead , P (1998a). "Developing a Quality Standards System for Maritime Institutions. Some Guidelines for the Establishment of a Basic Institutional Framework". *STCW Implementation Workshops*. Lecture notes. World Maritime University , Malmo , Sweden.

Muirhead , P (1998b). "Reasons for Revising the STCW Convention". *The Revision of the STCW Convention*. Lecture notes. World Maritime University , Malmo , Sweden.

Muirhead , P (1998c). "Training and Assessment and the use of Simulators". *The Revised STCW'78 Convention*. Lecture notes. World Maritime University , Malmo , Sweden.

Mukherjee, P K (1999). 'Flagging Options: Legal and Other Consideration.' *Maritime Labour Law*. Hand-out. World Maritime University, Malmo, Sweden.

Northrup , H R and Rowan , R L (1983). ITF and the Asian Problem , ITF requirements for FOC Vessels . *The Development and Implementation of International Maritime Training Standards* (March 1994: Malmo, Sweden). World Maritime University. Malmo,Sweden: World Maritime University.

O’Neil, W A (1997). *World Maritime Day: Optimum maritime safety demands a focus on people*. London: IMO.

Parasad, R (1998). Interview by the author. Professor, Malmo, Sweden: World Maritime University.

Ready, N P (1998). *Ship Registration*. Third Edition. Business of Shipping Series. UK: LLP Limited.

STCW Amendments, (1997). Seaways, January, p-7,8.

Stevenson, D (1996). Will the 1995 STCW Revisions help seafarers?. *Surveyor*, September, p-12,13.

Swe, A S (1998). Interview by the author. Captain, Head of Nautical Division, Institute of Marine Technology. Yangon: Myanmar. Ministry of Transport.

Tun, Y M (1998). Interview by the author. Captain, Deputy Director, Seamen Employment and Control Division (SECD). Yangon: Myanmar. Ministry of Transport.

The World Bank (1998). *World Development Indicators*. USA: The World Bank.

Vanchiswar, P S (1996a). “Maritime Administration/Maritime Safety Administration”. *Maritime Safety Implementation*. Hand-outs. World Maritime University, Malmo, Sweden.

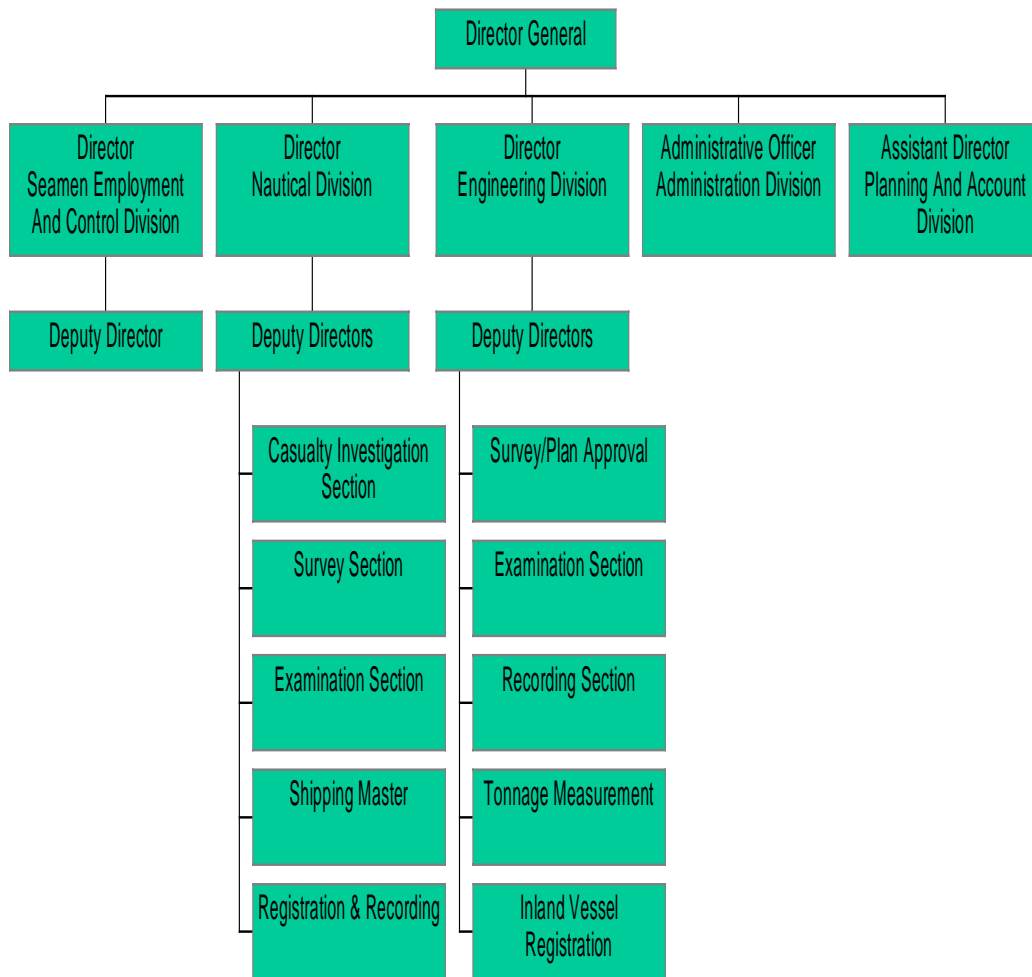
Vanchiswar, P S (1996b). “Translating international maritime training standards into national regulations”. *Maritime Safety Implementation*. Hand-outs. World Maritime University, Malmo, Sweden.

Thein, W (1998). Interview by the author. Principal, Institute of Marine Technology. Yangon: Myanmar. Ministry of Transport.

Zade, G (1996). *New demands on maritime training institutions*. WMU Student Council Technical Journal, 7th edition, Autumn, p-3,5.

Appendix “A”

**Government of the Union of Myanmar
Ministry of Transport
Department of Marine Administration**



Source: Department of Marine Administration (DMA) notification 1/98 record publication. Ministry of Transport. Yangon. Union of Myanmar.

Appendix “B”

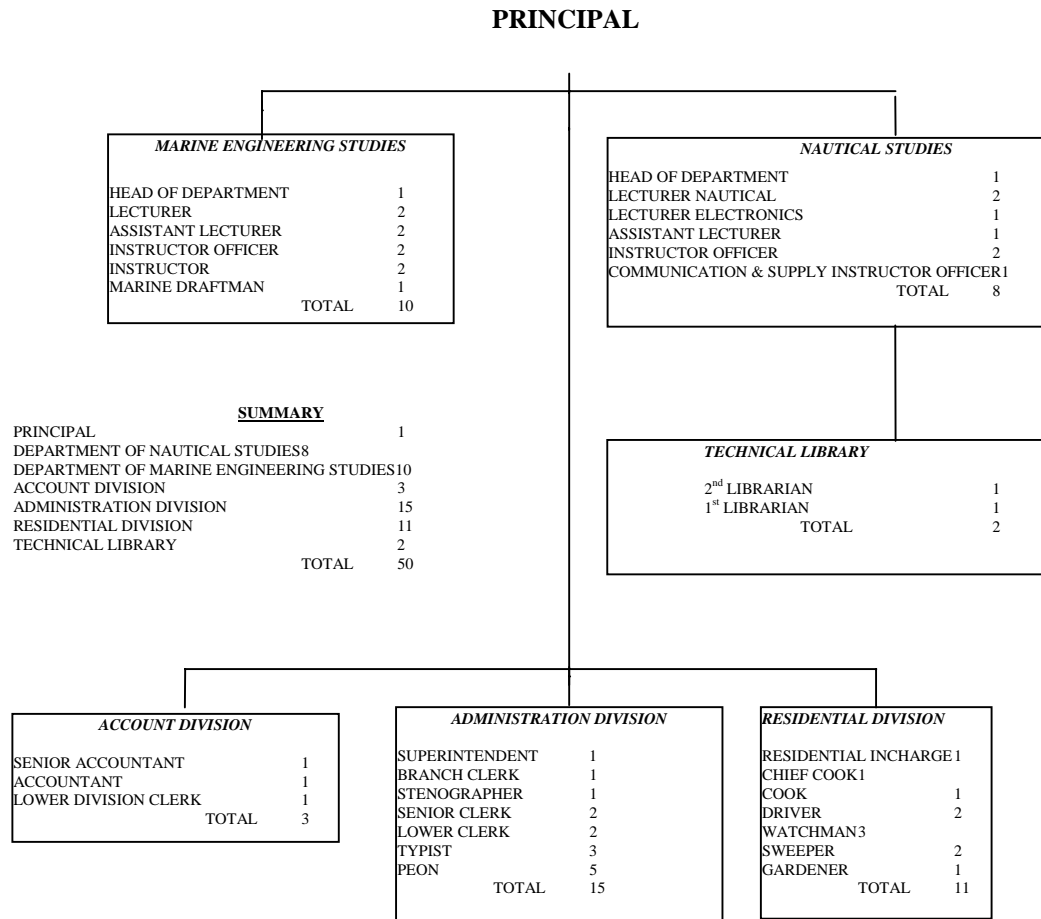
The Sanctioned and Existing Man Power of Department Of Marine Administration (DMA)

| Sr | PARTICULARS | SANCTIONED | EXISTING | REMARKS |
|----|---------------------------------------|------------|------------|---------|
| 1. | Director General | 1 | 1 | |
| 2. | Nautical Division | 34 | 15 | |
| 3. | Engineering Division | 66 | 42 | |
| 4. | Seamen Employment Control Division | 76 | 52 | |
| 5. | Planning and Accounts Division | 17 | 10 | |
| 6. | Administrative Division | 33 | 18 | |
| 7. | Patheingyi Region | 5 | 3 | |
| 8. | Mawlamyaing Region | 5 | 5 | |
| 9 | Dawei Region | 2 | 2 | |
| 10 | Myeik Region | 15 | 15 | |
| 11 | Kawthoung Region | 3 | 3 | |
| 12 | Sittway Region | 54 | 46 | |
| 13 | Mandalay Region | 346 | 229 | |
| | Grand Total | 657 | 441 | |

Source: Department of Marine Administration (DMA), Yangon, Ministry of Transport, Union of Myanmar,

Appendix “C”

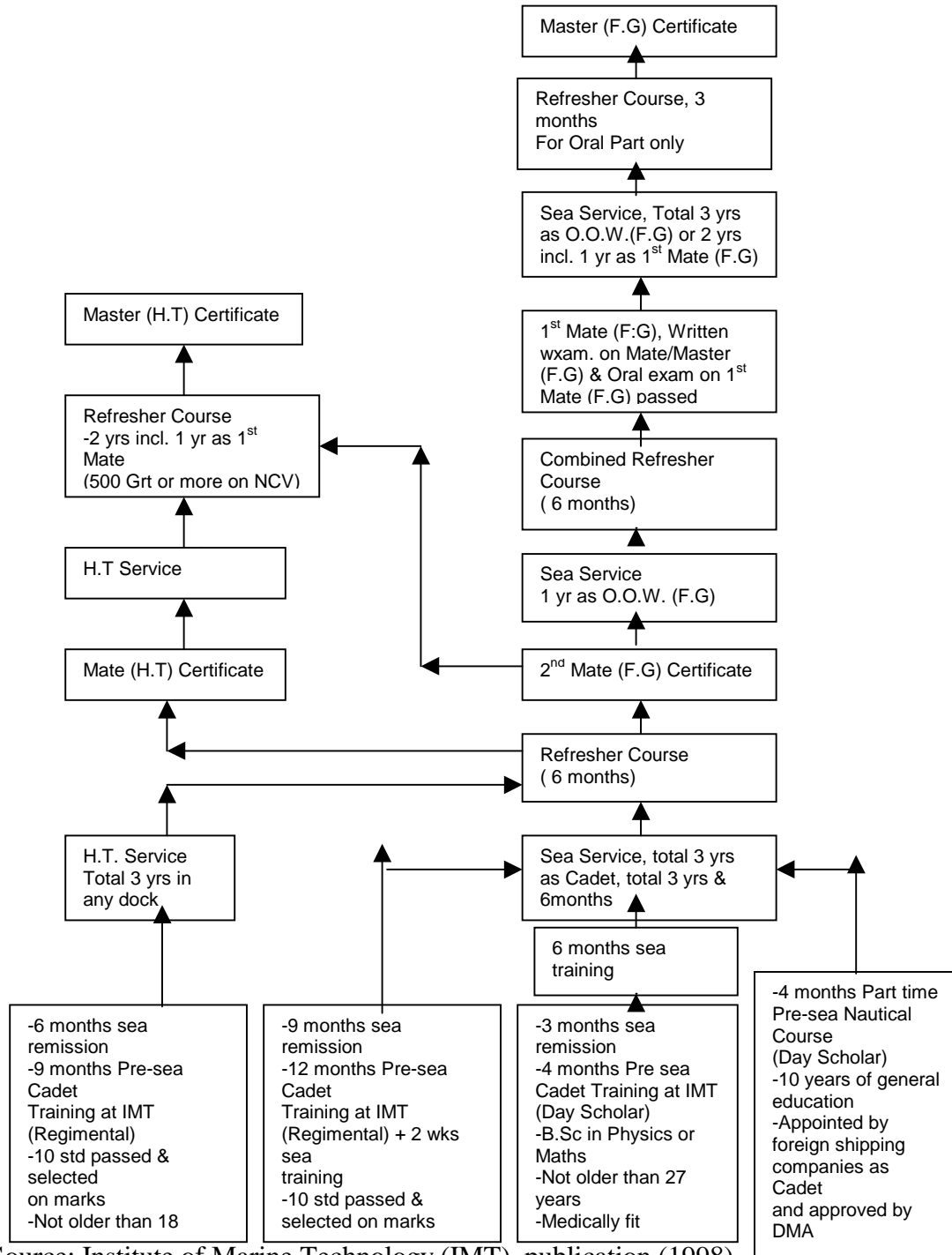
Institute of Marine Technology Organization Chart



Source: Institute of Marine Technology (1998), Yangon, Ministry of Transport, Union of Myanmar.

Appendix “D”

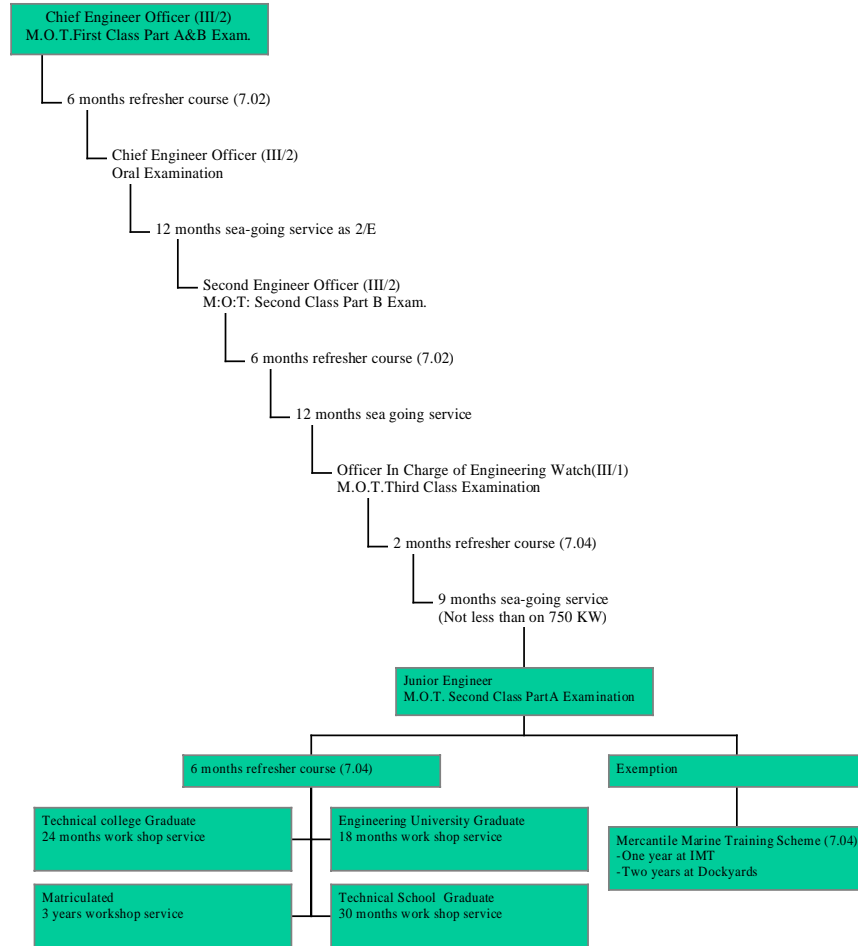
**Maritime Education And Training System For Master Mariner (F.G) And Master Mariner (H.T)
(According To STCW'95 Regulations and Ministry's Notification No. 1/98)**



Source: Institute of Marine Technology (IMT), publication (1998).

Appendix “E”

Myanmar Marine Engineer Training Scheme



Source: Institute of Marine Technology (IMT), Ministry of Transport. Yangon. Union of Myanmar.

Appendix “F”

Institute of Marine Technology (IMT), Listing of Existing training Facilities

| Sr | Training | Description of Training Facility | Student per course | Remarks |
|----|--|--|--------------------|---|
| 1 | Radar Simulator & Bridge Team Management (STCW II/1 & 2) | Two ownship stations with two radar sets in one room and three in the other. Bridge console panel with Manual/auto steering, ship whistle, inter-com and engine telegraph are fitted in each room. | 10 to 15 | It was received from Japan in 1988 as grant aid. All are still working condition. |
| 2 | ARPA training (STCW II/1 & 2) | ARPA unit is attached to one radar to facilitate ARPA course. | 10 | Students are divided into two groups to take practice. |
| 3 | GMDSS training (STCW IV/2) | 8 PC-based GMDSS ship stations and one coast station with computer based learning program called COMSAR created from Maritime Education, Sweden. Simulation on the use of all equipment can be done | 16 | Students are divided into two sections: each section takes 6 hours per day. |
| 4 | ARPA training (STCW II/1 & 2) | The installation of 5 PC-based ARPA simulator program called SISRADAR is being in progress. | 10 | Same as above. |
| 5 | Ship Stability Test room and Loadometer (STCW II/1 & 2) | There is a water tank with two ship's model with movable weights and measuring device for demonstration only. | Demonstration only | Received from Japan Grant Aid. |
| 6 | Advanced Fire Fighting (STCW VI/3) | Full equipment for the course is provided including a custom built smokehouse, which are three storied ship accommodation-like building and a command and control building. Each student has to participate in fighting different class of fire and rescue casualties. | 12 to 18 | Jointly conducted with MTM Shipping Company. |
| 7 | Personal Survival Technique (STCW VI/1 - 1) | Two full sets of liferaft, one for demonstration and one for boarding exercises which are carried out in INYA Lake. One open lifeboat with davit installed in the campus for demonstration purpose. Practical lifeboat drills are carried out on board Myanmar Five Star Line vessels. | 50 | Students are divided into two groups for practical exercises. |

Source: Institute of Marine Technology, (IMT) publication, Yangon. Myanmar.

Appendix “G”

List of Courses Conducted at IMT in 1997-98 Budget Year

| Sr. No. | Training courses | No. of Courses | No. of Student |
|-----------|--|-------------------|-------------------|
| 1. | <i>Refresher Courses</i> | | |
| | (1) Second Mate (F.G) | 2 | 270 |
| | (2) 1st Mate/Master (F.G) | 2 | 126 |
| | (3) 1st Mate (Home-Trade) | 2 | 8 |
| | (4) Master (Home-Trade) | 2 | 3 |
| | (5) 3rd Engineer (F.G) | 4 | 113 |
| | (6) M.O.t. Second Class Engineer Part A* | -- | ---- |
| | (7) M.O.T. Second Class Engineer Part B | 2 | 86 |
| | (8) M.O.T. First Class Engineer Part (A/B) | 2 | 38 |
| 2. | <i>Short Courses (IMO Model Courses)</i> | | |
| | (1) Radar Simulator Course | 4 | 51 |
| | (2) Radar Observer Course | 4 | 215 |
| | (3) Automatic Radar Plotting Aids Course | 9 | 134 |
| | (4) Electronic Navigation Aids Course | --- | ---- |
| | (5) First Aid Course | 1 | 24 |
| | (6) Basic Computer Course | --- | ---- |
| | (7) Survival At Sea Course | 23 | 2772 |
| | (8) Automation, Instrumentation & Control System | 1 | 24 |
| | (9) Ship's Captain Medical Guide Course | 2 | 74 |
| | (10) Tanker Familiarization Course | 6 | 550 |
| | (11) Advanced Training on Chemical Tanker Operation -- | | ---- |
| | (12) Electronic Courses | -- | ---- |
| | (13) English Course for Mariners | 2 | 245 |
| | (14) Hazardous Cargo Training | 1 | 16 |
| | (15) Instructor Course | -- | ---- |
| | (16) Bridge Team Management | 9 | 121 |
| | (17) Pre-sea Nautical Training | 3 | 117 |
| | (18) Advanced Fire Fighting | -- | ---- |
| | (19) GMDSS (General Operator's Certificate) | -- | ---- |
| 3. | <i>Seaman Courses</i> | | |
| | (1) Seagoing Basic Seaman Course | -- | ---- |
| | (2) Inland Basic Seaman Course | -- | ---- |
| 4. | <i>Cadet Courses</i> | | |
| | (1) Mercantile Marine Cadet Course | 1 | 150 |
| Total | | 96 | 5333 |

* The course has been conducted during the first half of this year, 1999.

Source: Institute of Marine Technology, (IMT), Yangon, Ministry of Transport, Union of Myanmar.

Appendix ‘H’

IMO minimum standards of requirements and deadlines for getting on the STCW “White List”

| Applicable regulations | STCW Convention regulation 1/7;STCW Code section A-1/7 |
|---|---|
| <p>Minimum information, Parties must report to IMO by 1 August 1998</p> | <ol style="list-style-type: none"> 1 The name, postal address and telephone and facsimile numbers and organization chart of the ministry, department or governmental agency responsible for administering the Convention; 2 A concise explanation of the legal and administrative measures provided and taken to ensure compliance, particularly with regulations 1/6 (training and assessment) and 1/9 (medical standards and the issue and registration of certificates); 3 A clear statement of the education, training, examination, competency assessment and certification policies adopted; 4 A concise summary of the courses, training programmes, examinations and assessments provided for each certificate issued pursuant to the Convention; 5 A concise outline of the procedures followed to authorize, accredit or approve training and examinations, medical fitness and competency assessments, required by the Convention, the conditions attaching thereto, and a list of the authorization, accreditation and approvals granted; 6 A concise summary of the procedures followed in granting any dispensation under article VIII of the Convention; and 7 The results of the comparison carried out pursuant to regulation 1/11 and a concise outline of the refresher and upgrading training mandated, (Regulation 1/11 requires Parties to |

| | |
|-------------------------|--|
| | compare standards of competence required previously with those required to comply with the STCW Code and to determine need for refresher and updating training or assessment). |
| August 1998 to May 1999 | IMO Secretary General to review information submitted by Parties to the Convention and submit report to Maritime Safety Committee, MSC; The competent persons nominated by Parties to the Convention and approved by the MSC may be called upon to assist in the preparation of the report to the MSC. Meetings of competent persons may be held at the discretion of the Secretary General and their views shall be taken into account in the report submitted to the MSC. |
| May/June 1999 | MSC meeting to review reports of compliance by Parties with STCW and issue “white list” of countries which fully comply with STCW. |
| 1 February 2002 | All seafarers must need to comply with the new standards and all seafarers must carry certificates which comply with the 1995 STCW Amendments. (Up to 1 February 2002, a Party may continue to issue, recognize and endorse certificates in line with the provisions of the Convention, which applied prior to 1 February 1997). |

Source: Department of Marine Administration (DMA) record paper,(1998). Ministry of Transport.

Appendix 'I'

Courses At Institute of Marine Technology (IMT)

| A. | Upgrading Courses (Post-Sea) | Duration of Course |
|-----------|---|---------------------------|
| • | Second Mate (foreign-going)-Model course 7.03 | 4 months |
| • | Master/First Mate (foreign-going)-Model course 7.01 | 4/6 months |
| • | First Mate (Home Trade) | 4 months |
| • | Master (Home Trade) | 4 months |
| • | Officer in charge of an engineering watch | 3 months |
| • | M.O.T Second Class (Part A)-Model course 7.04 | 6 months |
| • | M.O.T First Class (Part A)-Model course 7.04 | 3 months |
| • | M.O.T 1st & 2nd Class (Part B)-Model course 7.02 | 6 months |
| B | Short Courses (IMO Model Courses) | Duration of Course |
| • | Radar Simulator-Model Course 1.09 | 1 week |
| • | Radar Observer-Model Course 1.07 | 2 weeks |
| • | Automatic Radar Plotting Aids-Model Course | 1 week |
| • | Electronic Navigation Aids | 3 weeks |
| • | First-Aid-Model Course 1.14 plus compendium | 2 weeks |
| • | Basic Computer Course | 5 weeks |
| • | Survival At Sea-Model Course 1.19 | 2 weeks |
| • | Automation, Instrument Course | 2 weeks |
| • | Ship's Captain Medical Guide-Model Course 1.15 | 5 weeks |
| • | Tanker Familiarization-Model Course 1.01 | 1 week |
| • | Advanced Training on Oil Tanker Operation- Model Course 1.02 | 2 weeks |
| • | Advanced Training on Chemical Tanker Operations- | |

| | | |
|---|---|-----------|
| | Model Course 1.04 | 2 weeks |
| • | Electronic-Model Course 2.09 plus compendium | 130 hours |
| • | English Course for Mariners | 60 hours |
| • | Hazardous Cargo Training | 60 hours |
| • | Training Course for Instructors- Model Course 6.09 plus compendium | 6 weeks |
| • | ARPA and Bridge Team Work-Model Course 1.22 | 3 weeks |
| • | Advanced Fire Fighting-Model Course 2.03 | 2 weeks |
| • | GMDSS, GOC Course | 2 weeks |
| • | Pre-Sea Nautical Training | 6 months |

C Basic Seaman Course (Pre-Sea)

| | | |
|---|-------------------------------|----------|
| • | Sea-going Basic Seaman Course | 3 months |
| • | Inland Basic Seaman Course | 3 months |

D Pre-Sea Cadet Course (Residential)

| | | |
|---|--|--------|
| • | Mercantile Marine Nautical Cadet | 1 year |
| | Mercantile Marine Inland Water Craft Cadet | 1 year |
| | Mercantile Marine Port Craft Cadet | 1 year |
| | Mercantile Marine Fishery Cadet | 1 year |
| • | Mercantile Marine Engineering Cadet | 1 year |

(followed by practical workshop training)