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CONSIDERATIONS TOWARDS THE EMPLOYMENT OF NATIONAL SEAFARERS ON OPEN REGISTRY SHIPS-A STUDY OF LIBERIA

BY

JEFFERSON C. MOORE
LIBERIA

A paper submitted to the Faculty of the World Maritime University in partial fulfillment of the requirements for the award of a MASTER OF SCIENCE (MSc) DEGREE in:

GENERAL MARITIME ADMINISTRATION

The contents of this paper reflect the personal views of the Author, and are not necessarily endorsed by the UNIVERSITY.

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This study addresses itself essentially to the employment of Liberian nationals on open registry ships—considering that Liberia, as an open registry state, has the world’s largest fleet, in terms of gross registered tonnage.

A basic assumption employed in the process is that national seafarers would be gainfully employed provided they are well trained and duly certificated, in keeping with international standards, as prescribed by the Convention on Standards of Training, Certification, and Watchkeeping (STCW).

As a developing country with relative low wage rates, Liberia could also provide crew for ships at rates comparable with other developing countries.

In order to attain this goal, a manpower approach is utilized, encompassing a survey of the Liberian fleet (i.e. number of ships, classification according to tonnage, including the deployment of crew structure, as per the Approved Minimum Safe Manning Scale of Liberia). In addition, a survey was also conducted to ascertain the status of Liberian national seafarers (i.e. total number of seafarers, their qualification and type of training required in order to qualify for possible employment).

The main objective of this approach is geared towards determining an estimated number of crew, vis-à-vis, the number of rating positions available on Liberian registered ships, for which Liberian national seafarers should be trained accordingly.

In view thereof, this study reveals the need for trained Liberian seafarers, considering that a significant
number / percentage of the latter lack basic maritime education and training, according to international standards.

Therefore, in order to qualify for possible employment opportunity, the implementation of a maritime education and training scheme in Liberia, at the Rating level is herewith proposed.

This study is divided into six (6) parts. The first three Chapters, basically establish a framework for analyzing the manpower planning scheme; whilst Chapters four and five, deal with its application. The final part of this study, is the Conclusion.

Accordingly, the first Chapter, examines the origins, definition, characteristics and international attitude towards the open registry system.

Chapter II, deals with Liberia, a Maritime Flag State, featuring the present position of the Liberian fleet, safety standards, the employment figures, and related issues. Also, a background to maritime training activities in Liberia, and the role of the Bureau of Maritime Affairs (BMA), is presented.

In Chapter III, general concepts of manpower planning including manpower planning in the maritime sector, are highlighted, as a means of providing a conceptual framework for analyzing the maritime education and training process.

Chapter IV, features an estimated projection of maritime training requirements in Liberia, in relation to the manpower survey conducted, to establish maritime training needs.

In Chapter V, the elements or prerequisites for imple-
mentation of the proposed maritime education and training scheme in Liberia, including the implementation process are examined.

Finally, the general conclusion, is presented as the final portion of this study.
This dissertation, "Considerations towards the employment of National Seafarers, on open registry ships - A study of Liberia", is undertaken with a deep sense of commitment and patriotism, with a view towards enhancing the socioeconomic advancement of Liberia, in general, and in particular, ameliorating the existing plight of national seafarers, who are experiencing a high rate of unemployment.

The employment of Liberian seafarers on Liberian registered ships, therefore, would not only contribute towards enhancing the genuine-link between Flag State and vessel, but would go a long way towards creating a more favorable image of the Liberian Maritime Administration, vis-a-vis, the Government of the Republic of Liberia, on the one hand, and shipowners who register their vessels in Liberia, on the other.

Finally, the proposal for the implementation of a maritime education and training scheme in Liberia, should be read with a view considering the existing infrastructures of the Union Marine Training Institute (UMTI) facilities in Liberia. (Presently non-functional).

The contents, as expressed in this project reflect the personal views of the Author, and not by any means, endorsed by the Government of Liberia, or the National Port Authority, whom I serve as an humble servant.
LIST OF ABBREVIATIONS

AB Abled-Body Seaman
AMTA Arab Maritime Transport Academy
BMA Bureau of Maritime Affairs
EEC European Economic Community
EIU Economist Intelligence Unit
FOC Flag of Convenience
GCBS General Council of British Shipping
ILO International Labour Organization
IMA International Maritime Associates
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization
ITC International Trust Company
ITF International Transport Workers Federation
JOS Junior Ordinary Sailor
LSC Liberia Shipowner’s Council
MET  Maritime Education and Training
MINCOMAR  Ministerial Conference of West and Central African States
MSC  Maritime Safety Committee
OECD  Organization Economic Community Development
OS  Ordinary Sailor
RL  Republic of Liberia
RLM  Maritime Law, Notices and Regulations of Liberia
STCW  Standards on Training Certification and Watchkeeping
UMTI  Union Marine Training Institute
UNCTAD  United Nations Conference on Trade and Development
WMU  World Maritime University
CHAPTER I
AN OVERVIEW OF THE OPEN REGISTRY SYSTEM

1.1 INTRODUCTION

Discussions about "Flag of Convenience" or "Open Registry", to employ a more contemporary usage of the expression, often provoke arguments concerning its nature, characteristics or the legitimacy of its very existence. This study however, does not attempt to deliberate at length on the merits nor demerits of the system, rather, the approach used here only serves as a preliminary basis for introducing, Chapter II; Liberia, a Maritime Flag State; considering Liberia's role as an open registry State.

The expressions, Flags of Convenience and Open Registries are used interchangeably in this study.

A ship owned in one country while it is registered in another for commercial or legal advantage sails under a flag of convenience.(1)

Registration, accords nationality to a ship. Accordingly, the sovereignty of a state extends also to ships flying its flag.

1.2 ORIGINS

Although the expression, Flag of Convenience, was first used during the 1950's, registry under foreign flags had precedents in the nineteenth century or even much earlier in history. During the Roman Empire, Roman shipowners placed vessels in Greek registry for military reasons.(2)

Whilst early examples of Flags of Convenience basically originated from political or military considerations,
EXHIBIT I

<table>
<thead>
<tr>
<th>Period</th>
<th>Flag of Registry</th>
<th>Motivation</th>
</tr>
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<tbody>
<tr>
<td>16th Century</td>
<td>Spanish</td>
<td>English merchants circumvented restrictions limiting non-Spanish vessels from West Indies trade.</td>
</tr>
<tr>
<td>17th Century</td>
<td>French</td>
<td>English fishermen in Newfoundland used French registry as a means to continue operation in conjunction with British registry fishing boats.</td>
</tr>
<tr>
<td>19th Century</td>
<td>Norwegian</td>
<td>British trawler owners changed registry to fish off Moray Firth.</td>
</tr>
<tr>
<td>Napoleonic Wars</td>
<td>German</td>
<td>English shipowners changed registry to avoid the French blockade.</td>
</tr>
<tr>
<td>War of 1812</td>
<td>Portuguese</td>
<td>U.S. shipowners in Massachusetts changed registry to avoid capture by the British.</td>
</tr>
<tr>
<td>1922</td>
<td>Panamanian</td>
<td>Two ships of United American Lines changed from U.S. registry to avoid laws on serving alcoholic beverages aboard U.S. ships.</td>
</tr>
<tr>
<td>1920 - 1930</td>
<td>Panamanian, Honduran</td>
<td>U.S. shipowners switched registry to reduce operating costs by employing cheaper shipboard labor.</td>
</tr>
<tr>
<td>1930's</td>
<td>Panamanian</td>
<td>Shipowners with German-registered ships switched to Panamanian registry to avoid possible seizure.</td>
</tr>
<tr>
<td>1939 - 1941</td>
<td>Panamanian</td>
<td>With encouragement from the U.S. Government, shipowners switched to Panamanian registry to assist the Allies without violating the Neutrality Laws. European shipowners also switched to Panamanian registry to avoid wartime requisitioning of their vessels.</td>
</tr>
<tr>
<td>Period</td>
<td>Registrars</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1946 - 1949</td>
<td>Panamanian</td>
<td>More than 150 ships sold under the U.S. Merchant Sales Act of 1946 were registered in Panama - as it offered liberal registration and taxation advantages.</td>
</tr>
<tr>
<td>1949</td>
<td>Liberian</td>
<td>Low registration fees, a well writing code, absence of Liberian taxes, absence of operating and crewing restrictions made registry economically attractive.</td>
</tr>
<tr>
<td>1950-late 1970</td>
<td>Liberian, Panamanian, Honduran, Costa Rican, San Marinese, Sierra Leonean, Lebanese, Cypriot, Haitian, Somali, Omani, Manxman, and others</td>
<td>As registry in U.S. and other countries become increasingly uneconomical, many countries competed for ship registrations, recognizing the economic benefit to the host flag country; only a few succeeded in attracting significant registrations.</td>
</tr>
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</table>

contemporary practice of the system rests largely on a foundation of economic considerations and consequences. (Exhibit I, highlights the history of Flags of Convenience).

B.N. Metaxas, in his study of Flags of Convenience, attributes the origins of modern Open Registries to the political uncertainty in Europe in the years leading up to the second World War; to taxation avoidance (including double taxation in the case of bi-national joint ventures in shipping) and to avoidance of excessive formalities imposed by bureaucratic State mechanisms in the maritime sector. As a consequence, United States multi-national companies began to shift their tonnage from European flags to other flags, including Panamanian and later on Honduras and Venezuela.(3) The Liberian Open Registry system began at a much later period, in 1949.

It must however be emphasized that although the contemporary practice of Open Registry was initiated by the Americans, the Greeks and most traditional maritime states in western Europe, including Japan and Hong Kong, now make use of the system.

Accordingly, over 73% of Flag of Convenience tonnage (deadweight) is owned in only four countries: USA. Hong Kong, Greece, and Japan. Over 90% is owned by 13 countries.(4)

This latter issue of ownership brings about the phrase or expression, Beneficial Ownership, as opposed to True Manager, in relation to the open registry issue. The beneficial owner is considered as the person, company or organization gaining ultimate benefit from the shipping operations; the true manager is the person, company, or organization responsible for the day to day operation of ships.(5)

Since World War II, a number of countries have provi-
ded Open Registry facility, but the more prominent ones today are: Liberia, Panama, Cyprus, etc. Other countries have recognized that providing an Open Registry system can be economically advantageous, and have therefore, established the system. In addition to countries mentioned in Exhibit I; these include, the Bahamas, Bermuda, Cayman Island, Seychelles, Barbados, Surinam, Vanuatu, the Isle of Man, Hong Kong, to name a few.

The Flag of Convenience fleets have grown at a phenomenal rate over the years, while at the same time, the share of world shipping of the traditional maritime states has declined considerably. Hence, one can safely conclude that there exist a correlation between the growth of the (FOC) fleet, on the one hand, and the decline of the traditional maritime nations’ fleet, on the other.

From having 61% of world shipping in 1950, the traditional maritime nations had approximately 50%, in 1980, a decline of 31% of world shipping. Comparatively, in 1939, about 800,000 gross registered tons was registered under (FOC)—just over 1% of the world total. By 1950, over 5% of world tonnage was under FOC; and by 1980, this had increased to over 31%. Liberia has gone from registering two ships in 1949 to having the world’s largest fleet presently. (6)

The above mentioned trend tends to suggest that owing to restrictive national fiscal policies in the developed maritime states, coupled with high labor cost, shipowners in this part of the world continue to shift towards open registries, in search of a more competitive market.
In an attempt to illustrate the salient features which constitute the open registry phenomenon, the Rochadale Committee, thru its Inquiry into Shipping, Report, in 1970, compiled a list of factors identified as being common to flag of convenience or open registry.

The features include the following:

(i) The country of registry allows ownership and/or control of its merchant vessels by non-citizens;
(ii) Access to the registry is easy...and...transfer from the registry at the owner's option is not restricted;
(iii) Taxes on the income from ships are not levied locally or are low. 'A registry fee and annual fee, based on tonnage, are normally the only charges made...;
(iv) The country of registry is a small power with no national requirement under any foreseeable circumstances for all the shipping registered...;
(v) Manning of ships by non-nationals is freely permitted; and
(vi) The country of registry has neither the power nor the administrative machinery effectively to impose any government or international regulations; nor has the country the wish or the power to control the companies themselves.(7)

The Committee further indicated that one or more of these features may be observable in the policies or circumstances of many maritime countries; but it is only for flags of convenience that all apply and it is they which effectively have no possibility of imposing taxation on
shipping in the future.

The Rochdale's Report, although provides a useful framework for analysis of the FOC phenomenon, however, exceeded it limits in assuming that the six features it identified were only to be found in flag of convenience states. In view of efforts by Liberia and Panama to tighten up control of vessels operating under their flags, items (ii) and (vi) of the above mentioned definition warrant revision. Access to the Liberian registry is no longer as easy and automatic as it was in the 1960's, as the Liberian government have indeed established an effective administrative control of its fleet.(8).

Whilst, there are various reasons why shipowners may choose open registry shipping, as opposed to operating under national flag, the following reasons stipulated below are generally considered to be the primary considerations:

- To avoid heavy taxation;
- To avoid strict manning rules;
- To achieve freedom of operation;
- To avoid high manning costs;
- To achieve freedom from technical restrictions;
- Generally, to achieve lower costs, both on capital and or the operational, side.(9)
1.3.1 TO AVOID HEAVY TAXATION

Generally, in an environment of competitive market situation, shipowners seek to maximize profits. Due to relative high taxation imposed on income in most developed countries, shipowners in this part of the world are obliged to explore for alternative, or other legitimate means of avoiding taxation and other fiscal controls.

Taxes imposed, in most developed countries on shipowners make up to 60 to 80% of net profits, thus slowing down a natural renewal of the fleets. In contrasts, registration and annual fees constitute the only form of taxation, required by open registry, which are usually low. The difference in overall results from registering under the national flag and under the flag of convenience may be very great, especially in boom periods.(10)

1.3.2 TO AVOID STRICT MANNING RULES

Manning rules vary from one country to another. In some they are simply politically formed principles aimed at achieving the highest possible employment of nationals.(11)

Conversely, one of the main attractions of open registry, is the freedom of choice over nationality of crew and freedom from national wage agreements.
1.3.3 TO ACHIEVE FREEDOM OF OPERATION

Open registry offers shipowners the advantage of operating with minimum constraints; i.e., choosing the most economical shipbuilder, ship repair yard, selection of crew etc. These cost advantages can be important to an owner competing in the free market of international bulk cargo trading. It is a highly competitive industry with rates established by competitive forces. Flexibility of operations afforded under open registry is therefore a logical attraction in such an environment.

Open registry does not restrict owner as to ports vessels may enter, or customer that may or may not be served. Neither is the owner subject to extensive government trade and financial reporting requirements.(12) In many countries however, the government and/or authorities impose restrictive laws or fiscal policies both on the operation and chartering of ships.

1.3.4 TO AVOID HIGH MANNING COSTS

The wage levels paid to seamen and other personnel in shipping vary from one country to another.

Crewing is an area where considerable savings can be made, depending on the state of registry of vessel. Crew cost constitutes approximately 40 to 50 per cent of the overall ship operating costs. This statement may hold true particularly in the case of employing crew from high wage developed countries such as Sweden, West Germany, USA, etc. Hence, Open registry, with its flexible policy on crew selection, provides an excellent alternative, for shipowners wishing to become more competitive in a free market of shipping.

In developing countries where wages are considerably
lower than in the traditional maritime nations approximately one fifth; the difference in costs may add up to some $250,000,000, a year for middle size and large ships. Switching to flag of convenience therefore, is an advantage. (13)

In essence, open registry permits the owner to select what he believes to be the most cost-effective manning source. In view of shipowners' desire to make profits, there is a tendency towards recruitment of crew from relative inexpensive countries, where trained personnel are available and where government or union-imposed work rules are minimal or non-existent. It must be noted that cheap crew does not necessarily imply inferiority of qualification.

1.3.5 TO ACHIEVE FREEDOM FROM TECHNICAL RESTRICTIONS

Technical requirements are basically concerned with the safety of ships and crew and therefore to the advantage of shipowners. However, there is an increasing tendency on the part of governments in some developed countries, requiring technical modification of ships, acquiring new equipment, etc., the need of which are often questioned by independent shipowners, which contributes towards shipping being a very expensive venture. (14)

Many shipowners therefore find it profitable to register their ships in countries where rules are flexible. This does not necessarily imply the lack of existence of any standards at all. The point however, is, whilst there are national requirements which must be met, the rest of the issues relating to standards are delegated to Classification Societies and Insurance Companies, so that ordinary safety standards in keeping with international conventions are adhered to.
1.3.6 GENERALLY TO ACHIEVE LOWER COSTS

The combined effect of the factors as highlighted above is geared towards lower costs in order to remain competitive. Restrictive fiscal controls and other such practices under most flags limit the possibility of shipowners staying in the market or making profits.\(^{(15)}\)

Whilst discussions have more or less attempted to outline the apparent advantages of open registry shipping, the following factors cited below, are generally considered as the apparent disadvantages of open registry system.

1.4 APPARENT DISADVANTAGES OF OPEN REGISTRY

(i) Alledged absence of genuine link between the ship and the flag state;

(ii) Apparent inability of flag state to exercise proper and direct "control" over its ships, particularly those which do not regularly call at ports of the flag state. On the other hand, Port State Control, exercised by other countries over such ships, can prove to be very embarrassing to the flag state and can be more expensive to the shipowners concerned in the long run, resulting even in change in country of registry of the ships. In this connection, it may be also borne in mind that there is a marked tendency to treat ships of flags of convenience as "suspect" as regard maritime safety standards;

(iii) Likely difficulty in realizing the anticipated fees since the real principals (beneficial owners) are not in the flag state;

(iv) Apparent lack of credibility as a responsible maritime nation;
(v) Alleged inability to ratify and implement international conventions expeditiously;
(vi) Likely to attract criticism in international fora; and
(vii) Likely to be liable for trade union action by international trade unions i.e. ITF.(16)

The extent to which the aforementioned disadvantages exist, however, varies from one open registry to another; as some open registries are more reputable than others; in terms of maintaining relative high safety standards, including accountability and control of their fleet.

1.5 OTHER CONSIDERATIONS

S. G. Sturmey, a well known scholar on shipping, has identified three sets of forces which he describes as acting separately or together as regard the existence of open registries - repulsive forces, inhibitory forces, and the attractive forces.

Accordingly, the "repulsive forces" of certain registries are described to contain the following elements - high wage rates, excessive manning scales, strict tax laws, insistence on the use of nationality built ships at prices above world levels for example-repel national shipowners unless they are protected or aided by subsidies, cargo preference or in other ways.

Secondly, there are the "inhibitory forces" - these include defects in national maritime legislations, difficulties with foreign exchange transfers, rigid nationality rules for the manning of ships - all of which may cause an ambitious and expansion-minded shipowner to look for an alternative flag.

Lastly, there are the "attractive forces," of particu-
lar flags — those which offer a greater flexibility in operating procedures, i.e. limited taxation, crew selection etc.

In conclusion, it has been suggested by Sturmey, that forces of repulsion can be overcome by assistance to shipping through subsidies from government. (17)

The elements of the inhibitory forces depend on improving or updating national maritime legislations in keeping with relevant international conventions.

The competitive advantage which open registry has is mainly due to the predominance of the attractive forces as opposed to the others.

1.6 THE INTERNATIONAL ATTITUDE TOWARDS FLAGS OF CONVENIENCE (FOC)/OPEN REGISTRIES

INTRODUCTION

During the 1950's and 1960's, in many traditional maritime countries, there was hostility towards flags of convenience. Now views vary from qualified support to reserved opposition. (18)

1.6.1 THE INTERNATIONAL TRANSPORT WORKERS' S FEDERATION (ITF)

The International Federation of Ship, Dock and Riverside Workers, an organization which two years later, became known as the International Transport Workers' Federation, (ITF) was founded in 1896, by trade unionists from Great Britain, Sweden, United States, Germany, Holland and France.
The aims of the ITF, as stipulated in its constitution include the following:
- to promote respect for the trade unions and human rights worldwide;
- to work for peace based on social justice and economic progress;
- to help its affiliated unions defend the interest of their members;
- to provide research and information services to its affiliates;
- to provide general assistance to transport workers in difficulty;

ITF's aims as illustrated above, are based on the International Declaration of Human Rights.

The ITF has grown in strength and influence over the years. It unites more than 400 trade unions in more than 90 countries, representing over 5 million transport workers worldwide.(19)

As a result of its keen interest in shipping, the ITF has created a Special Seafarers Section, for the promotion of fair practices in the maritime shipping industry. The prime objective of this section is geared towards countering the apparent threat posed to seafarers' safety and social conditions posed by the registration of ships under flags of convenience.(20)

A flag of convenience, as defined by the ITF is one where the beneficial ownership and control of a vessel is found to lie elsewhere than in the country of the flag the vessel is flying.

Thus, ITF's campaign conducted against FOC ships jointly by its seafarers and docker's affiliates has two main objectives:
- To establish by international governmental agreement a genuine-link between the flag a ship flies and the nationality or residence of its owners, managers, and seafarers, as a means of eliminating the FOC system entirely;

- To ensure that seafarers who serve on flag of convenience ships, are protected from exploitation by shipowners.(21)

The political side of the campaign (lobbying governments and international organizations is dealt with through the ITF Seafarers' Section, whilst its "practical side," is handled through the Special Seafarers Department.

It must be noted however, that the ITF agitation is exclusively directed against FOC vessels and not vessels under their national flags. Such an apparent bias, contradicts and undermines the credibility of the organization. Consequently, the ITF is often accused of being an agent of European and North American trade unions, attempting to gain work for their members at the expense of seamen in the less developed countries employed on board FOC ships.

The ITF Collective Agreement is intended to cover seamen on vessels outside national wage agreements and to provide those seamen with the basic minimum conditions of employment. Its implementation normally depends on complaints being made by the crews of FOC vessels to local unions in a port and the local unions supporting them by threatening to boycott the vessel unless the conditions of the ITF Agreement are complied with.

The issuance of the Blue Certificate by the ITF, substantiates to seafarers' and dockers' union that a
ship's crew are covered by an agreement which meets the ITF standards. Presently, about 25% of FOC ships comply with the ITF agreement.

The ITF has had some impact on Flags of Convenience shipping. In 1950, the ITF Congress adopted a recommendation to concentrate boycott action against those ships which a defined minimum standard acceptable to the ITF was not applied, and to organize unorganized seafarers under the auspices of the ITF. This was indeed the beginning of the Special Seafarers Department of the ITF.(22)

In a response to a request from the ITF, the International Labour Organization (ILO), conducted an inquiry into working conditions on board Panamanian vessels, and concluded in 1949, that working conditions on board Panamanian ships were appalling and Panamanian legislations was totally inadequate. Accordingly, the ILO issued two Recommendations relating to seafarers' welfare, in 1957—Recommendations No.107 (The Engagement of Seafarers for service in vessels registered in a foreign country) and No.108 (Social Conditions and Safety of Seafarers).

Having been vindicated by the ILO's findings, the ITF, in December 1958, organized a worldwide boycott of FOC vessels. In the process, 300 ships were affected by the boycott. But this action also gave rise to certain legal actions in some countries which made affiliates there reluctant to take action.

Although there was a decline subsequently in FOC tonnage, from 13.6% of the world total in 1959 to 10.9% in 1962, the ITF's efforts designed to eliminate flags of convenience proved futile.(23)
The International Labour Organization, (ILO) was established in 1919, as a result of the Treaty of Versailles, concluded at the end of the first world war. The ILO operates under the umbrella of the United Nations, as one of its specialized agencies - a tripartite organization comprising of employers, workers and governments.

Unlike the ITF, the ILO have not directed its efforts against any particular type of flag. The ILO, however, endeavours to promote social and working standards generally on board ships, by providing a framework wherein shipowners/employers and seafarers alike can negotiate on a bilateral level concerning issues such as seamen’s wages, conditions of service, etc.

The ILO has adopted a number of relevant Conventions/Recommendations, in the field of maritime labour. One of the most outstanding is ILO convention No.147 "Merchant Shipping (Minimum Standards)." This convention includes provision for Port State Control, as well as by their implementation by the flag state.
1.6.2 THE UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENTS (UNCTAD)

The United Nations Conference on Trade and Development (UNCTAD), was established in 1964, as a specialized agency of the United Nations.

Since its founding, the UNCTAD Committee of Shipping have been active in initiating attacks against flags of convenience. Control over shipping constitute the basis of the UNCTAD controversy; although with the adoption of the convention on the Conditions for Registration of Ships, in 1986, the issue appear latent. Consequently, UNCTAD membership is divided into factions, representing varying interest on maritime shipping issues.

Accordingly, Group A and C represent (the Group of 77) largely developing countries from Africa, Asia, Central and South America, including the (COMECON) countries, China, and Yugoslavia, aligning.

Group B, is comprise of mainly the developed market economy countries, effectively the OECD group.

Whilst Group D, represent the Open Registry countries.

In view thereof, the flags of convenience argument as perceived principally by the Group of 77 countries, are basically three-fold:

- Open registry shipping hampers the development of national fleets of developing nations;

- There exist no "genuine-link" between the flag state and the ship;

- Developing nations have not equitably participated in world shipping as providers of world shipping services.
The foregoing arguments stemmed from the consideration that developing nations which accounts for over 50 per cent of the world’s trade by weight, have only 15.5 per cent in world shipping tonnage. This view largely reflects bulk shipping.

UNCTAD, being an international body where politics tend to dominate, the views of the Organization, has to a considerable degree, reflected the wish of the majority of its members - the Group of 77. UNCTAD, is regarded therefore, in some circles, as a Third World pressure group.

In consideration towards resolving the controversy of whether or not open registries should be phased-out, UNCTAD Committee on shipping adopted Resolution 43(S-III) recommending the convening of a conference of Plenipotentiaries to consider the adoption of an international agreement on conditions for the registration of ships.

The principal issues as presented by the Inter-governmental Preparatory Group, which was mandated to organize the conference, in relation to the FOC issue applied to:

1) manning of vessels; (2) the role of flag state in the management of shipowning companies and vessels; (3) equity participation in capital; and (4) identification and accountability of owners and operators.

Following two abortive sessions held in 1984 and 1985, inorder to end the deadlock within UNCTAD, over the key issues of manning, management; and ownership of vessels, as related to the FOC debate, the third session of the convention on the Conditions for Registration of Ships held in July 1985, was a success. Finally, a movement which began in 1974, with a view towards eliminating open registries, ended with the adoption of an international
convention on the conditions for registration of ships on February 8, 1986.

The following are the salient points of the aforementioned convention:

- The state of registration shall ensure that a satisfactory part of the crew are its nationals, while taking into account the availability of qualified seafarers in the country or territory;

- A flag state shall exercise its law and regulations for the ownership of vessels flying its flag;

- The state of registration shall ensure that the shipowning company or a subsidiary shipowning company is established within its territory in accordance with its laws and regulations before ships are accepted in its registry;

- The state of registration shall enter into its register of ships inter alia, information concerning the ship and its owner or owners;

- States shall establish a register of ships flying its flag, and the register shall be maintained in a management determined by the state in conformity with the relevant provision of this agreement.(24)

The convention on the conditions for registration of ships (not yet in force), is generally speaking a vague document; reflecting a political compromise between opposing factions within UNCTAD. Although, the convention has broadly outlined the criteria for establishing a genuine-link between flag state and vessel, it does not
prescribed means by which this objective can be attained.

The convention is entirely a flag state convention. No
duties have been prescribed for Port State Control. No
longer should a registry be referred to as an "open re­
gistry," or a traditional registry. For now, there exist
a unitary regime of classless society of national ship
registries.

1.6.4 THE INTERNATIONAL MARITIME ORGANIZATION (IMO)

The (IMO) came into existence in 1958, as a result of
the need for an international machinery to effectively
deal with problems relating to maritime affairs. Thus,
from the very beginning of the organization, the impro­
vement of maritime safety and the prevention of marine
pollution have been IMO's most important objectives.

In view of the above, the IMO has adopted several
international conventions geared towards the promotion of
of its objective: "safe shipping and cleaner oceans": Some
of these conventions include the following: LOADLINES,
MARPOL, SOLAS, OILPOL, COLREG, TONNAGE MEASUREMENT, AND
STCW.

1.6.5 TRADITIONAL MARITIME COUNTRIES

To some extent, the OECD countries have adopted the
views of their shipowners, particularly on safety and
social conditions as regard FOC. Hence, combatting the
use of substandard ships is perceived as the real prob­
lem, which is not confined to open registries. As such,
it is one which must be handled on a uniform basis
regardless of flag.

The General Council of British Shipping (GCBS) there­
fore comments: if a ship meets the standards prescribed by
IMO and ILO, it should not be subject to discrimination because of its owner, its flag, or the nationality of crew. (25)

1.6.6 THE EEC AND THE EUROPEAN PARLIAMENT

Fourteen European countries, including the nine EEC Community members, in 1982, signed the Paris Memorandum of Understanding on Port State Control. The failure of flag states to enforce safety standards led to the concept of Port State Controls. Basically, this system implies, harmonizing the regulations of the Community countries and applying a common procedure for the control of ships calling at their respective ports.

Port State Control is aimed at eliminating substandard ships which do not comply with relevant international conventions of IMO. (i.e. SOLAS, MARPOL, STCW etc.)

Vessels not meeting common standards as established under Port State Control regulations are banned or blacklisted or subjected to a fine being imposed.
CONCLUSION

Whereas there are several motivations for a shipowner registering ships under open registries, economic considerations predominate. Open registry is more cost-effective than operating under national flag, wherein tremendous fiscal controls and regulations exist.

Although organizations such as the ITF and UNCTAD, has been severely critical of safety standards on open registry vessels, their efforts coupled with international conventions adopted by IMO and ILO, have indeed contributed immensely towards increasing the level of safety awareness and standards of open registry fleet in general.

Finally, open registry usage have more or less become an acceptable norm within shipping, with even the so-called traditional maritime states and some developing countries finding the system economically advantageous.
REFERENCES

6. Ibid., p.4.
10. Ibid., p.37.
11. Ibid., p.37.
15. Ibid., p.38.
20. S.J. Bergstrand, Buy the Flag: Developments in the Open
23. Ibid., p. 4.
CHAPTER II.0
LIBERIA, A MARITIME FLAG STATE

PART I  EVOLUTION OF THE LIBERIAN REGISTRY

2.1 INTRODUCTION

The decline of the Panamanian registry between 1946 to 1949, marked the evolution of the Liberian Open Registry System, as Shipowners sought an alternate flag.

2.2 ORIGINS

Accordingly, it was Edward R. Stettinius jr. a former Corporation Director and former Secretary of State of the United States of America whose private initiatives brought to realization and establishment in 1947, the Stettinius Associates-Liberia, Incorporated. Using private capital and public influence, Stettinius envisaged his plans within the framework of providing economic aid to Liberia. (1) Thus, whilst he considered the prospects of venturing into other business enterprises, for example diamond mines, timber, iron ore—the eventual major export amongst others, the establishment of the Liberian Ship Registration System represents the most significant institutional survivor of the Stettinius Corporate activities of the period. Stettinius viewed the Liberian ship registration as a possible minor adjunct to his other Liberian enterprise. He noted that gasoline could be sold at a profit in Liberia for twenty-four cents a gallon, but it cost sixty-five cents due to a cartel worked out by Shell, Saacony-Vacuum and Texaco. He remarked, we must consider the possibility of Venezuela oil brought in by tankers, under the Liberian flag to break the cartel and
bring the price down. Stettinius considered the prospects of transporting iron ore from Monrovia to Baltimore could be transported at a rate under three dollars per ton if the Company used liberty ships manned by officers from developed countries, with the balance of the crew comprising of Liberians.(2)

Establishing a ship registration system in Liberia incidentally coincided with President Tubman's declared "Open Door Policy", which promised providing foreign investment upon assuming office in 1944. Confronted by his opponents who hoped to unseat him in the ensuing 1948 elections, Tubman found it politically expedient to endorse Stettinius proposals for the establishment of the Liberian Registry System, as this represented a notable administrative achievement for him. Tubman wanted visible results in the form of revenue to justify his arrangements with Stettinius.

Several members of Stettinius Associates had served as U.S. State Department or war-time Administration officials, and their contacts proved useful to the Company, as they developed the Liberian Maritime law and other proposals. Therefore, by July 21, 1946, the Maritime Code of Liberia was drafted. However, the Liberian President and Legislature changed the Maritime Code slightly, placing direct authority in the office of the Secretary of Treasury/Finance rather than the Secretary of Commerce, as the Company written draft had indicated. Another modification of the proposed Maritime laws which is of significance relates to the role of the Liberian Maritime Commissioner. The Commissioner, reporting to the Secretary of Treasure, was to issue rules and regulations directly, without required consultation which the proposed Stettnius organized contracting company had indicated in the first draft. Aside from these changes, the legislature...
approved draft kept almost fidelity to the original, even to the amount of fees and fines. In order to attract new ships in the burgeoning tanker market, the laws, provided for registration and recording of ship mortgages. The Liberian legislature accepted the slightly rewritten code in November 1948, and Tubman signed it into law on 16 December 1948. Because the code was properly enacted, it had some status, from an international point of view as other national laws governing ship registry and flag use. (3)

George Schaffer, a former Vice President of Chase National Bank in Panama, was appointed by the Corporation to set up offices in Liberia, incorporate the International Trust Company in Liberia, and obtain a contract between that company and the Liberian government to operate the Ship Registry system under the code.

The contract worked out by Schaffer provided that the company would deduct $0.325 of every $1.20 per ton for acting as a "quasi-official agent" of the Liberian government. The company as such, was exempted from any Liberian taxation because of its status.

Liberia's ship registration system, presented a clear departure from the Panamanian system in several important respects while it retained the features that attracted shipping to Panama's flag in the 1940's.

These features include the following:

1. The transfers and registry would be handled by the International Trust Company Office in New York, rather than a Consular network.

2. The system would be administered largely by International Trust Company employees, and not by the Patronage-appointee nationals of the Flag State.
3. The system would be frankly funded by the 27 percent ($0.325 of each $1.20) retention of fees, eliminating the necessity for irregular fee collection.

4. The code was written carefully, by American corporate officers, to conform to American needs.

5. Since the company-drafted code was duly passed by the Liberian legislature, it would have the status, in international law, of other national flag laws.

6. No provision for Liberian inspection or control of ships.

7. Liberian registry would benefit from the same exemption from taxation and labor restriction found in Panama in the tax-free environment, ship mortgages could be repaid on accelerated schedule out of earnings.

8. Liberian registered vessels could be owned by any citizen or corporate entity of any state in the world; Liberian incorporation was not required.

9. Minor advantages could be found in the fact that all laws and transactions would be written in English; Liberia's currency was the Liberian dollar.

In the early stages of the development of the company, the name Stettinius Associates was replaced, and the newly financed organization emerged as Liberian Development Corporation. The Liberia Development Company (LDC) continued as a separate entity from the ship registry.
enterprise. The International Trust Company, otherwise referred to as (INTRUSCO), and two other organizations were completely independent of each other. Considering this change, Stettinius informed President Tubman that the removal of his name from the organization implied no abandonment of the original goals.

As the International Trust Company recruited ship registry business in its first years, the first ship officially registered in 1949 under the new Liberian Maritime code was the "World Peace," a tanker owned by Starros Narchos and chartered to Gulf Oil.(5)

Within a relative short period of time, between 1949 to 1956, Liberia surpassed Panama both in terms of gross registered tonnage and number of ships registered.

The attraction of shipowners to the Liberian registry during its inception, was to a large extent attributed to Stettinius personal influence as a former statesman, coupled with the outstanding improvements of the Liberian maritime laws compared with that of Panama.

In addition, while never officially endorsed by the State Department, (U.S.A) the creation of the code under the leadership of a former Secretary of State, and its low-key review by a respected business leader under contract to the department, gave the organization and the Liberian registry system a degree of legitimation American shipowners never achieved by Panama.(6)

But as the Liberian flag gained prominence, it too became a target of attack from labor unions and some shipowners in the traditional maritime states.
Attempts by the European traditional Maritime States, to exclude Liberia and Panama from becoming members of the Maritime Safety Committee of IMO in 1949, provoked a legal dispute between the European traditional maritime states, on the one hand, and Liberia, Panama on the other. As a result, the issue found its way to the International Court of Justice for a possible settlement. The crux of the matter hinged on a minor organizational issue but assumed international significance due to the existing legal and union actions over Flag of Convenience Shipping.

According to Article 20 of the original (IMO) convention, a Maritime Safety Committee was to be elected by the (IMO) General Assembly. The Committee would consist of fourteen members; representatives of governments of those nations having an important interest in maritime safety, of which not less than eight shall be the largest shipping nations. While it was difficult to determine exactly who "owned" some vessels, in terms of the ultimate or beneficial ownership, it was clear that measured in terms of registered tonnage, both Liberia and Panama were among the top eight maritime nations in the world. Liberia ranked third largest, in 1959, with over ten million tons registered, while Panama ranked eighth with over four million tons.

Accordingly, the basis for the exclusion of Liberia and Panama for election to the membership of the Maritime Safety Committee in 1959, as articulated by the British, Dutch, Belgian, and Norwegian representatives emanated from the following considerations:
Neither Panama nor Liberia had any appreciable number of shipowners; the vessels in their registries belonged to nationals of other states. Thus, neither country could be called a "shipowning nation."

The Maritime Safety Committee was to be drawn from those nations having an interest in safety. "Neither Panama nor Liberia was at the moment in position to make any important contribution to maritime safety," according to the British delegate.

Since the convention that established IMO called for an "election," the automatic selection of representatives of the top eight nations on grounds of tonnage could not have been the intent of the framers and signers of the convention. An "election" implied choice, not automatic selection.(7)

Whilst the objective of the plaintiffs, the European traditional maritime states, in the aforementioned dispute was ostensibly geared towards preventing the defendants, Liberia, Panama and with the United States aligned, from becoming members of IMO Maritime Safety Committee, (MSC), based on the lack of genuine link principle between these States and ships flying their flags, there was embedded another motive - the question of the legitimacy of the two countries as maritime nations.

The International Court of Justice, which met in April and May respectively of 1959, rendered its decision on June 8, 1960. Accordingly, the Court ruled against the traditional maritime states, holding that the Assembly did not hold its election properly when it excluded Liberia and Panama. The choice of representation to IMO's Maritime Safety Committee, the Court ruled, was indeed
automatic, and the first eight nations chosen for the Safety Committee should be selected on the basis registered tonnage alone. The decision stated, neither the nationality of stockholders of shipping companies nor the notion of a genuine link between ships and their country is relevant for determining a shipowning nation. (8)

As such the decision reflected a victory for the "law of the flag," as opposed to the genuine link principle. Therefore, what had been a political and diplomatic maneuvering at IMO, became through the reassertion of scholars and the public relations of ship owners, a dictum of international law.
2.4 THE ORGANIZATIONAL/ADMINISTRATIVE STRUCTURE OF LIBERIA'S MARITIME ADMINISTRATION

INTRODUCTION

The Liberian Maritime Program operates on commercial principles. Its development and growth can be traced to the adoption by Liberia of liberal economic policies which attracted shipowners wishing to compete successfully in seaborne commerce worldwide. Although equally affected by the recession in the shipping industry, Liberia leads the rest of the world with the largest registered tonnage. (9)

The Ministry of Commerce, Industry and Transportation, is responsible for all Maritime transport activities in the country. However, the Ministry of Finance, through the Bureau of Maritime Affairs, is charged with the responsibility of managing the affairs of the Liberian maritime programme, operating under the Liberian maritime law and maritime regulations.

A Commissioner of Maritime Affairs, appointed by the President, heads the Bureau—under the supervision of the Minister of Finance, who is responsible for implementing matters pertaining to Liberian Flag Shipping. The Commissioner is principally responsible for implementing the provisions of the Liberian Maritime laws and Regulations. He is assisted in the Administration of the program by a team of professionals stationed at home and abroad. The Bureau's central office is in Monrovia, where maritime policy matters are formulated. A Deputy Commissioner Office, with headquarters in the United States, is the principal Operations Office for carrying out the Bureau's functions. There are major regional inspection offices in Rotterdam and New York and sub-regional offices in
London, Piraeus and Hong Kong. There are basically three departments in the Administrative structure of the Bureau of Maritime Affairs: Personnel, Licensing, Safety and Registration and registration. (Refer to Exhibit II), for the Organizational Structure of the Bureau of Maritime Affairs, of Liberia.

The principal legislation covering ship registration is based on the United States Mercantile law and is contained in Title 22 (Maritime Law) of the Liberian code of laws of 1956. This was updated by amendments made in 1986. Title 22 sets detailed provisions covering the Bureau’s functions which include:

- registration of ships under the Liberian flag worldwide;
- handling of mortgage matters;
- registration of ships, fishing vessels and other small crafts in Liberia;
- maritime safety administration;
- registration and licensing of seafarers;
- provision of seamen’s I.D. books;
- organizing training programme for Liberian seamen;
- safety inspection and survey of ships;
- investigation of maritime casualties;
- collection of all maritime revenues from ocean-going vessels; and
- the issuance of certificates of competency for seafarers, both foreign-going and domestic. (10)

Liberia maintains a comprehensive legislative and regulatory framework which ensures that the Liberian register fleet complies fully with international agreed standards at the International Maritime Organization and the International Labour Organization. (11)
EXHIBIT II
ADMINISTRATIVE ORGANIZATION OF THE LIBERIAN BUREAU OF MARITIME AFFAIRS

MINISTRY OF FINANCE

OFFICE OF COMMISSIONER OF MARITIME AFFAIRS

OFFICE OF DEPUTY COMMISSIONER

Licensing and Radio Department

Merchant Marine Personnel Division

Radio Communications Division

Marine Safety Department

Investigation Division

Technical Division

Safety Analysis Division

Documentiation, Recording and Registration Department

Recording Division

Initial Registration Division

Documentation Division

Marine Inspection Division I

Regional Marine Safety Office (Far East)

Marine Inspection Division II

Regional Marine Safety Office (UK & Europe)

Regional Marine Safety Office (Mediterranean)
As a member of the above mentioned organizations, Liberia has ratified several relevant maritime conventions. (Refer to Annex I).
There is a strong and effective Liberian Shipowners' Association, the Liberian Shipowners' Council, (LSC) which exercises through more than 72 shipowners and companies representing a tonnage of 27 million gross registered tonnage, considerable influence on international shipping policy issues and the quality of the Liberian registry. The (LSC) does extremely aggressive public relations work, organizes conferences on highly problematic shipping issues and is heavily involved in worldwide controversies regarding the New International Maritime Order.

MANNING AND CERTIFICATION

In the case of manning, Liberia allows shipowners the flexibility of choosing crews from wherever they please, as long as such crews are qualified in accordance with national law and regulation. This is permissible under Article 9(2b) which accepts manning arrangements valid and enforceable pursuant to Liberian law and Article 9(4) which permits persons of other nationalities to serve on board ships registered.(13)

Officers must possess a Liberian licence, valid for 5 years, which may be issued against a foreign licence recognized by the Liberian authorities. Seafarers must hold a valid Liberian Seaman's Identification and Record Book. Certain ratings forming part of the navigation or engineering watches, and all officers and ratings participating in cargo loading or discharge operations aboard oil tankers, chemical tankers and liquefied gas tankers, are required as of April 1986 to be certificated for spe-
cial qualifications with endorsement in their Seamen’s Identification and Record Book.(14)

2.4.2 BAREBOAT CHARTER

Bareboat chartering in and out from the Liberian registry is permitted. This is one area where the Liberian laws and regulations are substantially different from the newly adopted Convention on the Condition for Registration of Ships. According to the Convention, a State accepting a bareboat charter-in ship must comply with the relevant provisions and ensure that the ship is subject to its full jurisdiction and control in every respect as far as the internationally acceptable duties of a flag state are concerned. Such duties do not include responsibility for the property rights in the ship. That responsibility remains within the purview of the "primary" State of registration even while the ship flies the flag of another State.

Under present Liberian regulations the ship, even while bareboat chartered out, must continue to be subject to Liberian periodic special surveys and other examinations and Liberian administrative proceedings in the event of casualty.

The Liberian bareboat charter regulations have developed essentially with the view to protect mortgagees and not merely as a means of accommodating charterers. Existing regulations do not yet provide for a bareboat charter-in facility. This and other aspects of the bareboat charter arrangement are presently under review and study, particularly in the light of the aforementioned Convention on the Conditions for the Registration of Ships; (not yet in force). (15)
2.5 ECONOMIC BENEFITS

Countries provide open registry as a means of revenue generation. It is an attractive, non-depleting way to generate earnings in hard currency. (16)

For a developing country such as Liberia, with declining revenues in other sectors of its economy, the earnings from its open registry business is indeed quite significant. Accordingly, the net revenue to the Government of Liberia from its Maritime program is reported to have totalled 17.0 million dollars in 1984. (See Exhibit III, for revenues generated from the Liberian Open Registry System 1951-1984).

As any service rendered in the sphere of business activity requires compensation, providing a system of ship registration; otherwise referred to as open registry is no exception.

Liberia's Open Registry system therefore, should be perceived within the framework of a business venture designed to generate revenue within the framework of its national economic interest. It indeed requires a special-of service inorder to maintain and retain the reputation which Liberia has acquire over the years, as a leading open registry state.

2.6 CONCLUSION

Rather than being a mere collector of registration and other related fees, Liberia should maximize its total economic gains from the system of ship registration, within the scope of a wider maritime framework.
### EXHIBIT III

**Net Earning from Liberia's Registry (1951 - 1984) in Millions of US Dollars**

<table>
<thead>
<tr>
<th>Year</th>
<th>Initial Registration fees &amp; tonnage tax</th>
<th>Annual tonnage tax</th>
<th>Add'l Registration fees and tonnage tax</th>
<th>Change of name fees</th>
<th>Total</th>
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<td>.019</td>
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<td>.095</td>
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<td>.056</td>
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<td>4.6</td>
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<td>4.8</td>
<td>.198</td>
<td>.011</td>
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<td>1980</td>
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<td>4.0</td>
<td>.308</td>
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<tr>
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<td>14.6</td>
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<tr>
<td>1984</td>
<td>3.9</td>
<td>13.4</td>
<td>(.045)</td>
<td>.018</td>
<td>17.3</td>
</tr>
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</table>

**Total in million US dollars:** 249.8


CHAPTER II
PART II PRESENT POSITION OF THE LIBERIAN MERCHANT FLEET

2.2.1 FEATURES OF THE LIBERIAN FLEET

Whilst in 1984, there were 1,934 vessels, with a tonnage of 62,024,700 dwt, registered in Liberia, at November 1986, the Bureau of Maritime Affairs had under its registry, 1,808 ships amounting to more than 58,179,717 gross registered tons. (Refer to Table I).

This decline was mainly due the scrapping of some large oil tankers and the general slump in global maritime trade.

Of these ships registered in Liberia, four (4) operates foreign-going from Liberia, and about the same number operates on domestic coastal services.

The Liberian registry of ships reflect a youthful fleet with more than half of the vessels less than ten years old, consisting mostly of large vessels (30 per cent weighing more than 100,000 dwt). Oil tankers constitute 53% of the fleet, representing 23 percent of the world’s tankers); ore carriers and various bulk carriers. There are relative few container vessels.

(Refer to Exhibit IV, for characteristics of the Liberian fleet).

Liberia has no national shipping line at present. However, there are strong indications of the possibility of establishing a shipping line on a joint venture basis with an established foreign shipping company. (17).

Presently, there are two (2) private indigenous shipping companies operating from Liberia. They are:

1. DENC0 SHIPPING COMPANY
2. OMINATA SHIPPING
<table>
<thead>
<tr>
<th>Divisions of Tonnage</th>
<th>0-4 Years</th>
<th>5-9 Years</th>
<th>10-14 Years</th>
<th>15-19 Years</th>
<th>20-24 Years</th>
<th>25-29 Years</th>
<th>30 Years &amp; Over</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-499</td>
<td>3</td>
<td>1,463</td>
<td>8</td>
<td>2,592</td>
<td>21</td>
<td>9,131</td>
<td>7</td>
<td>2,432</td>
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<tr>
<td>500-999</td>
<td>7</td>
<td>5,367</td>
<td>9</td>
<td>6,180</td>
<td>16</td>
<td>12,863</td>
<td>2</td>
<td>1,997</td>
</tr>
<tr>
<td>1,000-1,499</td>
<td>3</td>
<td>3,837</td>
<td>8</td>
<td>12,668</td>
<td>15</td>
<td>22,555</td>
<td>2</td>
<td>2,430</td>
</tr>
<tr>
<td>1,500-1,999</td>
<td>3</td>
<td>3,837</td>
<td>8</td>
<td>12,668</td>
<td>15</td>
<td>22,555</td>
<td>2</td>
<td>2,430</td>
</tr>
<tr>
<td>2,000-2,499</td>
<td>1</td>
<td>1,968</td>
<td>1</td>
<td>1,763</td>
<td>3</td>
<td>5,367</td>
<td>1</td>
<td>1,780</td>
</tr>
<tr>
<td>2,500-2,999</td>
<td>1</td>
<td>1,968</td>
<td>1</td>
<td>1,763</td>
<td>3</td>
<td>5,367</td>
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<td>1,780</td>
</tr>
<tr>
<td>3,000-3,499</td>
<td>3</td>
<td>8,249</td>
<td>12</td>
<td>41,743</td>
<td>18</td>
<td>59,606</td>
<td>7</td>
<td>21,645</td>
</tr>
<tr>
<td>4,000-4,499</td>
<td>4</td>
<td>44,096</td>
<td>23</td>
<td>113,715</td>
<td>29</td>
<td>141,244</td>
<td>14</td>
<td>74,126</td>
</tr>
<tr>
<td>5,000-5,499</td>
<td>4</td>
<td>23,897</td>
<td>16</td>
<td>101,366</td>
<td>29</td>
<td>70,038</td>
<td>7</td>
<td>45,271</td>
</tr>
<tr>
<td>6,000-6,499</td>
<td>6</td>
<td>44,722</td>
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<td>14,400</td>
<td>5</td>
<td>33,267</td>
<td>7</td>
<td>53,827</td>
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<tr>
<td>7,000-7,499</td>
<td>2</td>
<td>172,521</td>
<td>48</td>
<td>440,993</td>
<td>21</td>
<td>192,066</td>
<td>22</td>
<td>194,429</td>
</tr>
<tr>
<td>8,000-8,499</td>
<td>2</td>
<td>364,802</td>
<td>73</td>
<td>906,310</td>
<td>71</td>
<td>906,169</td>
<td>45</td>
<td>344,956</td>
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<tr>
<td>9,000-9,499</td>
<td>3</td>
<td>906,286</td>
<td>103</td>
<td>1,921,725</td>
<td>114</td>
<td>1,955,193</td>
<td>25</td>
<td>422,918</td>
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<tr>
<td>10,000-10,499</td>
<td>5</td>
<td>2,347,792</td>
<td>54</td>
<td>1,293,082</td>
<td>37</td>
<td>864,452</td>
<td>48</td>
<td>1,200,173</td>
</tr>
<tr>
<td>11,000-11,499</td>
<td>8</td>
<td>2,347,792</td>
<td>54</td>
<td>1,293,082</td>
<td>37</td>
<td>864,452</td>
<td>48</td>
<td>1,200,173</td>
</tr>
<tr>
<td>12,000-12,499</td>
<td>3</td>
<td>173,340</td>
<td>5</td>
<td>421,687</td>
<td>13</td>
<td>980,204</td>
<td>7</td>
<td>513,980</td>
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<tr>
<td>13,000-13,499</td>
<td>2</td>
<td>186,862</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>491,199</td>
</tr>
<tr>
<td>14,000 and above</td>
<td>2</td>
<td>186,862</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>491,199</td>
</tr>
</tbody>
</table>

TOTAL 319 7,456,057 533 16,577,148 631 27,272,851 258 5,843,264 48 759,219 14 121,470 5 49,708 1,808 58,179,717

NB. AVERAGE CREW SIZE PER VESSEL IS 16

SOURCE: BUREAU OF MARITIME AFFAIRS- R. L.
### CHARACTERISTICS OF THE LIBERIAN FLEET

<table>
<thead>
<tr>
<th>TYPES</th>
<th>LIBERIAN FLEET</th>
<th>WORLD FLEET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of vessels</td>
<td>Tonnage (tdw)</td>
</tr>
<tr>
<td>Oil tankers</td>
<td>506</td>
<td>33419728</td>
</tr>
<tr>
<td>Oil tankers/chemical</td>
<td>42</td>
<td>692761</td>
</tr>
<tr>
<td>Chemical tankers</td>
<td>57</td>
<td>730447</td>
</tr>
<tr>
<td>Liquefied gas tankers</td>
<td>51</td>
<td>1619336</td>
</tr>
<tr>
<td>Oil tankers/bulk carriers</td>
<td>114</td>
<td>6617534</td>
</tr>
<tr>
<td>Oil tankers/ore carriers</td>
<td>647</td>
<td>15033510</td>
</tr>
<tr>
<td>Freight vessels</td>
<td>338</td>
<td>2528508</td>
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<tr>
<td>Container ships</td>
<td>36</td>
<td>484949</td>
</tr>
<tr>
<td>Other</td>
<td>143</td>
<td>897926</td>
</tr>
<tr>
<td>Total</td>
<td>1934</td>
<td>62024700</td>
</tr>
</tbody>
</table>

Table 1. — Types of vessels  
(Source: Lloyd's Register of Shipping - Statistical Tables 1984)
Denco presently operates seven (7) coastal vessels (domestic and international). (Refer to Figure I). The Company is involved in agency work, clearing and forwarding and stevedoring. It also holds the agency for Lloyds Underwriters and are surveyors and representatives for a number of underwriters:(18)

<table>
<thead>
<tr>
<th>Types/Ship</th>
<th>Name/Shipping</th>
<th>General Cargo</th>
<th>Tanker</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal</td>
<td>Coastal Denco</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Coastal</td>
<td>Domestic Denco</td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Coastal</td>
<td>Internat'l Ominata Shipping</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>
2.2.2 SAFETY STANDARD OF THE LIBERIAN FLEET

As a consequence of the stringent safety measures (Ship Inspection Program) introduced in 1972, the Liberian Bureau of Maritime Affairs, claims that a number of ships left the Liberian registry. It is estimated that as many as seventy to eighty vessels were affected. (19) In order to perform ship inspection—which are required periodically—the Bureau of Maritime Affairs relies on a network of independent marine survey firms it has contracted within 138 ports in 21 countries. Should deficiencies in safety equipment or licence violations be found during the periodic (not less than annual) inspection, a penalty is imposed on the shipowner. Effective as of 1976, vessel inspection frequency has been increased to every nine months for vessels of over 20 years old. Passenger vessels are inspected quarterly.

The rigid enforcement of safety measures have over the years reduced Liberian vessel casualties in 1979, for example, from 16 lost to 8 in 1983 or from a ratio of 1.57 to world's loss in 1979 to a ratio of only 0.63 in 1983. (20)

Insofar as safety is concerned, Liberia as a Flag State has made considerable effort, in order to improve the safety standards of its fleet. As "SEATRADE" magazine rightly comments in its October 1985, bulletin; when it comes to safety of vessels on a world-wide basis, discounting casualties as a result of the Gulf War, Liberia is now, amongst the Angels. (21) (See Exhibit V; safety record of the Liberian fleet i.e. average % losses between 1980 - 1984).

Considering the improvement in Liberia's ship safety standard records, this eliminates any unfair parallels and any identification of Liberian Open Registry System, with substandard ship.
<table>
<thead>
<tr>
<th>Country</th>
<th>Average Percentage Losses Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>World shipping</td>
<td>0.36</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1.36</td>
</tr>
<tr>
<td>Greece</td>
<td>0.98</td>
</tr>
<tr>
<td>South Korea</td>
<td>0.63</td>
</tr>
<tr>
<td>Rumania</td>
<td>0.88</td>
</tr>
<tr>
<td>Spain</td>
<td>0.87</td>
</tr>
<tr>
<td>Panama</td>
<td>0.83</td>
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<td>Bahamas</td>
<td>0.74</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.53</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>0.47</td>
</tr>
<tr>
<td>Italy</td>
<td>0.34</td>
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<tr>
<td>LIBERIA</td>
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<td>Canada</td>
<td>0.26</td>
</tr>
<tr>
<td>USA</td>
<td>0.26</td>
</tr>
<tr>
<td>Argentina</td>
<td>0.25</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.23</td>
</tr>
<tr>
<td>Turkey</td>
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<td>Saudi Arabia</td>
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</tr>
<tr>
<td>India</td>
<td>0.15</td>
</tr>
<tr>
<td>Japan</td>
<td>0.10</td>
</tr>
<tr>
<td>USSR</td>
<td>0.04</td>
</tr>
<tr>
<td>France</td>
<td>0.02</td>
</tr>
<tr>
<td>Norway</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Table 5. — Main fleets of two million tldw or more.

Average percentage losses recorded between 1980 and 1984.
(Source: International Maritime Insurers Union.)
Only vessels inspected and given approval by the below listed Classification Societies, qualify for a Certificate of Registry:

- The American Bureau of Shipping
- Lloyd's Register of Shipping
- Bureau Veritas
- Det Norske Veritas
- Germanisher Lloyd
- Nippon Kaiji Kyoba (22)

Concerning the issue of actual owners of the Liberian fleet, the United States of America, Hong Kong, Greece, and Japan, predominantly owned a considerable percentage. (Exhibit VI, shows the list of countries of beneficial ownership of the Liberian fleet).
EXHIBIT VI

"BENEFICIAL" OWNERSHIP OF THE LIBERIAN FLEET

<table>
<thead>
<tr>
<th>Country or territory of origin of shipowners</th>
<th>Number of vessels</th>
<th>Tonnage (tdw)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>336</td>
<td>38 151</td>
<td>31</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>410</td>
<td>27 214</td>
<td>22.1</td>
</tr>
<tr>
<td>Greece</td>
<td>247</td>
<td>18 407</td>
<td>14.9</td>
</tr>
<tr>
<td>Japan</td>
<td>199</td>
<td>10 216</td>
<td>8.3</td>
</tr>
<tr>
<td>Norway</td>
<td>158</td>
<td>6 275</td>
<td>5.1</td>
</tr>
<tr>
<td>West Germany</td>
<td>88</td>
<td>2 190</td>
<td>1.7</td>
</tr>
<tr>
<td>Unspecified</td>
<td>69</td>
<td>2 850</td>
<td>2.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>39</td>
<td>2 345</td>
<td>1.9</td>
</tr>
<tr>
<td>Switzerland</td>
<td>57</td>
<td>3 332</td>
<td>2.7</td>
</tr>
<tr>
<td>China</td>
<td>5</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>10</td>
<td>989</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>38</td>
<td>1 282</td>
<td>1.1</td>
</tr>
<tr>
<td>Israel</td>
<td>25</td>
<td>1 355</td>
<td>1.1</td>
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<td>Italy</td>
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<td>450</td>
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</tr>
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<td>Indonesia</td>
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<td>309</td>
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<tr>
<td>Netherlands</td>
<td>16</td>
<td>729</td>
<td></td>
</tr>
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<td>Monaco</td>
<td>17</td>
<td>1 053</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>21</td>
<td>766</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>15</td>
<td>839</td>
<td></td>
</tr>
<tr>
<td>Other</td>
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<td>2.4</td>
</tr>
<tr>
<td>Unidentified</td>
<td>10</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 902</strong></td>
<td><strong>122 830</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4. — Effective ownership of Liberian fleet in 1984
(Source: CNUCED).
In 1979, a study commissioned by the Bureau of Maritime Affairs of Liberia, entitled, "Economic Impact of Open Registry Shipping," commented on the employment situation aboard Liberian registered ships. It revealed that the total number of crews was approximately 25,000 officers and over 60,000 ratings. (Refer to Appendix A, for a survey of distribution of personnel employed on the Liberian fleet on a country by country basis). However, less than 1% (one percent) of the total personnel employed, as stipulated above are Liberian nationals. (It must be noted however that the total number of seafarers employed aboard Liberian registered ships is presently diminished due to a reduction in fleet size and crew deployment).

Crew origins however, reflects a wide dispersion of nationalities employed on Liberian vessels. Accordingly, the main countries providing officers and crew are the OECD countries, especially Italy, Spain; Greece, the United Kingdom, and Japan; China, Hong Kong and Taiwan; and South Korea. Some of the poorer developing countries such as the Phillipines, India, and Indonesia also provide crew on board Liberian registry vessels.(23)

Of the total of 24,960 officers employed on the Liberian fleet, as cited in the aforementioned study in 1979, 11,473 or 46 percent are from the developed OECD countries and a further 6,845 or 27 percent from China, Hong Kong and Taiwan. South Korea accounts for 1,932 or 8 percent and the Phillipines for 2,280 or 9 percent.

Of the total of 60,776 ratings, 21,110 or 35 percent are from the OECD countries and 15,191 or 25 percent from China, Hong Kong and Taiwan. In this category, however,
some of the least developed countries notably the Philippines, India and Indonesia feature prominently, and as a group the least-developed countries account for about 28 percent of the total. South Korea, with (4,841) ratings accounted for another 8 percent.(24)

The largest nationality of unlicensed personnel is Chinese, followed by Filipino, Greek, Italian Korean, Spanish and Indian. Among licensed personnel, the Chinese is again featured as the largest nationality, followed by the Greek, Italian, Korean, Filipino, British and Spanish. The above employment figures illustrates an important feature of the Liberian registry fleet. Although Liberian flag vessels employ virtually relative few nationals, it is interesting to note the significant extent to which the larger national flags depend on non-nationals as ratings.(25)

As open registry enables an owner to select crews from a world-wide personnel pool, the result tends to be geared towards a more labour intensive shipping industry, and increased job opportunities for persons from lower labor cost areas.

Of some significance, however, a considerable percentage of the crews and officers aboard Liberian registered vessels come from countries in the middle income group. (Appendix B, illustrates five groups of countries, based on per capita income parameters; while illustrating a classification of developing countries according to shipping interest and GNP per head). More than two-thirds of the seafarers come from countries with $500-$499 per capita incomes. Relatively few unlicensed crew are from the highest income group-though 12 percent of the officers are from this group.

However, according to a five year trend in the number of marine officers licensed by the Bureau of Maritime Affairs, R.L., the data indicate a definite upward trend
in the percentage of licensed officers from the lower income countries. This trend is considered quite significant. It strongly suggest a skill upgrading and transfer of technical capability is taking place. Personnel from the lower income countries are displacing licensed officers from the higher income countries. From a viewpoint of worldwide economics and social development, this is a very favorable trend. (26)

Over the years, there has been a tremendous economic impact in some countries from wages of seafarers employed on Open registry vessels. Because of its importance, it is relevant to mention same.

- The Phillipines National Seamen Board reports there are approximately 50,000 Filipino seamen employed on foreign registry vessels. Their earnings are about ten times the salary they would make in an equivalent domestic job. The foreign exchange earnings flowing into the Central Bank from these jobs was $120 million in 1978. In addition, seamen were among the ten largest earners of foreign exchange for the Phillipines in 1976. This trend continues to exist even today.

- The Korean Maritime and Port Administration reports an employment of 17,550 Korean seamen on foreign registry ships in 1978. This is a substantial growth from the previous year total of 13,462 seamen. Foreign exchange earnings associated with these jobs was $88 million in 1977 and $100 million in 1978.

- The Taiwan Advisory Committee for the Foreign Employment of mariners reports employment of 20,925 Taiwanese on foreign registry ships in 1978. Of this number, 7,512 were licensed officers. No official estimate of
foreign exchange earnings is mentioned.

- The Deputy Director General of Shipping, Government of India, reports 11,105 Indian seamen on foreign registry ships in 1978, produced about $30 million in income. Of this number about 2,000 were employed on Open Registry vessels—the remainder on British and other flags.(27)

(In addition, refer to Exhibit VII, for revenue generated by seafarers employed on Liberian registered ships, during 1984.)

A reputable scholar on Shipping matters, S.G. Sturmey, sums up the issue of developing countries citizens' employment on foreign vessels in a rather rhetorical fashion. "If a developing country does not have the capital to provide the means to employ all its potential workforce, which is better; that they starve, that they emigrate or that they work on foreign ships"?(28)

2.2.4 CONCLUSION

The Liberian registered of ships provides an excellent opportunity of Liberian seafarers gaining employment. As a developing country, with relative low income wages Liberia could also provide low cost crew, provided they are trained and duly certificated in accordance with international standards.
### Exhibit VII

**Revenue Generated by Seafarers**

1984

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount (Million US $)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>38.12</td>
<td>1</td>
</tr>
<tr>
<td>Philippines</td>
<td>31.60</td>
<td>2</td>
</tr>
<tr>
<td>China</td>
<td>29.00</td>
<td>3</td>
</tr>
<tr>
<td>South Korea</td>
<td>27.60</td>
<td>4</td>
</tr>
<tr>
<td>India</td>
<td>14.10</td>
<td>5</td>
</tr>
<tr>
<td>Taiwan</td>
<td>10.50</td>
<td>6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.80</td>
<td>7</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.30</td>
<td>8</td>
</tr>
<tr>
<td>Burma</td>
<td>2.10</td>
<td>9</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1.80</td>
<td>10</td>
</tr>
<tr>
<td>Chile</td>
<td>1.60</td>
<td>11</td>
</tr>
<tr>
<td>Egypt</td>
<td>1.14</td>
<td>12</td>
</tr>
<tr>
<td>Colombia</td>
<td>.85</td>
<td>13</td>
</tr>
<tr>
<td>Syria</td>
<td>.69</td>
<td>14</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>.61</td>
<td>15</td>
</tr>
<tr>
<td>Paraguay</td>
<td>.54</td>
<td>16.5</td>
</tr>
<tr>
<td>Singapore</td>
<td>.54</td>
<td>16.5</td>
</tr>
<tr>
<td>Jamaica</td>
<td>.39</td>
<td>18</td>
</tr>
<tr>
<td>Turkey</td>
<td>.36</td>
<td>19</td>
</tr>
<tr>
<td>Uruguay</td>
<td>.34</td>
<td>20</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>.27</td>
<td>21</td>
</tr>
<tr>
<td>Thailand</td>
<td>.23</td>
<td>22.5</td>
</tr>
<tr>
<td>South Africa</td>
<td>.23</td>
<td>22.5</td>
</tr>
<tr>
<td>Maldives</td>
<td>.22</td>
<td>24</td>
</tr>
<tr>
<td>Peru</td>
<td>.19</td>
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</tr>
<tr>
<td>Guatemala</td>
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<td>26</td>
</tr>
<tr>
<td>Nigeria</td>
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<td>27</td>
</tr>
<tr>
<td>Trinidad</td>
<td>.10</td>
<td>28</td>
</tr>
<tr>
<td>Morocco</td>
<td>.04</td>
<td>29.5</td>
</tr>
<tr>
<td>Algeria</td>
<td>.04</td>
<td>29.5</td>
</tr>
</tbody>
</table>

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Total: 172.75

Mean: 5.76

**Source:** Bureau of Maritime of Liberia, 1985.
CHAPTER II
PART III

BACKGROUND TO MARITIME TRAINING ACTIVITIES/ROLE OF THE
BUREAU OF MARITIME AFFAIRS R.L.

2.3.1 INTRODUCTION

Although Liberia's ship registration system began in 1949, it was not until 1975 when the Authorities of the Bureau of Maritime Affairs initiated a formal training program in order for eligible Liberians to pursue careers in the shipping industry; as only a very few Liberians had the requisite specialized training needed to get them employed aboard ships and to fill other maritime related posts ashore.

Pursuant to a 1975 Agreement between the Government of Liberia and the International Trust Company ITC, the Authorities of the Bureau of Maritime Affairs, acknowledged the need to redress the situation and henceforth proceeded to take a number of measures.(29)

Considering the high cost involved related to maritime training, the need for finance in order to sustain a training scheme is paramount. In this connection, the BMA initiated an effort and was successful in receiving a commitment from the Liberian Shipowners for an annual contribution specifically earmarked for training. Consequently, a training fund was established as per Liberia Maritime Regulations, provision; RLM-108 section 2.40(2)(c) and subsection (3), accordingly.

With the availability of training funds, the Bureau of Maritime Affairs embarked upon a training program. Its training program is divided basically into two types: External and Internal. The external training is designed
for personnel desirous of obtaining a licence of competen-

cy in the engine/deck and related maritime disciplines;

and the internal training component is geared towards

training of general-purpose ratings. Therefore, a number

of external training institutions in the United States of

America and Egypt were identified for the training of of-

ficers, whilst the Union Marine Training Institute (UMTI)

located in Marshall, Liberia catered to the training of

general-purpose ratings. (30)

Since the inception of its training program, the BMA

has trained a total of fifty-three (53) personnel in

Maritime related fields. Of this number, twenty-six (26)

undertook courses at the Arab Maritime Transport Academy,

Egypt, whilst another twenty-seven (27) undertook courses

at various maritime training institutions mainly in the

United States. Courses pursued by students sponsored by

the BMA included the following:

- Navigation
- Marine Engineering
- Naval Architecture
- Admiralty Law
- Marine Affairs
- Chemical Engineering
- Material and Logistics Management
- Survival and Inspection
- Nautical Inspection
- Marine Technology
- Maritime Economics
- Radio and Electronics
- Nautical Science (31)
The establishment of official relationship with the Arab Maritime Transport Academy (AMTA), Egypt, dates back to January 8, 1960, when a Technical Assistance Agreement was signed between the Government of Liberia and the Arab Fund for Technical Assistance to Africa and Arab countries. Consequently, fourteen (14) scholarships were made available to deserving Liberians in order to pursue studies in the areas of Marine Engineering and Navigation. Therefore, nine (9) fellowships was granted to personnel from the National Port Authority, to study Navigation and Marine Engineering respectively; whilst the remaining five (5) fellowships were utilized by trainees selected by the Bureau of Maritime Affairs, (BMA).(32)

Upon the termination of the Technical Assistance Program in 1982, the BMA continued to maintain a favourably good relationship with (AMTA), as an additional twelve (12) students were subsequently enrolled at the Institute.

However, there were some constraints encountered by the Bureau in relationship with students sent to (AMTA), as regard:

- Unavailability of textbooks;
- Language;
- Social activities;(33)

As a result of the reasons stipulated above, the (BMA) has in recent times decided to explore other avenues of training in order to avoid further complications.
The establishment of an Organization known as the Ministerial Conference of West and Central African States on Maritime Transport, in 1975, by Liberia and other African States, namely, Sierra Leone, Cameroun, The Gambia, and Ghana, gave consideration, inter alia, in its aims and objectives to the training of both sea-going and shore personnel.

Accordingly, with its Permanent Secretariat based in Abidjan, the Ministerial Conference, in 1980, established two Regional Maritime Academies—the Francophone Maritime Training Academy based in Abidjan and the Anglophone Maritime Training Academy based in Accra, Ghana (34).

During the initial stage of the Regional Anglophone Academy, based in Ghana, Liberia participated with trainees from the National Port Authority attending. However, this trend was discontinued, and for a number of years now Liberia, has not sponsored students at the Academy. Nevertheless, Liberia usually participates in the Ministerial Conference of the Organization.

Established under the aegis of (IMO) Technical Assistance Program, courses offered at the Academy includes the following:

- Pre-Sea cadet training

- Upgrading courses for Sea-going navigation officers and marine

- Radar training

- Short courses in professional subjects
- Courses for fishing vessels personnel; and -

- Shore-based activities and operations in shipping and port organizations.(35)

Among problems currently confronting the status and function of the Academy, include; the undue delay in payment of contributions by member-states; and the unavailability of ships for placement of trainees and graduates inorder to undergo practical sea-training. At the 5th Board of Governors Meeting, therefore, Liberia was requested to look into the possibility of assisting, considering her status in the international maritime community.

2.3.4 THE ESTABLISHMENT OF THE UNION MARINE TRAINING INSTITUTE (UMTI), IN LIBERIA

In 1976, the Union Training and Research Board of the Mano River Union, a customs union embracing the West African states of Sierra Leone, Guinea and Liberia, established a Union Marine Advisory Committee. In April 1977, the aforementioned Committee, recommended the establishment of the Union Marine Training Institute,(UMTI) in Liberia.(36)

In collaboration with the IMO, and principally the Government of the Federal Republic of Germany, the member states of the Mano River Union, signed and concluded an agreement of technical cooperation with the Federal Republic of Germany, for the development of the Union Marine Training Institute, on August 22, 1979.

As the Institute was scheduled to begin in March of 1980, delays, due to the lack of logistical requirements contributed towards further setbacks. However, the UMTI, finally became operational on March 1, 1982, with an initial enrollment of twenty-four (24) students.
The Institute was primarily established in order to provide continuous training for nationals of member-States, of the Union, for sea-going employment on both ocean-going and fishing fleets. In specific terms, the Institute was intended towards providing high school graduates with general purpose training in Deck/Engine departments.

Whilst the realization of the establishment of the (UMTI), is to a large extent to be attributed to the efforts of the Federal Republic of Germany, through whose extensive cooperation and assistance provided experts and all training equipment, the Liberian Shipowners' Council, through the Bureau of Maritime Affairs, made substantial contributions by providing electricity and upgrading the 35 miles Schiefflin - Marshall road. Also, the Government of Liberia allocated 20 acres of land for the exclusive use of the Institute. Last, but none the least, the Bureau of Maritime Affairs, collaborated closely with the Mano River Union in the establishment of the Institute.(37)

The Institute was established with the following staffing pattern: One Commandant, One Master Mariner, One Mariner, One Marine Engineer, Two Deck Instructors and Two Engine Instructors.

Facilities at the Institute are as follows; Four Faculty houses; One house for the Commandant; One dormitory capable of housing approximately 36 ratings; One all-purpose building with administrative offices, storage facilities and workshop with training equipment to facilitate skill building in both deck and engine departments; a standby electric generator as well as a water reservoir. There is a secondary laterite road connecting the Institute with the main Monrovia to Robertsfield highway.(38)
2.3.4.1 OPERATIONAL ACHIEVEMENT

The Union Marine Training Institute is the only one of its kind in the West African sub-region. (39)

Based upon the IMO Convention on Standards of Training Certification and Watchkeeping, 1978, the instructional courses at the Institute are geared towards meeting international standards. The Institute put out its first batch of graduates in November 1982. There were 12 graduates, six each from Liberia and Sierra Leone respectively. The general purpose course integrating deck and engine functions lasted for ten months. Its training results have been encouraging, as graduates have proven to be competent and therefore eligible for further training.

An upgrader's training program was also designed to cater to the needs of seafarers who have not had the opportunity of a high school education as well as training in a formal maritime-related institute or academy. The first upgraders program ended in mid-January 1984, with 14 students; 11 Liberians and 3 Sierra Leoneans successfully completing.

Enrollment expansion was envisaged to be in proportion to the various phases of the institute's development; 24 students in the first year; 48 in the second and 100 in the third year. The target enrollment during Phase II of the program was expected to run at a total student capacity of 300. However, in August 1982, the Union Ministerial Council resolved that the fisheries training component be transferred to the Fisheries Training Institute in Conakry in Guinea, upon the accession of the latter as a member of the Union. (40)
Situated 35 miles South, on the outskirts of Monrovia, the site of the Union Marine Training Institute (UMTI) is considered to be ideally suitable and a conducive environment for learning purposes; notwithstanding it suffers from social isolation. The major difficulty, which still exists and needs remedy, is the fourteen-minute laterite road connecting the Institute with the Monrovia to Robertsfield highway. It is difficult to transit during the rainy season. In addition, although there exist other logistical problems relating to the physical maintenance of the existing facilities at the premises of the UMTI, the crux of the problem relates to finance. It is reported that undue delays for payment of contributions on the part of member states, has seriously affected the development and progress of the institute. This latter point depicts the overall prevailing economic constraints facing member states. As a result, the provision of urgently needed physical facilities have either not been implemented or are facing delay or in some instances are seriously deteriorating. In effect, this neglect have handicapped the operation of the Institute, resulting in a stalemate in all activities. Consequently, the German experts departed in July 1985. Since then, regular classes at the (UMTI) have not resumed.(41)

Recently, the Mano River Union Ministerial Council mandated its Secretariat to evaluate the Union Training and Research Institutions and establishments to determine their viability and usefulness. In short, the Committee recommended that the present Union Training and Establishments be operated and maintained by the host member states and that other countries wishing to utilize such facilities should do so through bilateral negotiations with the
host country. Furthermore, member states were advised to continue their financial support of the institutions for a period of one (1) year to enable the Secretariat to make the necessary arrangements to remove responsibility for training institutions from the Union.(42)

In view of the foregoing, the Bureau of Maritime Affairs, has to consider the pros and cons towards assuming full administrative controls of the Union Marine Training Institute (UMTI).

2.3.5 CONCLUSION

The demand of Liberian nationals for manning on Liberian registered vessels would depend to a large extent on the level of trained manpower available, its quality and efficiency, amongst other considerations.

In view thereof, the need to strengthen Liberia’s national training capabilities within the framework of the existing facilities at the Union Marine Training Institute located in Marshall, Liberia, warrants consideration.
REFERENCES

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4. Ibid., pp.129-130.
5. Ibid., p. 131.
6. Ibid., p. 133.
7. Ibid., p. 156.
8. Ibid., p. 157.
11. Ibid., p.2.
12. Ibid., p.2.
18. Ibid., pp.42-43.


24. Ibid., p. 22.

25. Ibid., p. 25.


27. Ibid., p. III; 12.


33. Ibid., p. 12.

34. Ibid., p. 13.


36. Ibid., p. 2.

37. Ibid., p. 6.


40. Ibid., p. 7.

41. Ibid., p. 9.

42. Ibid., p. 9.
CHAPTER III
A CONCEPTUAL FRAMEWORK FOR ANALYZING THE MARITIME EDUCATION AND TRAINING PROCESS

PART I GENERAL CONCEPTS OF MANPOWER PLANNING

3.1.1 INTRODUCTION

No organization can achieve its results other than through people; it is therefore important that the right people are available with appropriate skills, whenever and wherever they are required and that, when they are in position, they perform well. In this light, it is important that skills should continue to be developed to meet the future needs of the organization so that they do not become obsolescent in due course. (1)

3.1.2 DEFINITION

Attempts by scholars to explain or define the concept of manpower/human resource planning have over the years produced a multiplicity of definitions. Some define it as a strategy for the acquisition, utilization, improvement and retention of an enterprise's human resources. While others consider it as a balance between supply and demand of manpower.

Another definition of manpower planning, is a scientific method depending on forecasting the economical and social variables for a fixed period of time with the objective of determining manpower supply and demand. (2)

However, a more acceptable definition of manpower planning, which in essence incorporates those previously mentioned may be stated as the process of forecasting, both quantitatively and qualitatively, the manpower needs
of the organization in relation to current and anticipated business needs resulting from internal and external changing conditions. (3)

This latter definition of manpower planning implies maintaining a balance between supply and demand of labor. It also suggest that human resource planning is an ongoing exercise; it is not static. The plan must be modified and updated as conditions require. It includes the planning and development of human resource programs such as recruitment, performance appraisal and training, amongst other functions.

Manpower planning is basically made up of three components. First, there is the task of estimating how many people of each kind will be needed at various stages in the future to enable the organization to meet its objective. This is referred to as the demand side of manpower planning. Second, there is the task of estimating the future supply by reference to trends in relation to recruitment, training, development, promotion, retirement and so on. Third, there is the task of taking decisions which will increase the chance of bringing the demand and supply into balance at the most desirable levels; taking into consideration the desire of minimizing the likelihood of redundancy, violent surges in recruitment training needs. (4)
3.1.3 THE PLANING PERIOD

Human resource planning should be tied-in with the overall long range planning of the organization. The extent and rapidity of change in the forces affecting the organization largely determines the utility of forecast into the future.

Generally speaking however, manpower planning for up to one year is considered short range and is widely practiced. Planning for two to four years more is considered intermediate range and planning for five years and beyond is called long range.(5)

3.1.4 THE MANPOWER PLANNING PROCESS

There are four stages in the manpower planning:

1) Investigating
2) Forecasting
3) Planning
4) Utilizing (6)

3.1.4.1 INVESTIGATING

The effectiveness of planning depends upon the details and accuracy of the information on which it is based. Therefore, before making any forecast, or plans to meet them, a clear picture of the organization is required. Any failure to grasp the problem at this stage will weaken the whole planning process. As such, understanding the various factors affecting the organization such as for example - commercial and financial situations; the external environment and its effects on the business/organization; and the internal manpower situation, is paramount.(7)
3.1.4.2 FORECASTING

Based upon information on all aspects of the organization's activities, forecasting is a process whereby an organization predicts its future manpower needs—supply and demand; both quantitatively and qualitatively. Inventorizing present manpower resources and analyzing the degree to which these resources are to be employed optimally is necessary. This implies anticipating manpower problems by projecting present resources into the future and comparing them with the forecast of requirements to determine their adequacy.

3.1.4.3 PLANNING

The purpose of planning is to formulate coherent and interrelated policies designed to achieve the organization's manpower objectives. Planning in the initial stage should be flexible enough in order to enable the planner to react to unforeseen events. (8)

3.1.4.4 UTILIZING

Implementation of policies within the framework of manpower planning, taking into consideration the parameters of utilization; such as reduced cost and high productivity will determine the success of planning efforts. (9)
Manpower planning therefore, is about establishing training needs, and accordingly implementing plans which will ensure that both the short and long term needs are met.

However, there must exist an equilibrium between supply and demand, inorder to safeguard against long term surplus or shortage of personnel. In this connection, once the organization has selected the right people needed, it is important that it keeps them inorder to avoid wastage.

Wastage, includes retirement, resignation, and redundancy etc. Some wastage are inevitable (i.e death, illness, etc.) (10) Being a factor on the supply side of manpower planning, the latter involves establishing policies, taking into consideration the circumstances mentioned above, including promotions, transfer/redeployment with the view towards maintaining a constant supply of skilled personnel within the organization.

Finally, inorder for manpower planning to be effective, the factors involved in the manpower planning process, namely investigating, forecasting, planning, and utilizing, as highlighted above should be carefully implemented.
CHAPTER III
PART II THE CONCEPT OF MARITIME MANPOWER PLANNING

3.2.1 INTRODUCTION

Whilst the concepts of job enrichment and human resource development have been easily accepted and thus, adequately developed to a degree of success in the developed countries, the problem is more difficult in developing countries where the awareness of the human element is less cognizant. This is due to the fact that as developing countries, the latter are confronted with numerous problems of under-development, resulting from population increase, low per capital income, lack of infrastructures and other barriers to social and economic development.(11 Consequently, in many developing countries the attitude towards the concept of manpower training is somehow sluggish.

Another reason for this trend is due to the fact that it takes a relative long period of time before results from investment in maritime training efforts may be realized. In most developing countries, there is a tendency to expect immediate results or benefits from investments in training ventures.

One of the most difficult problems facing developing countries is the shortage of properly trained human resources. Recognizing well trained manpower as one of three main elements for success of any project, namely; capital, natural resources and the human element;(12) the need for developing countries to redress this shortcoming of the latter element warrants serious consideration. Whilst there exist a dire need for trained manpower in every facet of life, this factor is even more important as regard shipping, wherein the necessity of maintaining a
relative high degree of safety standard is in reality the essence of efficient navigation. The risk of having incompetent crew endangers life and property at sea with high social consequences resulting.

It is estimated that every year approximately 380 ships of about one and a half million gross registered tons are lost through accidents at sea, and even greater number of ships are severely damaged. Accordingly, analysis shows that about 80% of these accidents are attributed to human errors, despite the fact these ships carried highly sophisticated navigational equipment. In view of this trend, it is evident that the main reason is due to the inadequacy of properly educated and trained seafarers.(13)

Whilst loss of life and property is the most serious consequences of maritime casualties, pollution to the marine and physical environment are of no less importance. The technological revolution which has occurred in the maritime industry within the last decades as regard ship design, shape, speed, design of shipboard equipment, marine electronics, etc.; have to a large extent necessitated a parallel development in the education and training of the human resources involved; that is seafarers.(14)

In view the foregoing, one cannot view the problems relating to maritime education, training, examination, certification, administration, and legislation separately. Instead, they should be looked at integrally; as all of these elements are interrelated. Therefore, the task of developing a proper system of education, training, and certification of seafarers should be dealt with under three main headings.

a) Maritime Legislation
b) Organization of an Educational System
c) Examination and Certification System.(15)
3.2.2 DEFINITION AND OBJECTIVE OF MARITIME EDUCATION AND TRAINING

One of the prerequisites of any form of training is a clear understanding of what the training is supposed to achieve. Against the background of this premise, more and more Administrations of maritime nations throughout the world are increasingly emphasizing standards of training and the quality of certification. This trend has been reinforced by the adoption and subsequent coming into force of the International Maritime Organization (IMO) Convention on Standards of Training, Certification, and Watchkeeping, in 1984. This Convention in effect, establishes minimum standards of competency to be attained by the ship's crew. In essence, maritime training and education has to meet content requirements and standards basically laid down by the STCW convention and reflected through national legislations.

Systems of training vary from country to country; but can be described generally as the combination of knowledge gained in shore establishments, put into practice at sea which with use and experience becomes skill. In this respect, there are a variety of approaches to training. Some Administrations concentrate on the theoretical knowledge needed at the beginning of the period of training and thereafter use qualifying sea service as the gauge by which successive qualifications are gained; without further examination or protracted periods back at school. Others have an initial learning period in shore establishments, followed by service at sea between periods back at school for successive examinations, leading to the award of superior certificates of competency.

Whilst it is not the purpose of this study to examine the pros and cons of the methods used by different Admi-
nistrations, it must be emphasized that the fundamental principle, as regard training, is that it should be relevant.

Firstly, that the trainee knows how his training relates to his duties. Secondly, that it does actually relate to his duties. An illustration of this latter point is the comprehensive seamanship and safety training provided for some deck ratings who eventually realizes that they are sent for employment in a very modern ship where their only duties involves washing and cleaning. This is not only a waste of training efforts and human resources, it is demoralizing for the individual and raises costs through a high level of turnover of disillusioned staff.(18) Seeking a solution or compromise to the problem as presented above is not a simple one. However, trained manpower must be utilized to an optimal level, if ships are to remain efficient and competitive.

In many ways, training is still regarded as something that has to be done to meet national and international regulations/standards and should be got out of the way as quickly and cheaply as possible. Such an approach towards training tends to yield a negative impact, in the light that it does not allow trainees to demonstrate in full the contribution that effective training can make to the success of the organization.(19)
3.2.3 GUIDELINES IN THE MARITIME EDUCATION AND TRAINING PROCESS

Generally speaking, there are several factors which directly or indirectly impinge upon maritime education and training, in terms of influencing the outcome of the training process. Whilst many attendant factors may not be indicated; however the major considerations are inclusive.

3.2.3.1 OWNER’S REQUIREMENTS

These are essentially prescribed by the type of ship, the environment in which it operates both physically and commercially, and the style of the company owning or managing the vessel. To a large extent, the owner/manager determines how he wants his ship operated, considering its type of equipment, trades, sea routes etc. Other than making profits, the shipowner’s ultimate objective is maintaining a trouble-free ship with relative good safety standards. (20)

Therefore, trainers should take into consideration a wide range of factors when preparing trainees for sea-service, realizing that there are many different kinds of ships with varying types of equipment. Most importantly, personnel employed aboard ships must be capable of performing his duties to an optimum level, inorder to maintain a reasonably safe and efficient navigation of the vessel.
3.2.3.2 MANAGEMENT STYLE

This is not necessarily a sound indicator of the overall objectives, and as such, may not always be helpful to the trainer. However, the style of a company may dictate the need for a number of different groups of ships within the one operating management. If reasonable mobility of labour is required, it is not a feasible proposition to train specifically for one type of ship. (21) This latter point reinforces the issue of the inherent flexibility required in the training process, on the part of trainers.

3.2.3.3 MANNING PHILOSOPHY

To a considerable extent, the operator determines the final organization of the workforce aboard the ship. He specifies the types and numbers of the officers beyond the minimum, the organization of the ratings workforce - departmental, interdepartmental or general purpose - and within that the type of work which is required. (22) In this connection, trainers could obtain some information or advice from operators/managers as regard job specification.

3.2.3.4 LEGISLATIVE REQUIREMENTS

There are basically two broad categories of Legislative requirements - National and International legislations. National rules often relate to the design, construction and equipment of ship, acceptable to the National Administration. (23) In addition, the latter prescribes minimum safe manning scales, in conformity with the STCW Convention. Shipping being international in nature,
Maritime Administrations are obliged to ensure that there exist adequate safety standards in keeping with regulations. Ratifying IMO/ILO conventions and incorporating same into national laws is therefore important.

3.2.3.5 DIVERSITY OF INTEREST

There exist a number of organizations, all of which to some extent, exert some degree of influence and vested interest in the maritime education and training process. However, the degree of influence may vary from one to another, as their differing requirements and aspirations are not necessarily compatible. These bodies of organizations act as a kind of interest group in this respect. These include the following: Shipowners/Employers, Maritime training establishments, Trade Unions/Seamen Unions, IMO, the Department of Education, and other Educational Institutes.

Each of the organizations concerned has a right to its view and their assistance in the formulation of national training schemes and standards is necessary. Thus, such bodies should serve as a basis for constituting a National Marine Training Advisory Board, when implementing the Maritime Education and Training Program.

3.2.3.6 LEAD TIME

One of the problems trainers are confronted with in relation to maritime education and training, is the relative long period of time required for training. This is particularly the case as regard officers' training and not necessarily the situation with junior officers or ratings. The prolonged duration of training often creates a vicious cycle, when the face of the industry is changing.
at a time scale in which significant developments are occurring in a shorter time-span. Attempts to change the training system to meet possible future requirements in advance of those requirements being established present problems in meeting national and international standards. (25)

3.2.3.7 MAN/MACHINERY INTERFACE

Whilst it may be true that human being is highly fallible, it is simplistic to blame him for that fallibility when the cause of failure is far more likely to be a complex interaction of factors involving man, machinery and the environment.

On the face of it, the human error argument gives every reason to do away with the human element. This is especially so when in many ways, mechanics and machines are considered to be more reliable and less prone to mistakes than man. But human being, is recognized as a vital aspect of the operation of ships because he has the ability to think, to exercise judgment, to override machines, and to take decisions of the kind which robots will probably never be able to achieve; thus for all his fallibility, man is still the best and most flexible asset available. (26)

Therefore, the job of the trainer is to communicate with the seafarer in such a way that a proper transfer of knowledge and skills occurs which the trainee can utilize in a practical and efficient manner and with minimum of error. Training is however, more than the sum of knowledge and skills. It involves inculcating into trainees various attitudes—the ability to weigh up situations and make correct judgements; the ability to relate to other people inorder to get the best out of them and an under-
standing of a range of behavioural matters. (27)

3.2.3.8 TRAINING AT SEA OR ASHORE

Whilst there has in recent years been an ongoing debate as to the relative merits of training people at sea or ashore; certainly, both of these approaches have their advantages and disadvantages. On the one hand, there is no substitute for an intensive period in a training establishment or college where, away from the operating pressures, one can undertake training in a concentrated manner with all the facilities available through a shore establishment in terms of staff and equipment. However, this is expensive, because seafarers are required to be paid while undergoing such training; the cost of maritime training itself is considerable. (28)

In contrast, training at sea has the distinctive advantage of being relatively low-cost; none of the considerations of study leave, back-up and tuition fees apply. And there is enough spare time available at sea which can be put to productive training use. The ship in this regard is considered as a sort of laboratory. Although this may appear as a useful concept, there are obviously limitations, as one cannot in any way contribute towards a ship's hazardousness or unsafety only because of training purposes. (29)

There are certainly pros and cons to the debate. As a result of the increasing cost of shore training both directly and indirectly as explained, the use of simulation and microcomputers, as a means of training or simulating operations either aboard ship or on very short courses ashore is frequently being practice in present times.

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Taking an inventory or forecasting manpower needs in the shipping industry is not a simple task; as a number of factors tend to have an impact on the manpower forecast. Some of these factors include the following:

- Because shipping has undergone a dramatic change.
- Because the survey of labour market in shipping involves a variety of analysis of statistics;
- Because of the complexity of maritime laws in various countries, relating to crew matters;
- Because of the political climate in different countries;
- Because of the UNCTAD Controversy concerning FOC;
- Because, shipping itself is international in nature.

As a consequence of the difficulties relating to forecasting manpower needs as highlighted above, maritime training needs invariably correspond to the dictates of the demand for shipping in general, and the situation of the labor market in particular. Accordingly, the following factors influence the change in maritime training needs:
The factors tending to increase manpower needs include:
- Fleet growth;
- Increase in the number of ships due to miniaturization;
- Increase of employment of ships of other nationalities;
- Improvement of crew welfare particularly with respect to paid leave and/or paid study leave;
- Increase in labor turnover. (30)

The factors causing the contraction of manpower needs elude the following:
- Fleet reduction
- Decrease of employment in foreign flag ships;
- Decrease in manning scale on board ships due to technological improvements; - Increase in the size of ships. (31)

Considering the uncertainties which exist in shipping regarding its climate, the success of maritime training needs would to a large extent depend upon the assessment of each of the above items enumerated above.

With respect to the supply of trained seafarers for
possible employment aboard ocean-going vessels, it is necessary to take stock of the national fleet and sea-going personnel and thereby, attempt to forecast future trends over a period of time, preferably (medium-long) term.

Although forecast of fleet growth or reduction, fleet replacement and modernization is of extreme difficulty, it is however generally possible to produce a maximum and minimum forecast, assuming favorable and unfavorable trends. The size of crew for each ship in the fleet will depend upon its type, size, main and auxiliary machinery, cargo gear, degree of automation utilized and the nature of trade it is employed in. In determining the minimum crew required for each ship in its fleet, the Administration should take into account the implication of international requirements and recommendations, and the associated national provisions which give effect to them. It is also important that due consideration be given to the applicable provisions of labor laws or codes and industrial agreements. (32) The specific qualifications required of the seafarers must also be identified.

The next stage of the manpower planning process involves estimating the number of qualified seafarers to be employed, inorder to keep each ship adequately manned whilst in operation. At this point of the plan, it is necessary to consider current and anticipated provisions of relevant national labour laws, codes and industrial agreements relating to the granting of leave to seafarers. Thus, the manpower forecast has to envisage the supply of adequate manpower, realizing that more than one crew will be required inorder to man each ship on a regular basis. (33)

In view of the estimated demand for crew as per each ship within the fleet, it is necessary that the Administration forecast the required manpower needed. This pro-
cess involves analyzing in detail, the qualification on a case by case basis of the personnel to be employed to meet the crewing demands. As wastage caused by retirement, resignations, disablement and deaths are inevitable, a projection of an estimate in this category, on an annual basis will help prevent any shortcoming in the manpower planning forecast. In this light, taking into account the age distribution of employees could prove useful in determining the rate of personnel turnover. The average period of service of young seafarers, recruited for employment at sea would depend largely upon the latter's ability to seek alternative employment opportunities, including shore post within his country of origin. As a matter of flexibility, any shortage of the crewing demands in relations to the availability of manpower (supply) must be made up for by the recruitment or improvement in the qualification of sea-going personnel.(34)

The Administration's manpower inventory and training needs over the forecast period should be between a range indicated by maximum and minimum figures in order to provide a national forecast of the training output required each year. In assessing the new entry intake needed annually, the authority responsible for coordinating the training of seafarers should take into consideration wastage, which may occur during the training period due to (student drop-out). However, efforts must be made from the outset in order to prevent a high level of student drop-out, by establishing a rigid selection process and high entry requirements. This process would help limit the high rate of academic failure.

Considering, that shipping is undergoing a transformation process, the manpower forecast should envisage the upgrading of trainees. And as trainees progress through the certification structure, practical upgrading courses
and other refresher courses should be introduced as a means of stimulating the knowledge of seafarers. (35)

Realizing the possibility that there could be some shortcomings in the manpower forecasting process, there exist a need for flexibility in the planning process. In view thereof, manpower planning requires a review on a continuous basis so as to ensure that there is an equilibrium between supply and demand. In addition, manpower planning forecast requires the participation and assistance of all concerned parties in the course of survey. In this connection, the participation of the parties involved should be coordinated in such a manner that an enrichment of the relevant information base is gained for effective manpower forecasting.
REFERENCES


3. Ibid., p.1.


5. Dale S. Beach, The Management of People at Work, 1980, p.188.


7. Ibid., p.5.

8. Ibid., p.5.

9. Ibid., p.5.


15. Ibid., p.2.


17. Ibid., p.46


19. Ibid., p.291.

20. Ibid., p.295.

21. Ibid., p.296.

22. Ibid., p.297.

23. Ibid., p.297.

24. Ibid., p.300.

25. Ibid., p.300.

26. Ibid., p.280.
27. Ibid., p.280.
28. Ibid., p.302.
29. Ibid., pp.302-303.
31. Ibid., p.78.
32. Ibid., p.79.
33. Ibid., p.79.
34. Ibid., p.80.
35. Ibid., p.80
CHAPTER IV
ESTIMATED PROJECTION OF MARITIME TRAINING REQUIREMENTS IN LIBERIA

4.1 INTRODUCTION

In view of considerations towards Maritime manpower planning in Liberia, inorder to satisfy the employment of Liberian nationals aboard Liberian registered ships, surveys were conducted to establish the manpower needs, vis-a-vis, education and training requirements. The surveys were in the form of questionnaires to the Bureau of Maritime Affairs, R.L., (BMA), in Monrovia, and the Maritime Safety Department, with offices in Reston Virginia, U.S.A., on the one hand, and the Seaman Organizations of Liberia, on the other; which comprise of the National Ports and General Workers Union of Liberia, and the Liberian Seaman Ports and General Workers Union.

4.2 SOURCES OF INFORMATION/DATA USED FOR ANALYSIS

The information received from the BMA, involved other relevant data relating to the Liberian Merchant fleet (i.e. number of vessels, tonnage, age, etc). This Chapter, therefore reflects a relative current position of the Liberian fleet, in terms of its size, tonnage, classification of vessels, crew deployment, age, etc.)

In addition, statistical data and information received from the Seaman Organizations in Liberia, reveals the total number of seafarers, their qualifications, and the kind of training required inorder to qualify for possible employment on Liberian registered ships.

Inorder to comprehend the manning structure aboard Liberian registered ships, the approved minimum safe
manning scale endorsed by the Liberian Maritime Administration (Bureau of Maritime Affairs), as illustrated in Table (II), explains the rationale by which the Administration deploys crews on ships. It also highlights various categories of vessels, included in the approved safe manning scale.

Hence, the above mentioned guideline, along with other pertinent sources of information relating to the Liberian fleet, provides a framework and serves as a basis for determining the number of positions for possible employment of Liberian nationals aboard Liberian ships. The selected areas or positions wherein MET programs should be implemented in Liberia has been categorically limited to RATINGS—particularly, Able Seaman (AB); Ordinary Seaman (OS); Junior Ordinary Seaman (JOS); Oiler/Wiper.

In attempting to derive at the number of seafarers to be employed on Liberian registered ships, two major sources were consulted and utilized. The first source, was a report commissioned by the (BMA), in 1979, referred to as "An Economic Impact of Open Registry Shipping." Whilst, the second source relates to statistics provided by the (BMA), dated November 1986, in response to the aforementioned questionnaire, concerning the size, age, and tonnage of all Steam/Motorships registered in Liberia. This source is used in relation to the approved minimum safe manning scale, which outlines the deployment of crew structure aboard various categories of Liberian registered ships—Deck and Engine.

The first source as represented in "An Economic Impact of Open Registry Shipping", reveals that of the total of 2645 ships on the (BMA) register between 1977 - 1979, crew list were made available for 1,753 or 66.3% of these ships. By extrapolation, using the factor 1.5088 (i.e. 1.00/663), it was estimated that about 85,736 seafarers
TABLE II

MINIMUM SAFE MANNING SCALES
FOR LEEWARD SHIPS
(October, 1986)

NOTES:

1. The scales given below are for general guidance only. Minimum Safe Manning will be assessed on a ship by ship basis upon application to the Administration.

2. Subject to the governing principle that the Master is at all times responsible for the safe operation of his ship, the Master may, at his discretion, vary the number of personnel on any watch either by reduction under favourable conditions or by doubling watches in areas of bad visibility and high traffic density.

3. In assessing minimum deck Manning the Marine Safety Department will consider the physical dimensions of the vessel, layout of crew accommodation and internal communications systems, all of which affect crew capabilities and response reactions. Vessel drawings and other data may be requested.

4. In assessing minimum engine room Manning the kW shall mean the aggregate of main propulsion and any auxiliary machinery routinely operated. In addition, engine room layout and proximity of boiler rooms, etc., will be evaluated. Drawings and other data may be requested. Where a multiple main engine arrangement exists, additional engineers may be required.

5. If an Interdepartmental Flexibility system of Manning is proposed, the Marine Safety Department may require evidence that non deck or engine personnel are competent to perform their additional duties and are not employed on functions for which they are untrained or unqualified.

6. If a General Purpose Manning system is proposed, the Marine Safety Department may require evidence that the ratings concerned have adequate training and experience. This would particularly apply if the number of General Purpose ratings proposed was less than the total numbers required by BASIC MANNING scales.

<table>
<thead>
<tr>
<th>APPLICATION BASIC MANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>General</td>
</tr>
<tr>
<td>All ships over 8,000 GT</td>
</tr>
<tr>
<td>Master</td>
</tr>
<tr>
<td>Chief Mate</td>
</tr>
<tr>
<td>Second Mate</td>
</tr>
<tr>
<td>* Third Mate</td>
</tr>
<tr>
<td>3 Able Seamen</td>
</tr>
<tr>
<td>3 Ordinary Seamen</td>
</tr>
</tbody>
</table>

*Upon application to the Administration a dispensation may be granted against the requirements for a Third Mate and Third Assistant Engineer. This concession is assessed on a case by case basis.

<table>
<thead>
<tr>
<th>APPLICATION BASIC MANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>All ships 3,000 kW and over</td>
</tr>
<tr>
<td>Chief Engineer</td>
</tr>
<tr>
<td>First Assistant</td>
</tr>
<tr>
<td>Second Assistant</td>
</tr>
<tr>
<td>* Third Assistant</td>
</tr>
<tr>
<td>3 Oilers</td>
</tr>
</tbody>
</table>
### TABLE II

#### REDUCTION FROM BASIC MANNING - ENGINE

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CATEGORY E/1</strong></td>
<td></td>
</tr>
<tr>
<td>Vessels 3,000 kW and over certified for unattended operation</td>
<td>Chief Engineer, First Assistant, Two Oilers</td>
</tr>
<tr>
<td><strong>CATEGORY E/2</strong></td>
<td></td>
</tr>
<tr>
<td>Vessels under 3000 kW but over 750 kW not equipped for unattended operation</td>
<td>Chief Engineer, Second Assistant, Third Assistant, Three Oilers</td>
</tr>
<tr>
<td><strong>CATEGORY E/3</strong></td>
<td></td>
</tr>
<tr>
<td>Vessels under 3000 kW but over 750 kW and certified for unattended operation</td>
<td>Chief Engineer, Second Assistant, Two Oilers</td>
</tr>
<tr>
<td><strong>CATEGORY E/4</strong></td>
<td></td>
</tr>
<tr>
<td>Vessels under 750 kW not equipped for unattended operation</td>
<td>Chief Engineer, Third Assistant, Two Oilers</td>
</tr>
<tr>
<td><strong>CATEGORY E/5</strong></td>
<td></td>
</tr>
<tr>
<td>Vessels under 750 kW and certified for unattended operation</td>
<td>Chief Engineer, Three Oilers (one with minimum three years sea service)</td>
</tr>
</tbody>
</table>

**NOTE:** In order to apply above reductions for basic engine room manning, application must be made to Technical Division, Marine Safety Department.

Above reduced scales provide for safe operation of the vessel but take no account for maintenance of machinery. Where Steam Machinery pertains, additional personnel for boiler watchkeeping may be required. Composition of the watch is the responsibility of the Chief Engineer but may not be less than the above scales.
<table>
<thead>
<tr>
<th>CATEGORY D/1</th>
<th>APPLICATION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vessels over 5,000 GT but under 8,000 GT</td>
<td>Master</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Third Mate</td>
</tr>
<tr>
<td></td>
<td>(3 watch ships)</td>
<td>Four Able Seamen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY D/2</th>
<th>APPLICATION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vessels over 1600 GT but under 5000 GT</td>
<td>Master</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Third Mate</td>
</tr>
<tr>
<td></td>
<td>(3 watch ships)</td>
<td>Two Able Seamen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two Ordinary Seamen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY D/3</th>
<th>APPLICATION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vessels under 1600 GT but over 500 GT</td>
<td>Master</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second Mate</td>
</tr>
<tr>
<td></td>
<td>(2 watch ships can go into 3 watches if necessary)</td>
<td>Two Able Seamen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One Ordinary Seaman</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY D/4</th>
<th>APPLICATION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vessels under 500 GT on passages of less than 72 hours</td>
<td>Master</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief Mate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two Seamen</td>
</tr>
<tr>
<td></td>
<td>(over 72 hours Category D/3 applies)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY D/5</th>
<th>APPLICATION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vessels engaged in special or unusual operations</td>
<td>By direction of Administration upon application</td>
</tr>
</tbody>
</table>

**NOTE:** Where any ship is given a dispensation to operate without a Third Mate the following phrase will be added to Conditions of Operation:

"Ship is permitted to trade without a Third Mate provided that, should the trading pattern, with the prior knowledge of owners, involve sea passages within areas of high traffic density or areas where significant adverse weather conditions are likely to be encountered, the owner shall provide additional bridge watchkeeping capability."
were employed; with 24,960 being officers, and 60,776 being ratings. (1) (Refer to Appendix A, which reflects a survey of Liberian ship personnel, on a country by country basis). The figures however suggest or imply an estimate of about 32 crew members per ship. This average crew size is obtained by dividing 85,736; the total number of crew, by 2645, the total number of ships.

This report however made some relevant comments of the estimate of manning size to include the observation that an average of five additional crew were employed when low cost labour is involved. This is a 15% greater labour input which tends to support the view that open registry-with the resulting freedom to choose low-cost sources, has the tendency of making shipping more labour intensive, thus creating additional jobs. (2) However, details of ship size and type were not distinguished in this study.

The second source which is based on information received in response to a questionnaire to the (BMA), is represented in Table (I). This table gives a fleet size of 1808 ships - a reduction of 837 ships, compared with the 1979 statistics, as indicated in the first source mentioned above. This most recent source also gave an average crew size of 16, for all steam and motor ships - a reduction from the average of 32, estimated in 1979.

Within the last 5-7 years, a combination of factors such as the sophistication and technological specialization of ships, increased labour cost, higher taxes as experienced in some developed maritime states, have contributed greatly to the general reduction in crew sizes.

Considering that crewing cost forms a considerable part of the day to day budgeting of a vessel. It is therefore, economically desirable to keep the number of crew as small a figure as possible, consistent with required
### TABLE I

#### Age of Vessel: Size and Age of All Steamships and Motorships

<table>
<thead>
<tr>
<th>Divisions of Tonnage</th>
<th>0-4 Years</th>
<th>5-9 Years</th>
<th>10-14 Years</th>
<th>15-19 Years</th>
<th>20-24 Years</th>
<th>25-29 Years</th>
<th>30 Years &amp; Over</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000- 1,599</td>
<td>3</td>
<td>1,483</td>
<td>8</td>
<td>2,592</td>
<td>21</td>
<td>9,131</td>
<td>7</td>
<td>2,430</td>
</tr>
<tr>
<td>2,000- 2,599</td>
<td>3</td>
<td>5,357</td>
<td>9</td>
<td>6,580</td>
<td>16</td>
<td>12,863</td>
<td>2</td>
<td>1,897</td>
</tr>
<tr>
<td>3,000- 3,599</td>
<td>3</td>
<td>3,037</td>
<td>8</td>
<td>12,668</td>
<td>15</td>
<td>22,553</td>
<td>2</td>
<td>2,430</td>
</tr>
<tr>
<td>4,000- 4,599</td>
<td>3</td>
<td>8,294</td>
<td>13</td>
<td>41,743</td>
<td>18</td>
<td>59,606</td>
<td>7</td>
<td>21,645</td>
</tr>
<tr>
<td>5,000- 5,599</td>
<td>9</td>
<td>44,906</td>
<td>23</td>
<td>113,715</td>
<td>29</td>
<td>141,244</td>
<td>14</td>
<td>74,126</td>
</tr>
<tr>
<td>6,000- 6,999</td>
<td>6</td>
<td>25,897</td>
<td>16</td>
<td>101,366</td>
<td>11</td>
<td>70,036</td>
<td>7</td>
<td>45,271</td>
</tr>
<tr>
<td>7,000- 7,999</td>
<td>6</td>
<td>44,732</td>
<td>2</td>
<td>14,400</td>
<td>5</td>
<td>35,367</td>
<td>7</td>
<td>53,627</td>
</tr>
<tr>
<td>8,000- 9,999</td>
<td>14</td>
<td>127,525</td>
<td>48</td>
<td>440,593</td>
<td>21</td>
<td>192,066</td>
<td>22</td>
<td>194,429</td>
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<tr>
<td>10,000- 14,999</td>
<td>30</td>
<td>364,802</td>
<td>73</td>
<td>906,310</td>
<td>71</td>
<td>906,169</td>
<td>43</td>
<td>544,956</td>
</tr>
<tr>
<td>15,000- 19,999</td>
<td>56</td>
<td>964,586</td>
<td>106</td>
<td>1,921,725</td>
<td>114</td>
<td>1,959,195</td>
<td>25</td>
<td>422,918</td>
</tr>
<tr>
<td>20,000- 29,999</td>
<td>99</td>
<td>2,347,797</td>
<td>54</td>
<td>1,293,082</td>
<td>37</td>
<td>861,842</td>
<td>48</td>
<td>1,200,173</td>
</tr>
<tr>
<td>30,000- 39,999</td>
<td>57</td>
<td>1,956,237</td>
<td>73</td>
<td>1,472,673</td>
<td>42</td>
<td>1,594,691</td>
<td>35</td>
<td>1,240,855</td>
</tr>
<tr>
<td>40,000- 49,999</td>
<td>20</td>
<td>652,078</td>
<td>26</td>
<td>1,122,684</td>
<td>25</td>
<td>1,120,802</td>
<td>17</td>
<td>762,832</td>
</tr>
<tr>
<td>50,000- 59,999</td>
<td>5</td>
<td>279,205</td>
<td>7</td>
<td>307,723</td>
<td>18</td>
<td>719,353</td>
<td>7</td>
<td>362,807</td>
</tr>
<tr>
<td>60,000- 69,999</td>
<td>---</td>
<td>16</td>
<td>1,021,456</td>
<td>33</td>
<td>2,112,908</td>
<td>2</td>
<td>126,242</td>
<td>2</td>
</tr>
<tr>
<td>70,000- 79,999</td>
<td>1</td>
<td>70,144</td>
<td>9</td>
<td>664,904</td>
<td>13</td>
<td>900,204</td>
<td>7</td>
<td>513,980</td>
</tr>
<tr>
<td>80,000- 89,999</td>
<td>2</td>
<td>173,340</td>
<td>5</td>
<td>421,687</td>
<td>12</td>
<td>1,119,418</td>
<td>2</td>
<td>169,787</td>
</tr>
<tr>
<td>90,000- 99,999</td>
<td>2</td>
<td>186,907</td>
<td>---</td>
<td>5</td>
<td>691,159</td>
<td>1</td>
<td>99,011</td>
<td>1</td>
</tr>
<tr>
<td>100,000-109,999</td>
<td>---</td>
<td>4</td>
<td>425,598</td>
<td>21</td>
<td>2,213,485</td>
<td>1</td>
<td>103,506</td>
<td>1</td>
</tr>
<tr>
<td>110,000-119,999</td>
<td>---</td>
<td>3</td>
<td>350,249</td>
<td>42</td>
<td>4,878,723</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>120,000-129,999</td>
<td>---</td>
<td>12</td>
<td>1,500,241</td>
<td>37</td>
<td>6,400,451</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>130,000-139,999</td>
<td>---</td>
<td>1</td>
<td>133,44</td>
<td>9</td>
<td>1,761,863</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>140,000 and above</td>
<td>---</td>
<td>17</td>
<td>3,196,757</td>
<td>10</td>
<td>1,761,863</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Total** 319 7,456,057 533 16,577,149 631 27,272,851 258 5,863,264 48 759,219 14 121,470 5 49,708 1,808 56,179,711

**NB. AVERAGE CREW SIZE PER VESSEL IS 16**

**SOURCE: BUREAU OF MARITIME AFFAIRS* R.E.L.**

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79 a
ship maintenance and the safe and efficient transportation of cargo from one point to another.

In light of the above considerations, and for the purposes of this study, preference has been given to the use of the more recent source/data, the (second source) for projections and recommendations.

4.3 ESTIMATION OF POSSIBLE RATING POSITIONS AVAILABLE ON LIBERIAN REGISTERED SHIPS BASED ON ESTIMATED CREW SIZE PER VESSEL

Table (III), therefore, attempts to highlight the size of the Liberian registered fleet by categories according to tonnage, with the aim of determining an estimated crew size per ship/total crew size; in conformity with current data/statistics, as presented in (Tables I & II). In order to achieve this, the number of ships in each category is multiplied by sixteen (16); this being the average crew size on the Liberian fleet, as indicated by the (BMA).
TABLE (III): SIZE OF THE LIBERIAN MERCHANT FLEET AND ESTIMATED CREW SIZE PER VESSEL

SOURCE: AUTHOR’S CALCULATION BASED UPON TABLES I & II.

<table>
<thead>
<tr>
<th>Division of tonnage</th>
<th>No. of vessels</th>
<th>Gross tonnage</th>
<th>Estimated crew size</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 499</td>
<td>45</td>
<td>17,981</td>
<td>720</td>
</tr>
<tr>
<td>500 - 999</td>
<td>35</td>
<td>27,332</td>
<td>560</td>
</tr>
<tr>
<td>1000 - 1,599</td>
<td>28</td>
<td>41,488</td>
<td>448</td>
</tr>
<tr>
<td>1600 - 1,999</td>
<td>2</td>
<td>3,731</td>
<td>32</td>
</tr>
<tr>
<td>2000 - 3,999</td>
<td>41</td>
<td>134,174</td>
<td>656</td>
</tr>
<tr>
<td>4000 - 5,999</td>
<td>83</td>
<td>417,362</td>
<td>1,328</td>
</tr>
<tr>
<td>6000 - 6,999</td>
<td>43</td>
<td>274,108</td>
<td>688</td>
</tr>
<tr>
<td>7000 - 7,999</td>
<td>23</td>
<td>169,523</td>
<td>368</td>
</tr>
<tr>
<td>8000 - 9,999</td>
<td>109</td>
<td>994,197</td>
<td>1,744</td>
</tr>
<tr>
<td>10,000 - 14,999</td>
<td>228</td>
<td>2,628,785</td>
<td>3,648</td>
</tr>
<tr>
<td>15,000 - 19,999</td>
<td>316</td>
<td>5,568,014</td>
<td>5,056</td>
</tr>
<tr>
<td>20,000 - 20,999</td>
<td>247</td>
<td>5,953,902</td>
<td>3,952</td>
</tr>
<tr>
<td>30,000 - 39,999</td>
<td>215</td>
<td>7,369,319</td>
<td>3,440</td>
</tr>
<tr>
<td>40,000 - 49,999</td>
<td>89</td>
<td>3,904,672</td>
<td>1,424</td>
</tr>
<tr>
<td>50,000 - 59,999</td>
<td>36</td>
<td>1,949,150</td>
<td>576</td>
</tr>
<tr>
<td>60,000 - 69,999</td>
<td>51</td>
<td>3,260,646</td>
<td>816</td>
</tr>
<tr>
<td>70,000 - 79,999</td>
<td>30</td>
<td>2,249,252</td>
<td>480</td>
</tr>
<tr>
<td>80,000 - 89,999</td>
<td>22</td>
<td>1,884,232</td>
<td>352</td>
</tr>
<tr>
<td>90,000 - 99,999</td>
<td>8</td>
<td>777,077</td>
<td>128</td>
</tr>
<tr>
<td>100,000 - 109,999</td>
<td>26</td>
<td>2,742,589</td>
<td>416</td>
</tr>
<tr>
<td>110,000 - 119,999</td>
<td>45</td>
<td>5,228,972</td>
<td>720</td>
</tr>
<tr>
<td>120,000 - 129,999</td>
<td>49</td>
<td>6,100,792</td>
<td>784</td>
</tr>
<tr>
<td>130,000 - 139,999</td>
<td>10</td>
<td>1,341,809</td>
<td>160</td>
</tr>
<tr>
<td>140,000 - ABOVE</td>
<td>27</td>
<td>4,940,620</td>
<td>432</td>
</tr>
</tbody>
</table>

TOTAL 1,808 58,179,717 28,928
Table (IV); illustrates the number of Liberian officers and their qualifications. It also shows the approximate number of Liberian seafarers classified as ratings. The limited number of Liberian seafarers certificated as officers is readily perceived. It is presumed that the number of officers as indicated above are employed on Liberian ships, although the (BMA), did not indicate whether these officers are in fact gainfully employed or not, due to the transiency of seafarers.

TABLE IV: LIBERIAN NATIONALS CERTIFICATED BY THE BMA, AS OFFICERS & NUMBER OF LIBERIANS CLASSIFIED AS RATINGS.

<table>
<thead>
<tr>
<th>Number of Liberian Officers</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Master Ocean Going</td>
</tr>
<tr>
<td>2</td>
<td>Master Near Trade</td>
</tr>
<tr>
<td>1</td>
<td>Chief Mate Ocean Going</td>
</tr>
<tr>
<td>3</td>
<td>Third Mate Ocean Going</td>
</tr>
<tr>
<td>2</td>
<td>Third Mate Ocean Going</td>
</tr>
<tr>
<td>3</td>
<td>Second Mate Ocean Going</td>
</tr>
<tr>
<td>9</td>
<td>Second Assistant Engineer Motor</td>
</tr>
<tr>
<td>1</td>
<td>Third Assistant Engineer Motor</td>
</tr>
<tr>
<td>*</td>
<td>RATING</td>
</tr>
</tbody>
</table>

* It is estimated that there are over 110 Liberian seafarers classified as ratings.

SOURCE: Bureau of Maritime Affairs, R.L. Marine Safety Department, Reston Virginia.
Tables (V) and (VI); project an estimate of total Deck-rating positions available on Liberian registered ships (Able Seaman and Ordinary Seaman) respectively.

In order to derive at Tables V & VI, the total number of ships, as illustrated in Table I, is utilized in relation to Table (II), which projects a basis for deployment of crew as per vessel category.

Therefore, in order to obtain the total number of Able Seaman/Ordinary Seaman, in each category, the number of ships indicated is multiplied by the number of Able Seaman/Ordinary Seaman accordingly; this being the average number of crew size in each category of ships.

**TABLE (V): A PROJECTION OF ABLE SEAMAN (AB) POSITIONS AVAILABLE ON THE LIBERIAN FLEET**

<table>
<thead>
<tr>
<th>Ship category</th>
<th>No. of ships</th>
<th>No. of AB/ship</th>
<th>Total No. of AB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 500</td>
<td>45</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Over 500 under 1600</td>
<td>63</td>
<td>2</td>
<td>126</td>
</tr>
<tr>
<td>*Over 1600 under 5000</td>
<td>126</td>
<td>2</td>
<td>252</td>
</tr>
<tr>
<td>*Over 5000 under 8000</td>
<td>66</td>
<td>4</td>
<td>264</td>
</tr>
<tr>
<td>Over 8000</td>
<td>1508</td>
<td>3</td>
<td>4524</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1808</td>
<td></td>
<td><strong>5166</strong></td>
</tr>
</tbody>
</table>

*Tonnage Division overlap; therefore an estimation is made. SOURCE: Author's calculations, based upon Liberian Approved Manning Scale-Deck, as indicated in Table II; in relation with the Size and categories of Ships, as indicated in Table I.*
## TABLE VI: AN ESTIMATION OF ORDINARY SEAMAN POSITIONS (OS) AVAILABLE ON LIBERIAN REGISTERED SHIPS

<table>
<thead>
<tr>
<th>Ship category</th>
<th>No. of Ships</th>
<th>No. of OS/Ship</th>
<th>Total No. of OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 500</td>
<td>45</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>Over 500 under 1600</td>
<td>63</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td>*Over 1600 under 5000</td>
<td>126</td>
<td>2</td>
<td>252</td>
</tr>
<tr>
<td>*Over 5000 under 8000</td>
<td>66</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Over 8,000</td>
<td>1508</td>
<td>3</td>
<td>4524</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1808</strong></td>
<td></td>
<td><strong>4929</strong></td>
</tr>
</tbody>
</table>

* Tonnage Division overlap, therefore an estimation is made. **SOURCE:** Author’s calculation, based upon Liberian Approved Safe Manning Scale - Deck (Refer to Table II; in relation to the Size and categories of all Steam and Motor Ships as illustrated in Table I).
* TABLE (VII): FEATURES AN ESTIMATION OF ENGINE-ROOM RATING POSITIONS AVAILABLE ON LIBERIAN REGISTERED SHIPS

<table>
<thead>
<tr>
<th>No. of ships</th>
<th>No. of Oilers</th>
<th>Total No. of Oilers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1808</td>
<td>2</td>
<td>3616</td>
</tr>
</tbody>
</table>

* In this table, note that the number of ships according to kilowatt rating is not given; but an average of two (2) ratings per ship is taken according to category recommendation. (Refer to Approved Safe Manning Scale-Engine (Table II).

In view of projections/estimations made above, the total number of Rating positions, both (Deck and Engine) for Able Seaman, (AB); Ordinary Seaman,(OS); and Oilers, aboard Liberian registered ships, as illustrated in Tables (V); (VI); and (VII); is reflected in the Table VIII, below.

TABLE VIII
TOTAL DECK-RATING POSITIONS AVAILABLE ON LIBERIAN REGISTERED SHIPS

<table>
<thead>
<tr>
<th>Category of Seafarer</th>
<th>Total No. of Deck-Ratings Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able Seaman</td>
<td>5166</td>
</tr>
<tr>
<td>Ordinary Seaman</td>
<td>4929</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,095</td>
</tr>
</tbody>
</table>
TABLE IX
TOTAL ENGINE-ROOM RATING POSITIONS AVAILABLE ON LIBERIAN REGISTERED SHIPS

<table>
<thead>
<tr>
<th>Category of Seafarer</th>
<th>Total No. of Engine-Rating Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oiler</td>
<td>3616</td>
</tr>
</tbody>
</table>

TOTAL NUMBER OF ENGINE AND DECK RATING POSITIONS AVAILABLE = 13,711

In addition, the total number of engine and deck rating positions would be further augmented, considering supplementary rating positions such as Junior Ordinary Seamen, (JOS); and Wipers. However, this study have excluded the latter positions in its projected calculations, due to the fact that as entry-level positions, JOS/Wipers; are not acceptable as part of the minimum safe manning complement on the Liberian registered fleet.

A limited number of qualified Liberian seafarers (JOS) and Wipers, in positions aboard Liberian registered ships could however be later upgraded to Ordinary Seaman and Oiler respectively, upon satisfying the required sea-service experience.

In order for the proposal to be implemented, as herein suggested, there exist a need to carry-out a survey, to establish the demand side of the manpower planning scheme. In other words, Liberian shipowners must confirm the need for employment of competent Liberian seafarers before any plans geared towards training is effected. Such an approach would ensure that there exist an equilibrium between supply and demand.

It is herewith acknowledged that due to time cons-
train, this study could not undertake the aforementioned survey, however, the following advantages and/or considerations, are likely to accrue to Liberia:

- The (BMA), has indicated through response to a questionnaire that the attitude towards the employment of nationals is favorable, provided they are well trained and certificated. Complementarily, Marathon Oil, for example, employed a substantial number of Liberian seafarers during 1986.

- As a developing country with relative low wages, Liberia could also provide low cost crew, provided they are trained and duly certificated in keeping with international standards.

4.4 A 10% EMPLOYMENT OPPORTUNITY OF POSSIBLE RATING POSITIONS AVAILABLE ON LIBERIAN REGISTERED SHIPS PROPOSED FOR LIBERIAN NATIONAL SEAFARERS

In view of the foregoing, inorder to give Liberia a fair share of the employment of its national seafarers, it is herewith suggested that a 10% employment opportunity at the rating level, of the total number of positions available aboard Liberian registered ships, as projected above would be beneficial.

The 10% employment opportunity at the rating level would create an incentive for training of seafarers on a national level.

In this light, it must be mentioned that Panama, as an outstanding open registry state, has provisions in its Merchant Shipping Laws, for the employment of 10% Panamanian crew (officer/rating); if available. (3)
4.5 REASONS FOR PROPOSING THE TRAINING OF RATINGS

- Availability of high rate of unemployed Liberian seafarers
- Relative short period of training required
- Relative low-cost of training
- Relative short pre-sea experience required.

According to Liberian Maritime Law, Regulations, Notices and Requirements, (RLM)-118, under Section (Requirements for Personnel Certification) B-1; a "Rating" means a member of the ship’s crew other than a Master or an Officer. (4)

### TABLE X

4.6 ESTIMATED NUMBER OF LIBERIAN RATINGS TO BE TRAINED, BASED ON 10% STIPULATION (EXCLUDING WASTAGE).

<table>
<thead>
<tr>
<th>Category of Rating</th>
<th>No. of Positions Available</th>
<th>Total No. of Ratings to be trained based on 10% stipulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able Seaman</td>
<td>5166</td>
<td>516</td>
</tr>
<tr>
<td>Ordinary Seaman</td>
<td>4929</td>
<td>492</td>
</tr>
<tr>
<td>Oiler</td>
<td>3616</td>
<td>361</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>1,369</strong></td>
</tr>
</tbody>
</table>

As previously mentioned, considering that (JOS)/Wipers could also be employed aboard ocean-going vessels, although not included in the safe manning scale, it is therefore suggested that a reasonable number in each category of such entry-level ratings, be included in the manpower planning scheme.
Considering seafarers annual leave, illness, including the inevitability of wastage-death, retirement, change of job etc., the total number of Liberian seafarers to be trained would have to be increased also.

**TABLE XI** ESTIMATED TOTAL NUMBER OF (AB), (OS), (JOS), OILERS/ WIPERS REQUIRING TRAINING (EXCLUDING WASTAGE)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% stipulation</td>
<td>1369</td>
</tr>
<tr>
<td>Junior Ordinary Seaman/Wiper</td>
<td>200</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1569</strong></td>
</tr>
</tbody>
</table>

*Note: Depending on the success of the scheme, facilities would have to be expanded, in order to cope with the demand of seafarers for possible employment.*

As previously indicated in this study, a survey was also conducted, in relation to Seaman Organizations in Liberia, with the view towards ascertaining the total number of seafarers on roster; qualifications; type of training required inorder to qualify for possible employment on Liberian registered vessels; and including other related inquiries.

Accordingly, a summary of the data/information received from the national Seaman Ports and General Union of Liberia, and the Liberian Seaman Ports and General Workers Union, revealed the following. For the purpose of conciseness and clarity, the information and data are projected together.
4.7 STATUS OF SEAMEN’S ORGANIZATIONS IN LIBERIA (i.e.
NUMBER OF SEAFARERS QUALIFICATION AND TYPE OF TRAINING
REQUIRED)

TABLE XII
TOTAL NUMBER OF LIBERIAN SEAFARERS ON ROSTER
INCLUDING FISHERMEN

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of Seafarers on Roster</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Seamen’s, Ports and General Worker’s Union of Liberia</td>
<td>7,085</td>
</tr>
<tr>
<td>Liberian Seamen Ports and General Worker’s Union of Liberia</td>
<td>2,950</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,005 (Approximate number of Liberian Sea-farers)</td>
</tr>
</tbody>
</table>

SOURCE: Seamen’s Organizations in Liberia.

In view of the figures above, the survey conducted further revealed that approximately 6% of the Liberian seafarers have had some kind of sea experience. However, the information did not reveal the level, nor the gross tonnage of ship on which seafarers acquired their sea experience. Included in the total number of Liberian seafarers, as illustrated in Table XII, are 1212 fishermen.

In addition, of the total number of seafarers mentioned above, a relative few have received any form of certification or approved document endorsed by the Adminis-
Presently approximately 160 Liberian seafarers are employed aboard Liberian registered vessels.

As per information received from the aforementioned Seamen Organizations, and in view of the scope of training indicated in this study, the following areas, were identified as paramount, in view of requisite training that would qualify Liberian seafarers for possible employment on Liberian registered vessels:

### TABLE XIII

**TRAINING REQUIRED FOR LIBERIAN SEAFARERS AT RATING LEVEL BASED ON SURVEY RESULTS**

<table>
<thead>
<tr>
<th>DECK-RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able Seaman</td>
</tr>
<tr>
<td>Ordinary Seaman</td>
</tr>
<tr>
<td>Junior Ordinary Seaman</td>
</tr>
<tr>
<td>Boatswain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENGINE RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oiler</td>
</tr>
<tr>
<td>Wiper</td>
</tr>
<tr>
<td>Donkey-man</td>
</tr>
</tbody>
</table>

The data and statistics as revealed above indicate that although there are relative few Liberian seafarers employed on Liberian registered ships, there exist a need for training and upgrading of the present reservoir of seafarers, in keeping with international standards, inorder for the latter to qualify for possible employment. In addition to the above mentioned areas, the following positions were also identified as possible avenues for pos-

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sible employment of Liberian seafarers:

Catering Officer
Steward
Laundry-man etc.

However, this study does not attempt to discuss nor highlight features relating to the aforementioned areas. Rather, it is herewith mentioned for the consideration of the Maritime Authorities, undertaking maritime manpower planning.

4.8 RATIONALE FOR PROPOSING A MARITIME TRAINING SCHEME IN LIBERIA

Having theoretically illustrated and justified the need for the training and employment of Liberian seafarers, the following reasons substantiate same:

- The Liberian register of ships could provide considerable employment potential for Liberian seafarers, provided they are properly trained and duly certified to recognized international standards.

- The manpower development scheme would not only provide a greater opportunity for the employment of Liberian seafarers, but would also contribute towards enhancing the genuine-link concept between Flag State and Ship; an issue which has been of much controversy within international forums, particularly, (UNCTAD).

- The provision of national seafarers to the Liberian registered ships would inevitably strengthen the Administration's responsibility towards its fleet. (5)
In addition to the aforementioned, the following are other considerations:

- "Trained seamen" of a country would in fact increase the "employment potential" of seamen in that country in the long run, because shipowners at large have become keen on employing trained seamen; irrespective of category;

- The training of seamen improves safety standards and efficiency, both of which are vital. An untrained seaman would be, a liability to others and to himself, especially so, in emergencies.

- The necessity for adequate training and attainment of professional standards has been recognized, in view of the adoption of the STCW Convention in 1978. It would therefore, be in the vital interests of all maritime countries to prepare their seafaring personnel to meet its provisions.

Finally, supplying qualified seafarers on ocean-going vessels provides foreign exchange earnings, which could be acquired thru remittances of seafarers salaries, to their respective families at home; by means of the National Bank of Liberia. This should have the consequential effect of contributing towards Liberia's socio-economic development.
REFERENCES

2. Ibid., p. III-7.
5. IMO. "MISSION REPORT", of the Inter-Regional Sectoral Consultants in Maritime Training (Deck & Engineering), 1986, p. 7.
6. P.S. Vanchiswar, Establishment/Administration of Maritime Affairs in Developing Countries, vol. 1, 1984, p. 119
Chapter V

Implementation of Proposed Maritime Training Program to Satisfy Manpower Requirement

Part I

Elements Required for Implementation Process

5.1.1 Introduction

Implementing a maritime education and training system and program requires certain prerequisites, which serves as a basis for facilitating and institutionalizing training and certification on a national level. Without incorporating these elements into national legislations, in order to govern the process, it is inevitable that the MET process would lack some basic structural shortcomings.

In this light therefore, international conventions relating to maritime education and training, the need for national legislation concerning examination and certification of seafarers, the organization of an educational system, the examination and certification structure and the process of recruitment and qualification of seafarers are relevant and essential ingredients towards facilitating the MET process.
5.1.2 INTERNATIONAL CONVENTIONS

Maritime education and training, in contemporary times transcends national jurisdictions wherein international bodies such as the ILO and IMO have adopted international standards through which a uniform system of maritime training and certification should be attained.

Prior to the adoption of the STCW convention in 1978, each government set its own education and certification standards for its seafarers. Whilst many of the standards established were higher in content and broader in scope, it is equally true that standards in many countries were of lower quality. (1)

Accordingly, the STCW convention established for the first time on a global basis, detailed requirements on the standards of training, certification, and watchkeeping for seafarers.

Considering, systems of MET vary from one country to another, the convention establishes minimum training requirements to be satisfied or exceeded, whatever system is adapted. That is to say, irrespective of the country involved, certificate structure adopted by a national administration should be in conformity with the guidelines and provisions of the convention.

In this respect, national administrations are obliged to ensure that it complies and give effect to the STCW convention by accordingly enacting national laws.

The STCW convention does not address itself to the manning of sea-going vessels. Therefore, it is incumbent upon each Administration to define what should be the minimum safe manning requirement for its fleet. Thus, every sea-going vessel to which the convention applies (vessels of any gross tonnage and their crews once engaged in international sea-borne commerce) must have on
board a minimum safe-manning document, approved by the Administration, in accordance with Annex I of the IMO Resolution A 481(XII).

Since emphasis in this study is placed on the training of ratings, the international convention on the standards of training, certification and watchkeeping of seafarers 1978, embodies a number of Regulations and Resolutions which affect the training of ratings. These are:

REGULATIONS

i. Regulation II/6: Minimum requirements for ratings forming part of a navigational watch.

ii. Regulation III/6: Minimum requirements for ratings, forming part of an engine-room watch.

iii. Regulation V/2: Minimum requirements for the training and qualifications of ratings of chemical tankers.

iv. Regulation V/3: Minimum requirements for the training and qualification ratings of liquified gas tankers.

v. Regulation VI: Minimum requirements for the issue of a certificate of proficiency in survival craft for all seafarers. (2)
RESOLUTIONS

i. Resolution VIII: Additional training for ratings forming part of a navigational watch.


iii. Resolution XI: Training and qualification of ratings of chemical tankers.

iv. Resolution XIII: Training and qualifications of ratings of ships carrying dangerous and hazardous cargo other than bulk.


vi. Resolution XIX: Training of Seafarers in personnel survival.(3)

The national administration is required to ensure that (ratings) who are not included in the safe manning requirement possess certificates or an authorized document, which is endorsed by the Administration. This requirement is necessary for the benefit of Port State Control Inspectors in foreign ports, wherein seafarers certificates and qualifications are scrutinized. However, it must be borne in mind that documents to be issued to deck-department ratings who do not form part of the navigational watch certainly has limitations.

Firstly, it is not intended to substitute for an Able seaman certificate, for which international standards of cetification have been established.
Secondly, wherein the seafarer is the only rating on watch, aboard ships of more than a limited size, such a document issued by the Administration shall not be deemed appropriate or satisfactory.

FIGURE (II), illustrates the sea-service training requirement and other qualifications for deck department ratings, forming part of the engine-room watch, as per the STCW convention.

The provisions of Regulation III/6 of the STCW convention stipulates mandatory minimum requirements for ratings forming part of an engine-room watch. Similarly, as in the case of deck department ratings, engine department ratings require certificates or an endorsement of documents issued by the Administration.

Sea-service training and other requirements of the engine-department rating, forming part of the engine-room watch, based on STCW standards, is illustrated in FIGURE (III).

The endorsement of documents on the part of the Administration of certificates to engine-room ratings who might eventually become assistant to engineer officer in charge of the watch is even more important, since the latter, upon satisfying the requirements of the provisions stipulated in Resolution 9, of the STCW convention, will be included in the safe manning scale.(4)

Sea-service, training requirements and other qualifications required for ratings nominated as the assistant to the engineer officer in charge of the watch is illustrated in (FIGURE IV).

Insofar as implementation of the STCW convention is concerned in relation to manning of Liberian vessels, the following references are vital. (Publication RLM - 118 and IMO Resolution A. 481(XII).

RLM-118, as now amended provides standards and infor-
FIGURE II

DECK DEPARTMENT - REQUIREMENTS FOR RATINGS FORMING PART OF A NAVIGATIONAL WATCH

AUTHORIZED DOCUMENT OR ENDORSEMENT AS A RATING FORMING PART OF A NAVIGATIONAL WATCH ON A SEA-GOING SHIP OF 200 GROSS TONS OR MORE

MINIMUM AGE 16 YEARS

APPROVED SEA-GOING SERVICE SPECIAL PRE-SEA OR SHIPBOARD TRAINING
INCLUDING NOT LESS THAN 6 MONTHS SEA EXPERIENCE +
ASSOCIATED WITH SUPERVISED NOT LESS THAN 2 NAVIGATIONAL WATCHKEEPING MONTHS SEA-GOING DUTIES SERVICE

GENERAL EDUCATION

FIG. II

1/ 1978 STW Conference Resolution B recommends additional training in use and operation of bridge equipment and in pollution prevention requirements.

2/ Pre-sea basic fire-fighting course recommended (Res. A.437(XI)).
FIGURE III

ENGINE DEPARTMENT-REQUIREMENTS FOR RATINGS FORMING PART, OF AN ENGINE ROOM WATCH

RATINGS FORMING PART OF AN ENGINE ROOM WATCH

MINIMUM AGE 16 YEARS

SHORE EXPERIENCE RELEVANT TO HIS SEA-GOING DUTIES

SPECIAL PRE-SEA DR. SHIPBOARD TRAINING

SUPPLEMENTED BY AN ADEQUATE SEA-GOING SERVICE

APPROVED SEA-GOING SERVICE OF AT LEAST 6 MONTHS

GENERAL EDUCATION 1/

1/ Pre-sea basic fire fighting course recommended (Res. A. 437(XI)).
ENGINE DEPARTMENT-REQUIREMENTS FOR A RATING NOMINATED AS THE ASSISTANT TO THE ENGINEER OFFICER IN CHARGE OF WATCH

FIGURE IV

AUTHORISED DOCUMENT OR ENDORSEMENT AS A RATING NOMINATED TO ASSIST THE ENGINEER OFFICER IN CHARGE OF ENGINEERING WATCH 1/

MINIMUM AGE 17 YEARS

SEA-GOING SERVICE IN AN ENGINE ROOM CAPACITY FOR AT LEAST 12 MONTHS

6 MONTHS OF SEA-GOING SERVICE IN ENGINE ROOM

6 MONTHS OF APPROVED TRAINING

REQUIREMENTS OF REGULATION III/6 2/

REQUIREMENTS OF REGULATION III/6

GENERAL EDUCATION 3/

1/ STCW Conference Resolution 9—“Recommendation on Minimum Requirements for a Rating Nominated as the Assistant to the Engineer Officer in Charge of the Watch.

2/ Mandatory Minimum Requirements for Ratings forming Part of an Engine Room Watch.

3/ Pre-sea fire-fighting course recommended (Res. A437 (XI)).
mation on training, qualification, certification and
documentation of all merchant marine personnel, as is
necessary to comply with the STCW convention; and IMO
Resolution A.481 (XII)-Principles of Safe Manning
especially emphasizes, safe manning as a function of the
number of qualified or experienced seafarers necessary
for the safety of navigation and the protection of the
marine environment.

In relation to manning requirements as stipulated
under Liberian Maritime Laws and Regulations, for the
training and qualification of ratings, the following sec­
tions outlines the legal structure and prerequisites for
elevation from one level of position to another.

RLM 118 Part J (Special Qualifications for Certifica­
tion in Seamen’s Identification and Record Book. Particu­
lar reference should be given to J 2(i)&(ii), which
stipulates requirements and qualifications of Able Seamen
(AB), and Ordinary Sailors (OS); J-2(c), for Oiler, while
(e)and(f) are for Junior Ordinary Seamen (JOS), and
Wipers respectively. (5)

The convention is not specific as to how many ratings
should be included in a navigational or engine room
watch. Therefore, for Liberian vessels, the following de­
terminations are made:

- when only one rating forms a navigational watch, he
  shall be qualified as an Able seaman. When more than
  one rating is included in a navigational watch only
  one need to be qualified as an Able seaman.

- when only one rating forms part of an engine room
  watch he shall be qualified to the standards prescri­
bbed for Fireman/water-tender or Oiler, according to
  the duties required of him. When more than one rating
is included in an engine room watch, only one rating need be qualified in accordance with this paragraph.

- Resolution A.481 mandates that no member of the engine room watch shall be required to enter the engine room alone except under controlled conditions.

In cases where personnel not defined in RLM - 118, such as electricians, fitters, mechanics, etc., are carried on the crew list in lieu of fireman/water-tenders or oilers, a sufficient number of such personnel shall comply with the standards and hold certification prescribed for fireman/water-tenders or oilers, according to the duties they are required to perform.(6)

5.1.3 THE NEED FOR NATIONAL LEGISLATIONS

In the process of institutionalizing MET, the leading role must be assumed by the Government (Maritime Administration) for the following reasons:

- The political, social and economic philosophies of the government, as regards labour matters in general are also bound to affect maritime labour (seafarers).

- In the interest of the country's maritime development it is the National Government (Maritime Administration) which has to:
  a) make the assessment as regards the manpower needs in the maritime sector.
  b) plan for and ensure the availability of such manpower, both in quantity and quality, and
  c) The optimum utilization of such manpower to national advantage.
- It is the National Government which has to ensure that the National merchant shipping law, applicable to the national marine personnel (seafarers), is such as to suit their extraordinary working/living environment.

- The National government is in the best position to:
  a) monitor international developments affecting its (existing and/or future) marine personnel,
  b) seek and avail itself the opportunity to influence in its favor, to the maximum extent possible such developments, through international fora and support from other Governments and Bodies with common interest.
  c) evaluate such developments when they emerge finally, and
  d) adopt policies compatible with national interest.

- The National Government has international obligations, as regards International Maritime Conventions which it has to meet, including international standards for the competency/proficiency of its seafarers. (7)

In view of the aforementioned, the role/responsibilities and functions of Government (Maritime Administration), as regards enacting national legislations concerning their marine personnel (seafarers), need to cover essentially the following:

- Crew matters (i.e., matters affecting marine personnel) in general;
- Examination and Certification of Seafarers
- Manning of ships;
- Maritime Training (8)
In organizing the Maritime Education System, it is imperative that objectives be set. In this connection, the MET process should be in conformity with the goals of the national shipping policy.

The needs of a country's maritime transportation system coupled with the aims of the shipping policies will to a considerable degree determine its maritime education policy. Whether MET is geared towards providing qualified seafarers only for a nation's merchant fleet or to supply the labour for foreign flag vessels as well, is indeed a crucial consideration in determining the output of the MET system.

Nevertheless, the purpose of the MET process should be preparing of seafarers to perform their duties efficiently in order to ensure the highest possible standards of operating efficiency and of safety aboard vessels.

The approach towards training varies from one country to another. Whilst, it is the public entity in some countries that is responsible for the education of seafarers, in some others, it is a private body. Yet, in others, it is a combination of both public and private entities which supervises maritime training. The coordination of MET activities can also be implemented through the IMO Technical Cooperation Program. But this is mainly done on an inter-regional basis.

Whatever method or approach is adopted to suit a country's national circumstances, the most effective and efficient scheme is likely to derive from the formation of a government or quasi-government organization, responsible for the implementation of maritime education and training.

Accordingly, the day to day operation of maritime
training activities in many countries, is entrusted to a body established at the national level, which is primarily responsible for organizing and developing maritime education programs. Such a body need not be a statutory one. But it is advisable that it should include other interest groups, including: the national maritime administration, representatives of shipowners, educational establishments, and representatives of seafarers. This would provide a cross-section of views and inputs into the MET system.

The principal functions of such a Body should be:

- to advise the Government, in the planning, development and coordination of maritime training;

- to recommend a programme of MET, in conformity with national needs;

- to determine curricula and administration of the maritime institute;

- to advise on the selection of the professional instructional staff;

- to study and propose solutions to problems concerning training;

- to advise on other matters relating to the education and training of national seafarers. (9)

Finally, inorder to accomplish this task, it is necessary that the authorities, responsible for maritime training and education provide adequate facilities to ensure that seafarers have been properly educated in the various
operational techniques and related maintenance and repair work. In addition, the education process should be such that the seafarer understands the entire concept of the shipping industry and the role he is expected to play in it.

5.1.5 EXAMINATION AND CERTIFICATION SYSTEM

Certificates of competency awarded by competent maritime authorities, to sea-farers, particularly, marine officers and ratings included in the minimum safe manning scale, establish proof of the competence of the respective seafarers concerned for the levels at which they have to perform duties/operate ships.

(Ratings), who are not required to be duly certified, must however also possess a document, endorsed by the administration, certifying that the rating has completed a prescribed course of study, in keeping with international standards.

Whilst the human factor is dominant in the operation of a ship, the professional competence of the management/supervisory personnel is predominant. Therefore, in view of the importance attached to examination and certification of seafarers, the Government, through the Maritime administration in most countries have assumed direct responsibility for its supervision and administration. It is however, advisable that other interest groups such as the shipping industry, the maritime education authorities, and representatives of seafarers, be consulted in prescribing standards for the examination and certification system itself. Such an approach would help establish credibility and legitimacy of the entire examination and certification process.

There are a number of factors to be taken into consi-
deration, concerning examinations.

Firstly, the content of examination should demand that the candidate has a sound understanding of the required subjects; instead of testing for traditional and obsolete knowledge.(10) In order to give examination some relevance, emphasis should be placed on up-to-date knowledge, considering rapid technological developments in the modern shipping industry.

In relation to the above, oral examination is a useful means in the examination process. It provides an opportunity to test both the practical ability of a candidate, any additional knowledge not previously tested in the written examination. In addition, and more importantly, it enables the examiner to establish whether apparent weaknesses revealed in the written paper are real.(11)

Secondly, the question of security of examination papers is essentially crucial, if integrity and fairness of the examination process is to be assured, and standards of competency and efficiency maintained.

In view of the aforementioned, the following considerations should be taken into account in the preparation of examinations:

- Examinations should not go beyond the accepted syllabi;

- Out-dated questions should be disposed of or amended;

- Sufficient number of questions should be provided in a "bank", so that the same question is not frequently used.(12)
A country wishing to establish a system of maritime education, examination, and certification structure in keeping with international standards should consider implementing the following guidelines:

- Prepare appropriate Rules/Regulations and detailed syllabuses for the conduct of various examinations and certification of seafarers;

- Ensure the necessary infrastructure for the conduct of the examinations, as part of (or linked to) their Maritime Administration;

- Ensure the availability of adequate and appropriate maritime training facilities for their seafarers;

- Ensure the availability of duly qualified and trained maritime instructors/educators.(13)

Whilst Governments in most countries have accepted the responsibility of maritime examination, and certification, it must however be indicated that in some other countries, this function is delegated to an independent body, which is responsible for setting standards and examining. It is therefore necessary, that such a body be duly constituted under national laws; and be given the requisite powers to execute its functions relating to examination and certification of seafarers.

Having presented differences in approach to the system of examination and certification, as highlighted above, it must however be mentioned that the national circumstances in a given country will to a large extent, influence or determine which approach to pursue.
5.1.6 RECRUITMENT AND QUALIFICATION

In order to ensure that maritime education and training attain its objective of providing adequate number of well-trained seafarers, it is imperative that there exist an effective recruitment scheme. It is necessary that such a scheme introduce a rigid selection process, based upon high entry requirements inorder to limit academic failures and help prevent a high-level of turn-over or wastage.

Selecting the "right calibre" of entrants therefore is important. The phrase, "right calibre", implies a person who is physically and mentally capable to undergo maritime training; and aspires to a sea-career as an ambition.(14)

When devising a recruitment scheme, it is advisable that the following considerations, inter alia, be taken into account:

- determine the criteria for the right calibre of candidates;

- foster the development and general use of appropriate selection techniques involving both character and intelligence assessment;

- create circumstances in which the shipping industry can attract the calibre of seafarers it needs;

- exercise effective supervision of entry standards—total numbers accepted for training and the number of places to be provided in the training school;(15)
Whilst a well-organized recruitment scheme is necessary, it should go along with high standards of education and training, which in effect ensures flexibility and adaptability to changes, considering technological innovations occurring in the maritime shipping industry, both ashore and aboard ships. This would ensure a parallel development of skills of sea-going personnel to cope with required shipboard tasks.

Accordingly, there should be a central body established and responsible for the development of the overall recruitment policy. It should be structured in such a manner, as to have representation from the shipping industry, the educational establishments, and the government. The function of this body should include the following:

- the development of an appropriate recruitment policy; hence a suitable selection scheme;

- the creation of a favorable environment for better recruitment through utilizing the mass media, literature publications, etc.;

- the establishment of entry standards, and advisory services to all recruits on the training program. (16)

The most common entry requirement for maritime studies is the completion of secondary or high school education. Other qualifications often vary to a considerable degree from one country to another.
CHAPTER V PART II

IMPLEMENTATION PROCESS OF THE PROPOSED MARITIME EDUCATION AND TRAINING SCHEME IN LIBERIA

5.2.1 INTRODUCTION

Having provided a framework in the previous section (Part I), of chapter V, through which maritime education and training should be established, the latter portion of this study attempts to highlight the means by which the MET scheme should be implemented in Liberia. In view of this, subsequent discussions are geared towards illustrating the salient features which constitute the basis for a successful implementation of a maritime human resource development/manpower planning program, as herein proposed in this study.

5.2.2 TRAINING PROGRAM

Based upon an estimation of the total number of Able Seamen (AB), Ordinary Seamen (OS), Junior Ordinary Seamen (JOS); Oiler/Wiper, as illustrated in Table XI, of Chapter IV, to be trained for possible employment aboard Liberian registered ships, Table XIV, portrays the sequence for phasing-in training, per batch, according to training schedule. Accordingly, based upon IMO Report, (Expanded Proposals of the Manpower Development Plan), Mission Report to Liberia, 1986, a total recruitment intake, per year is recommended below:

- 36 Able Seamen
- 36 Ordinary Seamen
- 36 Oilers (17)
In view of training capacity at the existing Union Marine Training Institute, located in Marshall Territory, Liberia, the above mentioned report suggest that the training programmes should be implemented over a 3 month period, permitting 3 intakes of trainees annually as follows:

- 12 Able Seamen
- 12 Ordinary Seamen
- 12 Oilers (18)

Accordingly, Table XIV, is based upon the phasing-in schedule, as indicated above, coupled with the total number of Liberian seafarers (ratings) to be trained, as illustrated in Table XI.

Table XIV
TRAINING PROGRAMME (Phasing - In) of TRAINEES PER BATCH

<table>
<thead>
<tr>
<th>Category of Seafarer</th>
<th>No. of Batches</th>
<th>Training Output/Yearly</th>
<th>Total No. Seafarers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able Seamen</td>
<td>15</td>
<td>36</td>
<td>540</td>
</tr>
<tr>
<td>Ordinary Seamen</td>
<td>14</td>
<td>36</td>
<td>504</td>
</tr>
<tr>
<td>Oilers</td>
<td>10</td>
<td>36</td>
<td>360</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>39</strong></td>
<td><strong>108</strong></td>
<td><strong>1404</strong></td>
</tr>
</tbody>
</table>

Note: 3 Batches of 12; in each category to be trained annually, based on IMO Mission Report, 1986.
Considering the training of Junior Ordinary Seamen (JOS) and Wipers, as proposed, it is herewith suggested that a limited number of Ratings, be included or phased-in for training, under figures estimated above for Ordinary Seamen and Oilers, respectively. Hence, the total number of Ratings to be trained would consequently increase accordingly.

5.2.3 NATIONALIZATION OF THE EXISTING UMTI/MANO RIVER UNION TRAINING INSTITUTE

In view of considerations towards establishing a maritime human resource development, vis-a-vis, manpower planning scheme in Liberia, it is hereby proposed that the existing (UMTI) facilities be utilized for the benefit of training Liberian seafarers, (Ratings).

Such a proposal as stated above requires the nationalization of the (UMTI). Whilst there exist pros and cons to the issue, the advantages of nationalization exceeds its disadvantages. The most important factor for consideration however, relates to the level of Government commitment and support.

The following include the advantages and disadvantages of nationalization:

5.2.3.1 ADVANTAGES OF NATIONALIZATION

- National ownership;

- Adequate training and employment opportunities for Liberians;

- Foreign currency reserves;
- Increase aid from Liberian shipowners;

- Utilization of marine training institute as a pre-requisite for overseas training. (19)

In addition, nationalization would permit an expansion of the training capability of the proposed National Marine Training Institute, to include training of personnel for other related local industries, i.e., ports, fisheries, coast guards, etc.

5.2.3.2 DISADVANTAGES OF NATIONALIZATION

- Financing of Liberia alone;

- Diminished cooperation from member states of the Mano River Union. (20)

In view thereof, and further considering the non-operational status of the UMTI, mainly due to the lack of financial support from member states of the Mano River Union, it appears that the host country, Liberia, has no alternative but to proceed towards nationalization. This conclusion is further substantiated by the Union's Ministerial Council's recommendation through its Secretariat, which affirms the need for nationalization of the Institute.

In this light, the following observations by a special committee set-up by the Council to investigate problems relating to the functioning of the institute are relevant:

- That whilst the institution should be maintained, its
operational costs was very expensive and placed constraints on the resources of the Union;

- That although the institution was receiving some foreign assistance, member states had to contribute substantial amounts towards its maintenance;

- That member states were not meeting their required contributions;

- That if the institution is operated on a national level by the host member state, other countries of the Union area and the West African sub-region could utilize same through bilateral negotiations with the host country;

- That countries usually support their National training institutions both from local and foreign resources, with less difficulty than they do regional training institutions;

- That normally, the training institutions take long to achieve results and member states tend to lose the faith in the goals and objectives of the regional organization. (21)

Hence, it is herewith proposed that the nationalized Institute be referred to as; the Liberian National Marine Training Institute. Its purpose will be geared towards the training of lower/middle level maritime personnel in Liberia.
Having established a National Marine Training Institute, considerations should be given towards upgrading present facilities at the Institute, in order to meet the present and future maritime training needs of Liberia. It must however be stated that training of personnel from other local industries (i.e. Port, Fisheries, Coast Guards) be implemented at a later stage of the proposed Institution.

Accordingly, personnel from the National Port Authority, Ministry of Agriculture - Fisheries Division, and the Coast Guards, could derive tremendous benefits from training courses established at the proposed Liberian National, Marine Training Institute.

5.2.4 CURRICULUM/TRAINING SYLLABUSES

The advent of the STCW convention, in 1984, and Liberia's subsequent ratification of it, makes it mandatory that the Convention becomes the basis upon which the curriculum/training syllabuses is established at the proposed Liberian National Marine Training Institute.

The convention stipulates certain common elements applicable to all training courses for deck and engine-room ratings. These include:

- basic sea survival training;
- basic fire-fighting training; and
- basic first-aid/medical care courses (22)

Moreover, the type of training programs to be implemented should generally be within the framework of the following guidelines stipulated below which establish
minimum international standards of education and training required for seafarers (Ratings).

- Training programme for the training of Able Seamen as described in the ILO/IMO revised "Document for Guidance, 1975."

- Ratings forming part of a Navigational Watch Reg.II/6 (STCW).
- New entrants Ratings (Deck)

- Ratings forming part of an Engine-room Watch III/6 (STCW).(23)

In addition, there exist a need to introduce specialized courses in the following areas:

- Fire-fighting Techniques; IMO Resolution A437 (XI); "Training of Crews in Fire Fighting;"

- Certificate of Proficiency in Survival Craft (STCW) Reg. IV/1;

- Basic Sea Survival (STCW Resolution 19);

- Crude Oil Washing (COW);

- Tankerman, Oil, Chemical and Liquefied Natural Gas Tankers (STCW, chapter V);

- Inert Gas Systems (IGS);(24)
Plans, as envisaged in this study should enable the Bureau of Maritime Affairs, implement the Ratings training scheme, in the immediate short term, considering the existing facilities at the Institute, coupled with additional logistical and financial support required. However, as per the proposed upgrading of facilities at the Institute, to incorporate training of personnel for related local maritime industries/institutions, the following levels of training/courses of study should be instituted accordingly:

1) Deck-Rating (New-Entrant) - An induction course required, containing basic seamanship and safety training, a basic sea-survival course and basic fire-fighting course;

2) Deck-Rating (A rating with sea-service) - A course containing training leading to the Able Seaman Certificate, and the Proficiency in Survival Craft Certificate. Further fire-fighting and first-aid training should be undertaken;

3) Engine-Room Rating - A course of training leading to mandatory minimum requirements for rating forming part of an engine-room watch. Such a course should include; basic sea survival, basic fire-fighting, and basic first-aid;

4) Engine-Room Room - A course of training leading to minimum requirements for a rating nominated as the assistant to the engineer officer-in-charge of the watch. A full
course containing further fire-fighting training is required;

5) Crews of fishing vessels - Training courses should be based on the recommendations developed by IMO STCW sub-committee on "Training and Certification of Fishing vessels, where appropriate;

6) Port Workers - Courses to be offered should include; Marine Pollution, search and rescue, pilotage for Tug Captains/Mates and Launch Captains. In addition, a course in safe working practices relating to handling and stowage of dangerous goods; Bulk cargoes, IMDG Code, Port Administration; Moreover, a course in Maritime Transport and Technology, with emphasis on General Cargo Operations and containerization would be necessary.

7) Coast Guards - Courses for Coast Guards should include the following: (i.e., Marine pollution, search and rescue, pilotage for tug captains/mates and launch captains etc.) (25)
5.2.6 TRAINING FACILITIES

In view of considerations towards expanding the scope of the proposed Liberian National Marine Training Institute in Liberia, the following facilities should be provided or developed in order to facilitate the training requirements of the Institute on a broad scale:

- Fire-fighting complex;
- Sea-survival training unit;
- Marine Safety and Pollution training unit;
- Port training; cargo handling, practical training area;
- Marine Workshops for: Seamanship (Deck) and; Mechanics (Engineering).(26)

5.2.7 STAFF REQUIRED

5.2.7.1 TRAINING

The need to develop a cadre of qualified instructional staff to meet the requirements of the proposed Institute is imperative. In this light, the Bureau of Maritime Affairs, BMA, overseas training programme should be intensified with the desired objective of providing competent maritime lecturers/instructors.

Considering the enormous cost of training of marine officers overseas, especially in Europe and North America, it is hereby recommended that the Regional Maritime Academy, located in Ghana, and the Arab Maritime Trans-
port Academy, AMTA located in Egypt, be utilized for the training of deck and engine officers respectively. Accordingly, upon completion of studies, these officers could become instructors at the proposed Institute. Hence, it is important that Liberia, renews its involvement and participation with the Ministerial Conference of West and Central African States of Maritime Transport (MINCOMAR), in order to fully maximize training opportunities provided by the organization's Regional Academy.

The advantages of using the Regional Maritime Academy compared with other institutions abroad are as follows:

- Closer administrative control and monitoring of training as a member of the Board of Governors (i.e., in the case of the Regional Maritime Academy in Ghana)

- Lower training costs;

- Training geared towards international standards; the Regional Maritime Academy is a product of IMO Technical Assistance Program. (27)

The above recommendation towards training of deck and engine officers at the Regional Institute in Ghana and the Arab Maritime Transport Academy, (AMTA) in Egypt, does not necessarily suggest nor imply that the Bureau of Maritime Affairs, should abandon its current on-going training of maritime personnel at other institutions abroad. Rather, only specialized training in maritime studies such as; Maritime Administration, Maritime Safety Administration, Maritime Law, Maritime Education and Training, etc., should be pursued at Maritime Academies in the developed countries.
In view thereof, the World Maritime University (WMU), in Sweden and other related Academies in the United States including; Maine Maritime University, Massachusetts Maritime Academy, California Maritime Academy, the U.S. Merchant Marine Academy (Kings Point), amongst others, could be utilized in the light of the recommendation made above.

The proposed Liberian National Marine Training Institute would require professional Instructional/Administrative staff to administer the day to day operations of the Institute. To a large extent, the staff required would relate to the training capacity and throughput, but should as a minimum include the following:

- A Director of Training (Principal); preferably, a Captain/Master Mariner;

- 4 Instructors (2 Deck, / 2 Engineering);

- Seamanship/Survival Instructor;

- Mechanic/Safety training Instructor;

- Port training Expert;

- Fire-fighting Expert;

- Fisheries training Expert (28)
5.2.7.2 ADMINISTRATION AND GENERAL SERVICE

- Registrar;

- Accountant;

- Clerical Assistants;

- Typists;

- Cooks and Stewards;

- Caretakers and Cleaners;

- Watchmen (29)

In order for the scheme to become operative within a relative short range period as herein before suggested, it is hereby recommended that the former staff of the UMTI, be utilized, if available.
In view of the proposal under consideration, the International Maritime Organization, IMO, could be of tremendous assistance towards establishing a Liberian National Marine Training Institute in Liberia.

The preparation of a project document, to be submitted to the Technical Division, of IMO, entailing the essentials of the kind of assistance required, is the first step towards seeking technical assistance from IMO. Upon approval, the project document becomes the working document in the overall plan of operation for a Technical assistance package. It therefore should become the prerogative of the BMA, to undertake this preliminary initiative.

IMO, has a range of technical capabilities, which include the following: project management, the provision of training advisers and consultants, teaching experts, equipment specialists, equipment procurement and installation including simulators. Moreover, IMO specializes in the development of training programs, using World Maritime University fellowships and study tours.(30)

It would therefore be expedient and advantageous if the IMO, were to become involved in the initial stage, in an attempt to establish a National Marine Training Institute in Liberia. Complementarily, Liberia is an outstanding member of the IMO; a member of the Maritime Safety Committee, and one of the largest contributors to the Organization’s budget.
Financing of the proposed National Marine Training Institute, is one of the most crucial factors for consideration, in pursuit towards institutionalizing a Maritime Education and Training program in Liberia. The role and assistance of the Government of Liberia, therefore, towards subsidization of the scheme is essential.

Notwithstanding, according to Maritime Laws and Regulations of Liberia; RLM-108, Section 2.40; 2(c); entitled, "Nautical Training"—Liberian shipowners have a commitment towards contributing to the costs of nautical and vocational training of seafaring personnel, in support of the Liberian Maritime training program. Accordingly, an amount computed at one cent U.S. ($0.01), is placed in a trust fund and administered by the Minister of Finance.(31) This amounts to about four hundred thousand dollars ($400,000.00) annually. The aforementioned amount from Liberian shipowners becomes the nucleus of a training fund towards training pursuits.(32)

Realizing that the amount stipulated above may not be enough to sustain both a local and foreign maritime training program, the following recommendation would assist in augmenting existing funds:

The Bureau of Maritime Affairs should engage the seafarers under training by contract. During this period, they would be paid a training stipend which should be repaid by the seaman after securing seagoing employment. By this means, the local training scheme could be partly self-financing.(33)
Presently, there exist no provisions in the Maritime Laws and Regulations of Liberia, for compulsory employment of Liberian seafarers on Liberian registered ships. (34) As per the proposal under consideration, for the establishment of a Liberian National Marine Training Institute, this omission warrants a revision.

However, according to Liberian Maritime Laws and Regulations, contained in (RLM-108 Sec.2.40(3), entitled, "Credit for Liberian Crew", reads as follows: Each vessel employing two or more Liberian nationals on board for an aggregate period of at least one year shall be entitled to a credit of one cent U.S. ($0.01) per net ton against payment of the fee established. Such credit shall be in lieu of the nautical training allocation in paragraph (2) (c). (35)

In order to receive such credit, the shipowner must apply by letter to the office of the Deputy Commissioner, showing the names and Seaman's Book numbers of such Liberian nationals, and attaching copies of such pages from the Liberian Articles of Agreement as will establish their employment for a total period of one year or more. In view of the foregoing, and as a further incentive to induce shipowners towards employing qualified Liberian seafarers, aboard Liberian registered ships, it is here-with suggested that the credit amount stipulated above be moderately increased, when Liberian seafarers are employed.

The responsibility for monitoring the placement of Liberian seafarers aboard Liberian registered ships should be delegated to the National Marine Training Institute, in collaboration with the Bureau of Maritime Affairs and the Liberian Shipowner's Council, Ltd.
However, inorder to effectively regulate the maritime manpower and coordinate employment opportunities, it is hereby suggested that the Bureau of Maritime Affairs, BMA, should establish an appropriate Crew Employment Agency, solely for the purpose of finding employment for crew aboard deep sea registered ships.

This latter proposal presupposes, as a preliminary, the introduction of a National Register, for Liberian seafarers, and the establishment of a regular Manpower Employment Agreement, with the Liberian Shipowner's Council. Whilst, a new National Register will contribute towards regulating a more systematic registration and employment process of seafarers, the aforementioned Employment Agreement with the Liberian Shipowner's Council, will assist towards quantifying the employment opportunities for Liberian seafarers on Liberian registered ships.

Considering numerous problems which could emanate, in relation to the registration and employment of seafarers, the following guidelines stipulated below should be given due consideration.

The essential aspects of such a scheme are:

Objectives

i) Eradication of malpractices, as related to the registration and employment of seafarers;

ii) Equitable distribution of the available volume of employment among the "effective" (National) seamen on principles of:

   a) rotation according to date of last discharge;
b) reasonable choice to shipowners in the selection of their crew; and

c) freedom to the seamen in the choice of his employers, so that a seafarer has a direct access to the job and retains all his rightful dues while the shipowners get the right man.

The following are the salients features of the scheme:

i) Compilation of authentic record of all the "effective (National) seamen available for employment through registration.

ii) Fixation of turn for employment of each seaman according to the dates of his previous discharge by preparation of a Roster.

iii) Supply of seamen in accordance with their Seniority on the Roster.

iv) Regulation of promotion of seamen from the lower to higher categories on the principle of seniority-cum-merit.

v) Adequate provision for appeals-i.e. Seamen Council of Appeal; a tripartite body comprising of shipowners representative, Government representative and the Seamen representative.

vi) Arrangements to ensure that new entrants to the seafaring profession are of a suitable type.

vii) Consultation with the interests concerned - ship owner, seafares, government - on all important aspects of the scheme. (36)
Finally, inorder to ensure that the proposals herein referred to in this study are attained, there is a need to introduce appropiate national legislations as regard, the institutionalization of maritime education and training, with the aim towards the employment of competent Liberian nationals, aboard Liberian registered ships.
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7. P.S. Vanchiswar, Establishment/Administration of Maritime Affairs in Developing Countries, vol.1, 1984, p.113
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10. Ibid., p.58.
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12. Ibid., p.59.
15. Ibid., p.36.
16. Ibid., p.38.
17. IMO ("Expanded Proposals of the Manpower Development Plan) of the Mission Report to Liberia", Inter-Regional Sectoral support Consultants in Maritime Training (Deck & Engineering), p.3.
18. Ibid., p.3.
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21. Ibid., pp. 9-11.

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29. Ibid., p.3.


31. BMA, Liberian Maritime Law, Regulations, Notices and Regulations, RLM-108, Sec. 2.40;2(c).


35. BMA, Maritime Law, Regulations, Notices and Regulations, RLM-108; Sec.2.40(3).

GENERAL CONCLUSION

Open Registry, provides shipowners the advantage of reducing their overall operational costs, and to compete more effectively in a "free market" environment of shipping. Consequently, shipowners from the traditional and high cost flags have increasingly found it economically expedient to transfer to open registry, in order to improve their competitive position. The attractiveness of providing open registry system have likewise, induced or triggered the emergence of many new-comers (mainly developing countries) into the business, in pursuit of boosting their economies, through the earnings of foreign exchange or hard currency. More than ever before, economic considerations predominate than any other motivation for providing a system of ship registration, referred to as "Open Registry System".

Presently, open registry system has become an established phenomenon within international maritime circles. The newly adopted United Nations Convention, on the Conditions for Registration of Ships, in 1986, can indeed be considered an official endorsement of the open registry system.

Providing a system of ship registration, as a business venture nevertheless, should be a part of a wider maritime plan. In this regard, the principle or rationale of the establishment of Liberia's open registry system in 1949, was designed to develop the maritime potential of competent Liberian nationals, through a process of training, whereby officers aboard Liberian registered ships would come from the developed traditional maritime states, whilst crew would have been Liberians. However, this plan, as envisaged, never materialized for unknown reasons. Consequently, Liberia has not be benefited as it
should from its system of ship registration.

Therefore, in order to maximize total gains from the open registry system, within the framework of the scope of its Maritime Administration, there exist a dire need to redress this short-coming, through adequately developing the maritime human resource capabilities of Liberian national seafarers.

Providing national crew of international standards and repute therefore, as envisaged in this study, would indeed be justified as being a part of a wider maritime development plan, which a system of ship registration should engender. Through this medium, Liberia would be gaining tremendously (total benefits), from its Open Registry system - (Both registration fees, and the employment of nationals, with the anticipated foreign exchange to be derived consequentially).


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Training in the Developing Countries", (Case of AMTA)
(lecture), 1986.


**ANNEX I**

International Conventions and Agreements, Maritime or Related, to which Liberia is a Party or of which Liberia is a Signatory.

**Key:**

* = Applied by Liberia in advance of coming into force internationally.

N.Y.R. = Liberia has not yet deposited ratification.

E.I.F. = Date of entry into force for States Parties.

N.Y.I.F. = Not yet in force internationally.

**IMO Conventions**

1. **CONVENTION ON THE INTERNATIONAL MARITIME ORGANIZATION (IMO CONSTITUTION)**
   - **06 MAR 48, Geneva**
   - Amendments to the Convention on the International Maritime Organization
   - 28 SEP 65 (Res A.70)
   - 17 OCT 74 (Res A.315)
   - 14 NOV 75 (Res A.358)
   - 17 NOV 77 (Res A.400)
   - 15 NOV 79 (Res A.450)
   - Q6 JAN 59
   - 06 JAN 59

2. **INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960 (SOLAS '60)**
   - **17 JUN 60, London**
   - 26 MAY 64
   - 26 MAY 65
   - (Abrogated: 25 May 80)

   - 1966 Amendments
     - 30 NOV 66 (Res A.108)
   - 1967 Amendments
     - 25 OCT 67 (Res A.122)
   - 1968 Amendment
     - 29 NOV 68 (Res A.146)
   - 1969 Amendments
     - 21 OCT 69 (Res A.174)
   - 1971 Amendments
     - 12 OCT 71 (Res A.205)
   - 1973 (General) Amendments
     - 20 NOV 73 (Res A.263)
   - 1973 (Grain) Amendment
     - 20 NOV 73 (Res A.264)
   - 25 FEB 69
   - 25 FEB 69*
   - 29 JAN 70
   - 25 SEP 72
   - 25 SEP 72
   - 25 SEP 72
   - 25 SEP 72
   - N.Y.I.F.
   - N.Y.I.F.
   - N.Y.I.F.
   - N.Y.I.F.
   - N.Y.I.F.
   - N.Y.R.
   - N.Y.I.F.
   - N.Y.I.F.
   - N.Y.I.F.
   - (01 JAN 75)
   - 01 JAN 75*
3. INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974 (SOLAS '74)
   01 NOV 74, London
   1981 Amendments
   20 NOV 81 (Res MSC. 1.XLV) 20 NOV 81 N.Y.I.F.

4. PROTOCOL OF 1978 (TSPP '78) TO SOLAS '74
   17 FEB 78, London
   28 OCT 80 01 MAY 81

5. CONVENTION ON THE INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA, 1972 (COLREGS '72)
   20 OCT 72, London
   1981 Amendments
   19 NOV 81 (Res A.464) (19 NOV 81) 01 JUN 83

6. INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION OF THE SEA BY OIL, 1954 (OILPOL '54)
   12 MAY 54, London
   28 MAR 62 26 JUL 58
   (OILPOL '54 - Continued)
   1962 Amendments, excepting Article XIV
   22 MAY 62
   1962 Amendments to Article XIV
   22 MAY 62
   1969 Amendments
   22 OCT 69 (Res A.175) 25 SEP 72 20 JAN 78
   1971 Amendments
   12 and 15 OCT 71
   (Res A.232 and A.246)

7. INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 (MARPOL '73)
   02 NOV 73, London
   (28 OCT 80) 2 OCT 83

8. PROTOCOL OF 1978 (TSPP '78) TO MARPOL '73
   17 FEB 78, London
   28 OCT 80 2 OCT 83

9. INTERNATIONAL CONVENTION ON LOAD LINES, 1966 (LL '66)
   05 APR 6, London
   1971 Amendments
   12 OCT 71 (Res A.231) 25 SEP 72 N.Y.I.F.
   1975 Amendments
   12 NOV 75 (Res A.319) N.Y.R. N.Y.I.F.
10. INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969 (TMS '69)
   23 JUN 69, London
   25 SEP 72

11. INTERNATIONAL CONVENTION FOR SAFE CONTAINERS, 1972 (CSC '72)
   02 DEC 72, Geneva
   14 FEB 78

12. INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCH-KEEPING FOR SEAFARERS, 1978 (STCW '78)
   07 JUL 78, London
   28 OCT 80

13. CONVENTION ON FACILITATION OF INTERNATIONAL MARITIME TRAFFIC, 1965 (FAL '65)
   09 APR 65, London
   14 FEB 78

   1973 Amendment
   19 NOV 73

   Amendments to the Annex
   1969 Amendments
   (12 AUG 71)
   1977 Amendments
   (31 JUL 78)

14. INTERNATIONAL CONVENTION RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF OIL POLLUTION CASUALTIES, 1969 (INTERVENTION '69)
   29 NOV 69, Brussels
   25 SEP 72

15. PROTOCOL RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF POLLUTION BY SUBSTANCES OTHER THAN OIL (INTERVENTION PROT '73)
   02 NOV 69, Brussels
   25 SEP 72

17. PROTOCOL OF 1976 (CLC PROT '76)
   19 NOV 76, London
   17 FEB 81

18. CONVENTION RELATING TO CIVIL LIABILITY IN THE FIELD OF MARITIME CARRIAGE OF NUCLEAR MATERIAL; 1971 (NUCLEAR '71)
   17 DEC 71, Brussels
   17 FEB 81
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<td>19</td>
<td>INTERNATIONAL CONVENTION ON THE ESTABLISHMENT OF AN INTERNATIONAL FUND FOR COMPENSATION FOR OIL POLLUTION DAMAGE, 1971 (FUND '71)</td>
<td>18 DEC 71, Brussels</td>
<td>25 SEP 72, 16 OCT 78</td>
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<td>20</td>
<td>PROTOCOL OF 1976 (FUND PROT '76)</td>
<td>19 NOV 76, London</td>
<td>17 FEB 81, N.Y.I.F.</td>
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<td>21</td>
<td>ATHENS CONVENTION RELATING TO THE CARRIAGE OF PASSENGERS AND THEIR LUGGAGE BY SEA, 1974 (PAL '74)</td>
<td>13 DEC 74, Athens</td>
<td>17 DEC 80, N.Y.I.F.</td>
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<td>22</td>
<td>PROTOCOL OF 1976 (PAL PROT '76)</td>
<td>19 NOV 76, London</td>
<td>(To be deposited on entry into force of PAL '74) N.Y.I.F.</td>
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<td>23</td>
<td>CONVENTION ON LIMITATION OF LIABILITY FOR MARITIME CLAIMS, 1976 (LLMC '76)</td>
<td>19 NOV 76, London</td>
<td>17 DEC 80, N.Y.I.F.</td>
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<td><strong>ILO Conventions</strong></td>
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<td>24</td>
<td>ILO CONVENTION NO. 22 CONCERNING SEAMEN'S ARTICLES OF AGREEMENT, 1926</td>
<td>24 JUN 26, Geneva</td>
<td>21 JUN 77, 21 JUN 78</td>
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<td>25</td>
<td>ILO CONVENTION NO. 23 CONCERNING REPATRIATION OF SEAMEN, 1926</td>
<td>23 JUN 26, Geneva</td>
<td>21 JUN 77, 21 JUN 78</td>
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<td>26</td>
<td>ILO CONVENTION NO. 53 CONCERNING THE MINIMUM REQUIREMENTS OF PROFESSIONAL CAPACITY FOR MASTERS AND OFFICERS ON BOARD MERCHANT SHIPS, 1936</td>
<td>24 OCT 36, Geneva</td>
<td>09 MAY 60, 09 MAY 61</td>
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<td>27</td>
<td>ILO CONVENTION NO. 55 CONCERNING THE LIABILITY OF THE SHIPOWNER IN CASE OF SICKNESS, INJURY OR DEATH OF SEAMEN, 1936</td>
<td>24 OCT 36, Geneva</td>
<td>09 MAY 60, 09 MAY 61</td>
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<td>28</td>
<td>ILO CONVENTION NO. 58 CONCERNING THE MINIMUM AGE FOR ADMISSION OF CHILDREN TO EMPLOYMENT AT SEA, 1936</td>
<td>24 OCT 36, Geneva</td>
<td>09 MAY 60, 09 MAY 61</td>
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29. ILO Convention No. 73 Concerning
The Medical Examination of
Seafarers, 1946
06 Jun 46, Geneva
E.I.F.
17 Aug 55

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Freedom of Association and Protection
Of the Right to Organise, 1948
09 Jul 48, San Francisco
25 May 62
25 May 63

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Accommodation of Crews (Revised), 1949
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21 Jun 77
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Collectively, 1949
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25 May 62
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13 May 58, Geneva
08 Jul 81
08 Jul 82

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Employment and Occupation, 1958
25 Jun 58, Geneva
22 Jul 59
22 Jul 60

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The Minimum Age for Admission to
Employment as Fishermen, 1959
19 Jun 59, Geneva
16 May 60
07 Nov 61

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The Medical Examination of Fishermen,
1959
19 Jun 59, Geneva
16 May 60
07 Nov 61

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Fishermen's Articles of Agreement,
1959
19 Jun 59, Geneva
16 May 60
07 Nov 61

38. ILO Convention No. 113 Concerning
Accommodation of Crews (Supplementary
Provisions), 1970
30 Oct 70, Geneva
08 May 78
N.Y.I.F.

39. ILO Convention No. 147 Concerning
Minimum Standards in Merchant Ships,
1976
29 Oct 76, Geneva
08 Jul 81
08 Jul 82
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<td>40</td>
<td>INTERNATIONAL CONVENTION FOR THE UNIFICATION OF CERTAIN RULES OF LAW WITH RESPECT TO COLLISION BETWEEN VESSELS (1910 COLLISION)</td>
<td>23 DEP 10, Brussels</td>
<td>N.Y.R.</td>
<td>01 MAR 13</td>
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<td>41</td>
<td>INTERNATIONAL CONVENTION FOR THE UNIFICATION OF CERTAIN RULES OF LAW RELATING TO ASSISTANCE AND SALVAGE AT SEA (1910 SALVAGE)</td>
<td>23 SEP 10, Brussels</td>
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<td>PROTOCOL OF 27 MAY 1967 TO 1910 SALVAGE</td>
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<td>INTERNATIONAL CONVENTION FOR THE UNIFICATION OF CERTAIN RULES OF LAW RELATING TO BILLS OF LADING (1924 HAGUE RULES)</td>
<td>25 AUG 24, Brussels</td>
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<td>02 JUN 31</td>
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<td>PROTOCOL OF 23 FEB 1968 (HAGUE-VISBY, 1968)</td>
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<td>46</td>
<td>INTERNATIONAL CONVENTION FOR THE UNIFICATION OF CERTAIN RULES RELATING TO PENAL JURISDICTION IN MATTERS OF COLLISION OR OTHER INCIDENTS OF NAVIGATION (1952 PENAL JURISDICTION)</td>
<td>10 MAY 52, Brussels</td>
<td>N.Y.R.</td>
<td>20 NOV 55</td>
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**Miscellaneous Conventions and Agreements**

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<tr>
<td>47</td>
<td>CONVENTION ON THE HIGH SEAS, 1958</td>
<td>29 APR 58, Geneva</td>
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<td>30 SEP 62</td>
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<td>48</td>
<td>INTERNATIONAL HEALTH REGULATIONS, 1969</td>
<td>25 JUL 69, Geneva; as Amended (1973) (01 JAN 71)</td>
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<td>49</td>
<td>INTERNATIONAL TELECOMMUNICATION CONVENTION, 1973</td>
<td>25 OCT 73, Malaga-Torremolinos</td>
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50. RADIO REGULATIONS PRESCRIBED BY THE INTERNATIONAL TELECOMMUNICATION UNION
21 DEC 59, Geneva, as Revised (1974 - 81) (22 SEP 75) 22 SEP 75

51. CONVENTION ON THE INTERNATIONAL MARITIME SATELLITE ORGANIZATION, 1976 (INMARSAT C)
03 SEP 76, London 14 NOV 80 14 NOV 80

52. OPERATING AGREEMENT (INMARSAT OA)
03 SEP 76, London 14 NOV 80 14 NOV 80

53. AGREEMENT REGARDING FINANCIAL SUPPORT OF THE NORTH ATLANTIC ICE PATROL
04 JAN 56, Washington 23 APR 58 23 SPR 58

54. INTERNATIONAL AGREEMENT REGARDING THE MAINTENANCE OF CERTAIN LIGHTS IN THE RED-SEA
20 FEB 62, London 05 JUL 67 05 JUL 67

55. CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER; 1972 (LDC '72)
13 NOV 72, London 1978 (Disputes) Amendments 12 OCT 78
Amendments to the Annex 1978 (Incineration) Amendments
1980 - Amendments N.Y.R. 11 MAR 79 N.Y.R. 11 MAR 81

56. CONVENTION ON THE RECOGNITION AND ENFORCEMENT OF FOREIGN ARBITRAL AWARDS, 1958
10 JUN 58, New York N.Y.R. 07 JUN 59

57. VIENNA CONVENTION ON THE LAW OF TREATIES, 1969
23 MAY 69, Vienna N.Y.R. 27 JAN 80

58. U.S.-LIBERIA AGREEMENT CONCERNING JURISDICTION OVER VESSELS WITHIN THE LOUISIANA OFFSHORE OIL PORT (LOOP), 1979
16 JAN 79, Washington 16 JAN 79 16 JAN 79
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<td>59.</td>
<td>INTERNATIONAL MARITIME DANGEROUS GOODS CODE, 1965 (CDG), AS AMENDED</td>
<td>17 SEP 65, London (Res A.81)</td>
<td>(01 MAR 79)</td>
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<td>60.</td>
<td>CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK, 1971 (BCH)</td>
<td>12 OCT 71, London (Res A.212)</td>
<td>(19 AUG 76)</td>
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<td>61.</td>
<td>CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK, 1975 (CGCC)</td>
<td>12 NOV 75, London (Res A.328)</td>
<td>(19 AUG 76)</td>
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<td>62.</td>
<td>CODE FOR EXISTING SHIPS CARRYING LIQUEFIED GASES IN BULK, 1975 (EGCC)</td>
<td>12 NOV 75, London (Res A.329)</td>
<td>(19 AUG 76)</td>
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<td>63.</td>
<td>CODE FOR THE CONSTRUCTION AND EQUIPMENT OF MOBILE OFFSHORE DRILLING UNITS, 1979 (MODU)</td>
<td>15 NOV 79, London (Res A.414)</td>
<td>(01 OCT 80)</td>
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<td>64.</td>
<td>CODE OF SAFE PRACTICE FOR BULK CARGOES, 1979 (BC)</td>
<td>15 NOV 79, London (Res A.434)</td>
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Republic of Liberia
Bureau of Maritime Affairs
30 December 1982

2-081-1
## APPENDIX A
### SURVEY OF LIBERIAN SHIP PERSONNEL
#### DISTRIBUTION BY COUNTRY

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<th>Country</th>
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