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WORLD MARITIME UNIVERSITY
MALMÖ, Sweden

THE MAKING OF AN
EFFECTIVE INLAND
SHIPPING ACT OF
MALAWI

by

A.D.B. Msowoya

Malawi

November 1985



A dissertation submitted to the World Maritime University in partial fulfilment of the requirements of a Master of Science degree in MARITIME SAFETY ADMINISTRATION (MARINE ENGINEERING).

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

Signature:

A handwritten signature in black ink, appearing to read "A.D.B. Msowoya", with a long, sweeping flourish at the end.

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ABSTRACT

Due to change of times and advancement of technology in shipping generally, a research programme has been made to identify factors which may influence the need to update the Inland Shipping Act of Malawi.

Since active shipping was established in the middle of the 19th Century on lake Malawi an attempt was made to establish a shipping Act to control shipping and this Act was drawn from the British Merchant Shipping Act 1894. This extract has existed until now and very few changes have been made to it. Since this inland shipping Act was established a number of developments to shipping have taken place, especially in the field of safety of ships, such developments are like increase in ship sizes, high technological developments in ship navigation and propulsion and introduction of International Regulations to control maritime activities. These developments have influenced the creation of a bigger Maritime Administration and the need to update the existing shipping Act.

The application of the research is presented as a guideline for identifying matters that may need to change. In this paper the main structure of the existing inland shipping Act is clearly and comprehensively presented, problems faced regarding safety of vessels on lake Malawi are discussed and proposals leading to solutions are given. It is my opinion that all parties involved in shipping activities on a larger or smaller scale will find this paper useful. Due to lack of written material on shipping in Malawi I wish to advise the reader that most of the information contained in this paper was obtained through observation and interviews.

PREFACE

This research was made possible by the World Maritime University in Malmö, Sweden and the Ministry of Transport and Communication in Malawi by providing transport and information to the author to do the research work both in Europe and in Malawi. The author would like to thank Professor T. Balmer of Maritime Safety Administration Department at the University in Malmö and Gordon Clark, the Senior Surveyor of Vessels and head of the Marine Safety Administration in Malawi for the invaluable assistance in the preparation of this project documents. The author would also like to thank the University for providing the author the opportunity to train with the Maritime Safety Administration of the Governments of Sweden, Norway, Finland, Denmark and the United Kingdom where a compilation of high safety standards was made possible. Lastly I wish to thank all who contributed towards this project document.

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CHAPTER 1

1. INTRODUCTION

The Malawi Maritime Safety Administration has been subjected to several administrative problems mainly due to its improper organization. For decades control of vessels' safety has been a one man's show, even at present when tremendous developments in shipping have taken place. The situation seems to worsen.

Shortage of properly trained staff is a notable handicap, the government must do something to improve the situation. The Inland Waters Shipping Act drafted five decades ago has almost become out of date. The government must take steps to bring this shipping Act up to date. Reorganizing the entire Marine Administration and updating the Shipping Act are two most important things the government must do, only then will the Control of Safety of vessels be effective. The entire subject is discussed in the chapters that follow.

1.1. Background

The twists and turns of Colonial history created Malawi out of a long narrow and landlocked high plateau along Lake Malawi and the Shire river the last tributary of the Zambezi. It is approximately 1,000 kilometres long and varies from 80 to 200 kilometres in width and lies between longitude 9° and 17° south of the equator. Its total area of 119,139 square kilometres is aligned along the rift valley system of which 20 percent

is water. Because of its mountainous look Malawi is called the Switzerland of Africa. Lake Malawi covers 30,000 square kilometres of the country's surface in its length and is Africa's third largest lake after lake Victoria and lake Tanganyika and is the thirteenth largest lake in the world at approximately 600 kilometres long and varying between 16 and 80 kilometres in width.

As a land locked country Malawi is bordered by Tanzania to the North Mozambique to the East, South and South-west and Zambia to the West. Malawi experiences a tropical continental climate with some maritime influences marked in the dry season when a light drizzle locally known as "Chiperoni" is experienced in the Shire highlands of southern Malawi. There are three seasons in Malawi: the dry (August to November), the cool (May to July) and the wet (December to April). Temperatures vary according to seasons, the hot season normally registers temperatures as high as 40^o centigrade while the cold season, as low as 0^o centigrade or below. The rainy season during which most of the agricultural produce is grown extends from November to April thus making the country suitable for supplying off-season fruits and vegetables to European countries. Rainfall varies according to altitude but in most parts of the country there is sufficient rain for dryland farming. The wide range in climate enables Malawi to grow both tropical and sub-tropical crops such as maize, tobacco, groundnuts, rice, cotton, fruits and vegetables.

Due to the geographical position of Malawi and the topography of the land, lake transport provides the most convenient and economical means of moving both people and goods from the North of the country to the South of the

country that is almost through out the entire length of the country. Malawi has four other smaller lakes which are lakes Malombe, Chirwa, Chiuta and Kazuni, these are very rich in various types of tropical fish.

Figure 1. shows map of Malawi which shows the lakes, rivers, roads and railway lines. The map also shows the borders with her neighbours.

1.2. History and Government

The western side of lake Malawi has long been a melting pot for Bantu tribal migration from as far afield as South Africa and the Congo Basin, with the earlier indigenous bushman people having disappeared as a separate ethnic grouping over 100 years ago. Until the establishment of a British Protectorate in the late 19th century, this amalgam of people was heavily preyed upon by slave traders. Under the name of Nyasaland, the country was incorporated, mainly for geographical reasons into the Central African Federation of Rhodesia and Nyasaland in 1953. Malawi was very different from the rest of the Federation and political unrest led to its secession within ten years. Despite this there are still strong commercial links with Zambia, Zimbabwe and also South Africa and a significant number of Malawians work in these countries.

At the time of self-government in 1963, Malawi was poverty - stricken country. Since then, however, through the transition to independence in 1964 and Republic status in 1966, stable and pragmatic government has brought about a transformation by achieving optimum utilization of the country's

only resources - its people, climate and fertility - and the external assistance extended to it. Supreme political power rests in the Annual Congress of the Malawi congress party, the only political party. A National Executive Committee led by the President is responsible for most policy decisions. Legislation is enacted by a single Chamber parliament which is a combination of constituency representatives elected every five years by Universal adult citizen suffrage and nominees of the president, who also appoints government ministers and Regional Party Officials. The cornerstones of the government and the Malawi nation enshrined in the constitution are; Unity, Loyalty, Obedience and Discipline. Policies tend to be conservative and there is a strong belief in the capitalist concept as the most efficient manner in which to improve the lot of the country's people. Nationalisation is not favoured but local participation in foreign - controlled enterprises is very strongly encouraged.

Traditions of African society lead to certain restriction in personal dress and outspoken expression of personal opinions. Expatriates must comply with these rules.

The Judiciary is independent of the legislative and executive arms of government and the country's mercantile law; most of the Civil law applicable to expatriates is based upon the English law of the late nineteenth century. Administration of Customary law and of certain statutes, however, is dealt with by traditional courts.

The country is divided into three regions administratively.

1. Northern Region - Mountainous and sparsely populated.
2. Central Region - Fertile well populated plains country.
3. Southern Region - Hilly and very densely populated.

Lilongue, situated in the fertile plains of the Central Region has been the capital of Malawi since January 1975 and is well connected to the Northern and Southern Regions and to the outside world by the ultra modern Kamuzu International Airport.

The population of Malawi is in excess of seven million, one of the highest densities on the African continent. The concentration occurs in the Southern Region but the fastest rate of growth is now in the Central Region. Although migration to the cities is discernible, almost 90 percent of the people still live in rural areas as a result of economic policies pursued. There is no dominant tribal grouping.

Many languages and dialects are spoken, but acceptance and understanding of Chichewa is spreading rapidly. The official language of the country and the language of the commercial sector is English.

Religious freedom is guaranteed by the constitution. Malawi is principally Christian, with the Presbyterian sects predominating but there is a strong Moslem grouping as a relic of the days of Arab contact. There is also an economically significant Asian Community, equally split between the Hindu and Moslem faiths. The currency is the Kwacha which is divided into 100 tambalas and is written thus K 15.05 or K 5.20. The unitial letter M is used when necessary to distinguish it from the Zambian Kwacha. 1 US dollar is equal to MK 1.33.

1.3. Introduction of ships in Malawi

History tells us that long before the Scottish missionaries came to Malawi, Arab slave traders from Zanzibar had found their way across Mozambique, then Portuguese East Africa to the east coast of lake Malawi. The Arabs brought with them Dhows which they used for trading on the lake. At forty feet long they were the biggest crafts used on the lake at that time. These were built of wood.

Among the British Missionaries it was David Livingstone who first showed the possibility for missionary and trade enterprise of the water way to lake Malawi via the Zambezi and Shire rivers during his Zambezi expedition between 1858 and 1864. He also suggested ways of overcoming the barrier to navigation presented by the sixty kilometres of cataracts between the upper Shire and lower Shire. Following his lead European missionaries, traders and of course settlers began to come to the land which they later named Nyasaland, meaning land of the beautiful lake, making use of the waterway and bringing with them a variety of steel vessels. The vessels used on the upper Shire river and the lake had one thing in common, they had to be dismantled into loads small enough to be carried or dragged by porters overland passed the cataracts. By 1891 when a British Protectorate was declared over the country, the waterway began to see changes in terms of development.

From ocean liners, passengers and goods were transferred at the mouth of the Zambezi to river steamers which took them up that river and along the lower Shire to the foot of the cataracts. After a land journey of some

90 kilometres they reached the upper Shire and from there went by river steamer again to Mangochi on the Southern end of Lake Malawi where they transferred onto lake steamers. As navigation of the river was erratic due to shallow water depths the journey would take weeks.

The Zambezi and the lower Shire route was gradually phased out from 1908 by the building of the Shire Highlands railways. Lake Malawi has since continued to be a well used waterway. In the years that followed after 1935 the railway was extended to Chipoka which became a major port connecting the railways and the lake services. Also during this time Malawi Railways took over the operation of goods and passenger transport on the lake and made Monkey Bay headquarters for the lake services and chief port.

Figure 2 shows the route used by the early missionaries in the 19th century from Chinde on the Indian Ocean to Chiromo in Malawi using the Zambezi and Shire rivers. Also shown is the Shire highlands railway which run from Beira on the Indian Ocean to Salima in Malawi passing through Chipoka port.

From the time the first missionaries came to the lake to the years of the first world war, as many as twenty vessels had been brought onto the lake from the United Kingdom and Germany.

We have seen how the first vessels were brought into Malawi, we should now look at the vessels that were organized into a true cargo and passenger fleet by the Malawi Railways Company.

In the cause of developing lake transport to assist the overall development of the country, Malawi Railways Limited took over the operation of the lake transport network and the main task was to improve the services of both passenger and cargo transport on the lake. The first task of the company which led to the biggest improvement was phasing out all steamships and creating a fleet which was diesel powered. Small ships were withdrawn from service and bigger ships acquired. At independence the lake service had two passenger ships and four cargo ships supported by four tugs and six barges. During the late seventies one more passenger ship and three cargo vessels were added to the existing fleet. Malawi Railways Lake services is now a statutory body under Ministry of Transport and Communications. The lake service is still undergoing extensive rehabilitation and rationalisation resulting in additional lake vessels and upgrading of ports. The first stage of port development was the improvement of Chilumba, Nkhata Bay and Chipoka ports. The fleet is well served with a floating dock and ship repair yard. New ships are brought to Monkey Bay in parts where they are reassembled on the newly built slipway.

The fisheries sector is another that has brought onto the lake a large number of fishing vessels. Both steel and wooden vessels are a common sight on the lake. Nature has endowed lake Malawi with the richest variety of tropical fish of any fresh water lake in the world. It is estimated that up to four hundred species of Cichlids are unique to these waters. Commercial fishing has been on the increase due to demand of Malawi fish by neighbouring states Zambia, Zimbabwe and South Africa. From this we will see that the growth of the fishing fleet is imminent.

Most of the fish is caught by small scale fishermen, who constitute 70 percent of the fishing fleet. These use 27 foot wooden boats driven by inboard diesel engines. Also common are 20 foot wooden boats which are mainly powered by Yamaha or Seagull Outboard Motors. Both government controlled and private boatyards are found in the country and the boatbuilding industry has been one of the most successful industries in the country. Use of the traditional canoe has been on the decline and it is hoped that by year 2000 the canoe will be completely phased out. Most of the fishing vessels are used to carry passengers or cargo when not engaged in fishing.

The biggest fishing company on the lake, Maldeco Fisheries operates a fleet of 12 vessels of which nine are trawlers and three are fish carriers. Many more fishing companies are about to come into operation in the near future through loans from Indebank.

1.4. The Effects of Agricultural Development

Malawi's economy is entirely based on agriculture as such there are several various agricultural projects all over the country. These agricultural projects need a good network of roads to link them to industrial as well as market centres. They also need cheaper means of ferrying their produce to markets. Lake Malawi provides the most economical means of moving agricultural products in big quantities. Plans were made to link most of the agricultural centres to ports on lake Malawi, as such most both farm produce and requirements use lake transport. Fertilizers and farm machinery imported use lake transport. The growth of the agricultural industry has we can say had big influence on the growth and development of lake transport. Malawi is a major grower and exporter of tobacco, tea, sugar, cotton, groundnuts, maize, cassava, paddy rice, sunflower seed, wheat, ara-

bica coffee and beans.

Malawi is self sufficient in food and for the past two year when Zimbabwe, Mozambique, Zambia and Tanzania have been hit by the worst drought in the Eastern and Southern African region, Malawi had a bumper maize production and managed to export thousands of tonnes of maize to its neighbours to alleviate famine. Lake transport played an important roll in moving maize bound for Tanzania.

1.5. Tourism

Tourism is yet another factor that has influenced and is still influencing the growth of the passenger fleet on lake Malawi. the country's centre of attraction is the lake and just this factor makes it one of the richest natural resources the country has. The lake has always attracted more than its share of reminiscent travellers and has remained the largest tourism factor. In recent years tourism has tremendously improved and therefore has brought need to expand the passenger fleet.

1.6. The Northern Import and Export Route

The political instability that has mushroomed in neighbouring Mozambique has almost brought to a halt the flow of cargo between Malawi and her traditional import and export ports of Nacala and Beira on the Indian Ocean in Mozambique. This situation has forced the country to establish an alternative route for its imports and exports this time to the North through the port of Dar-ess-alaam in Tanzania. Lake transport is therefore expected to play a very important roll. Exports will be carried to Dar-ess-alaam where they will be shipped to Europe or the far East. Imports will

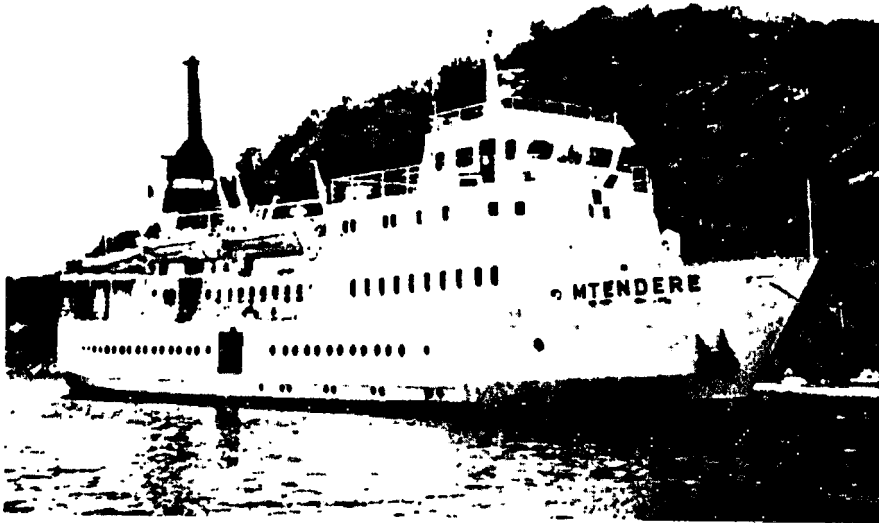
be carried from Dar-ess-alaam to Chilumba a port on the Northern shore of Malawi from where ships will carry to various ports in the Central and Southern Regions of the country. Other developments to lake transport are anticipated through the regional organizations, the Southern African Development Co-ordination Committee SADCC and the Preferential Trade Area P.T.A. The regional bodies are charged with the responsibility of developing the transport and communications infrastructure and trade among the Eastern and Southern African countries. Improvements to Inland water transport is one major objective of the P.T.A: organization and lake Malawi is included. Countries which are a party to SADCC are Tanzania, Zambia, Malawi, Mozambique, Zimbabwe, Botswana and Angola while those which are a party to P.T.A. are Kenya, Burundi, Tanzania, Zambia, Malawi, Mozambique, Mauritius, Zimbabwe, Botswana, Angola, Ethiopia and Somalia.

Most of the cargo that comes and goes through the port of Dar-ess-alaam is containerised, as there is no proper container ship on lake Malawi the government must consider the necessity of purchasing at least two container vessels of about 3,000 deadweight to handle the container fleet. Also, the governments decision to take steps in becoming self sufficiency in coal will affect lake transport. Mining of coal is due to start in the very near future in Karongq District on the boarder with Tanzania and the only means of hauling large amounts of coal from Karongq to industries in the Central and Southern Regions is by lake transport, the government will also have to consider the necessity of purchasing ships of about 3,000 deadweight for coal.

Until two decades ago passenger ships used to call at Tanzanian ports of Mbamba Bay and Manda on the Eastern shores and Itungi on the Northern shores of Malawi. Political differences between Malawi and Tanzania in the mid nineteen sixty four brought an end to such voyages but as relationship has been brought up to normal and both countries working to get closer voyages to these Tanzanian ports may start again in the near future. As this will boost tourism as well as trade government must take steps to purchase bigger passenger vessels to match the demand that will obviously intensify. These are a few factors which will lead to the growth of shipping on lake Malawi. Safety for all these vessels will become a big issue and government must get prepared to protect people ships and cargo through improving safety control standards. This can only be achieved by reorganizing the Marine Safety Administration and updating the Shipping Act.

Figure 3 shows the railway lines to Nacala and Beira in Mozambique which have now been cut due to political unrest in Mozambique. It also shows the lake transport routes from North to South and the road route to Dar-ess-alaam.

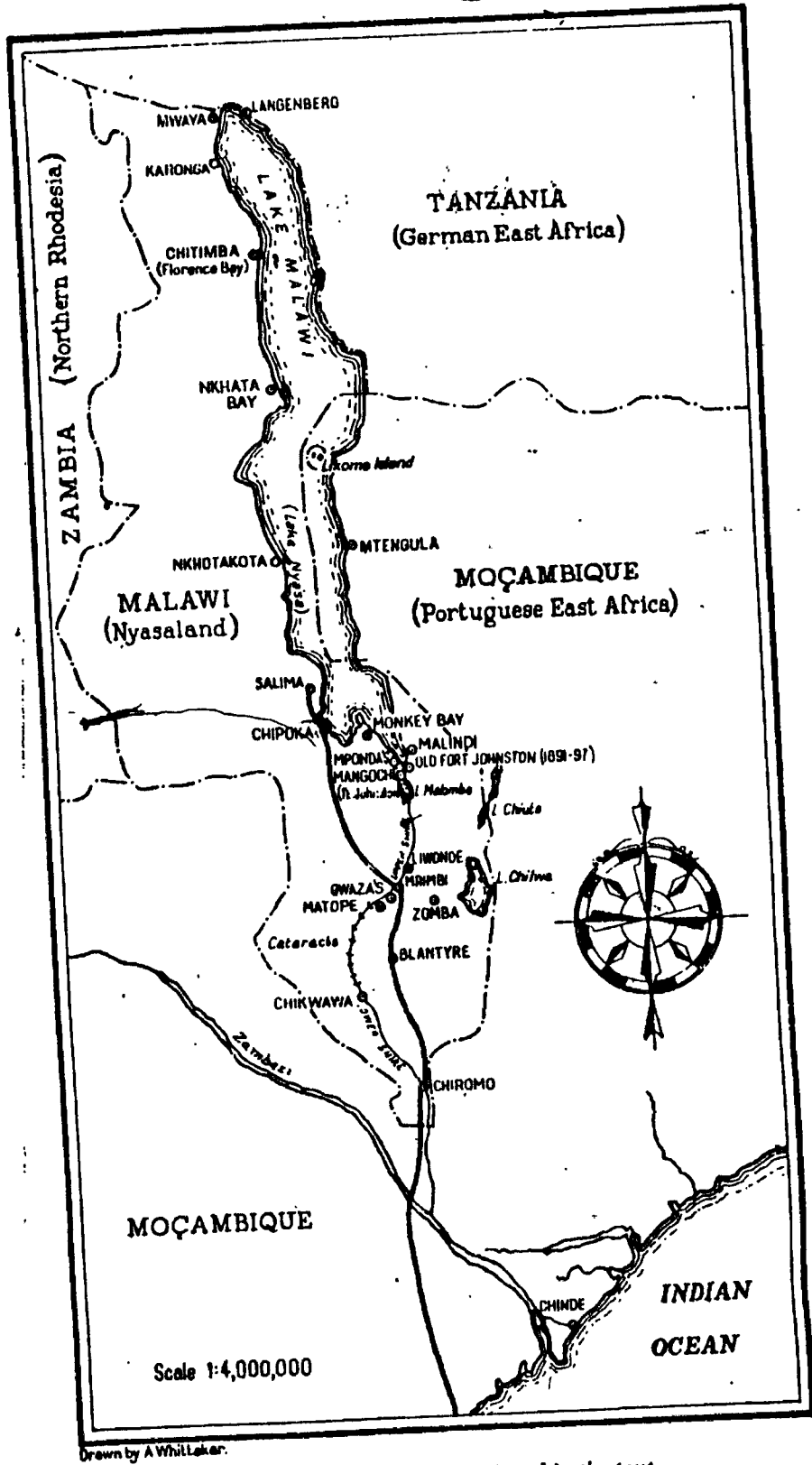
Figure 6



A bill was also passed for building a motor vessel to replace MV Ilala. The vessel will join MV Mtendere above

Malawi though not a coastal state has been successful in developing its Inland waters transport more than some coastal countries in East Africa. The 1,000 grt passenger ships MTENDERE, seen above and ILALA are the two biggest passenger vessels. The Mtendere was built in West Germany and the Ilala was built in the U.K . A cruise ship being built in France will join the fleet in the near future! The passenger fleet will surely boost the tourist industry.

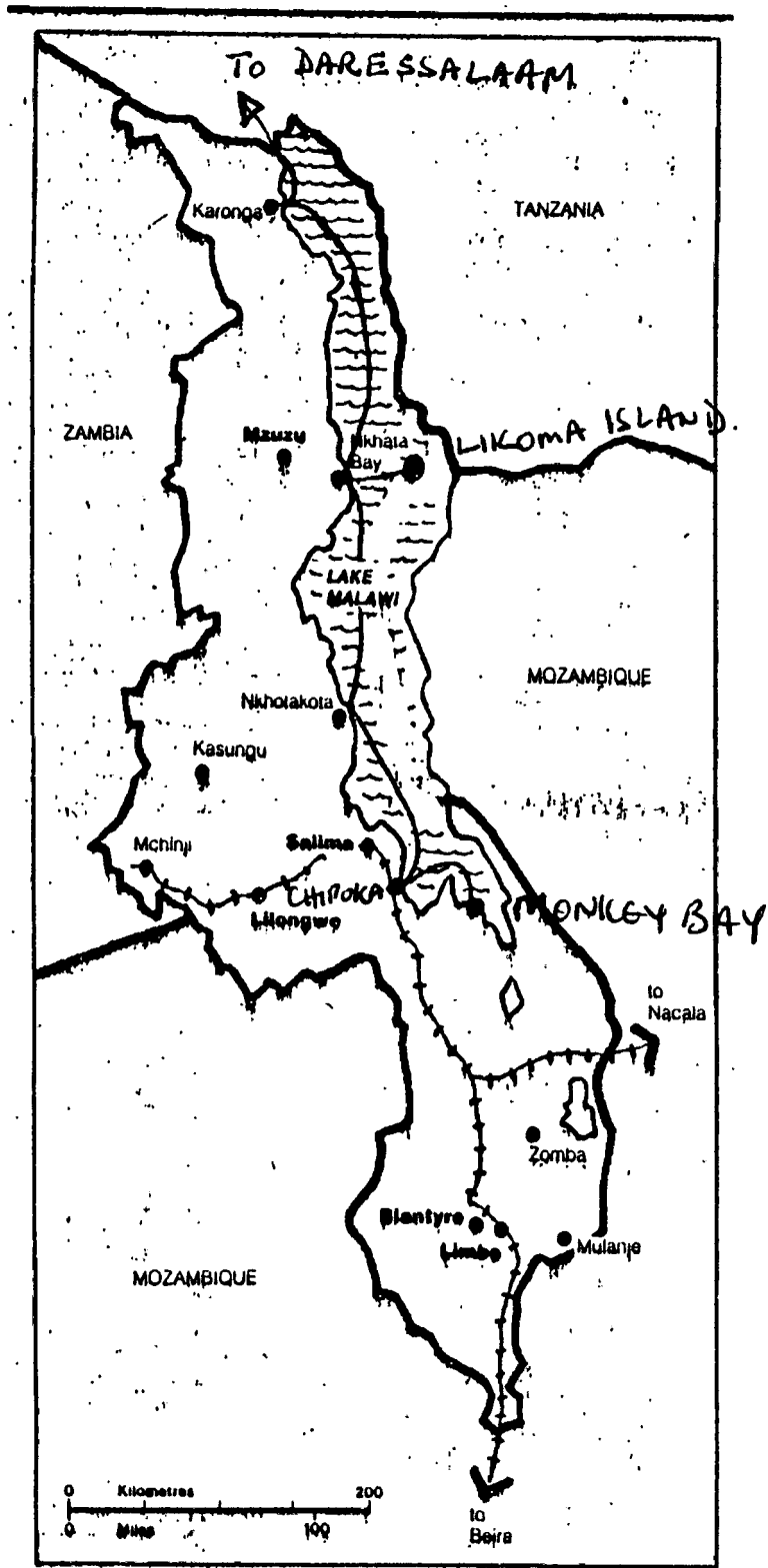
Figure 2



Drawn by A. Whitaker.

Map showing places mentioned in the text.

Figure 4



CHAPTER 2

2. THE MAKING OF THE FIRST INLAND SHIPPING ACT

2.1. The existing Shipping Act

The existing Shipping Act has been in force since the middle of the fifties. At this time the British government brought to Malawi one passenger ship and one cargo ship the M.V. Ilala and the M.V. Nkhwazi respectively, in order to improve lake transport. The surveyor of ships Her Majesty's government appointed for lake Malawi vessels decided to draft a Shipping Act that could be applied to lake vessels as against the use of the British Merchant Shipping Act used before. The Act had been drafted based on the British Merchant Shipping Act itself of 1894. As in 1891 Malawi was declared a British Protectorate, all the laws for governing the territory had to come from Her Majesty's government in London. After a commercial fleet had been organized on the lake, there was need to safeguard the safety of passengers, cargo and the ships themselves, the British government therefore accepted the Act as drafted by its surveyor of ships as law. This marked the beginning of the Marine Safety Administration in Malawi. This Act and its regulations was easy to understand and easy to comply with but it was not given the publicity it required for all vessel operators on the lake to know or be familiar with. Years passed and nothing in the form of publicity was done until at the time of self-government in 1963 when this same Act had to become law in the new government. After independence in 1964 some parts of the Act were reviewed and passed as law to become the first and only ship-

ping Act of Malawi.

2.2. The Act and Enforcement

For a small country like Malawi the shipping Act had been established long enough for most vessel owners or operators to know it well but this was not so. Only a few people knew about the existence of this Act and this fact was proved true in 1981 after some investigations on the popularity of the Act. During this year the author made a study throughout the country to find out how much people knew about the existence of this Act, to do this the author visited all the lake regions from Karonga in the North to Mangochi and throughout the length of the Shire river to Nsanje. Operators and owners of all types of vessels were interviewed, the results were very interesting as three groups of people were distinguished after the tour was over, and the following table clearly indicated them.

Table 1

1981 Study results

Group No.	Percentage	Remarks
I	70%	Never heard about the Shipping Act
II	20%	Heard about the Act but never knew that it was in force
III	10%	knew about the existence of the Act and complied with its regulations

Group I which was the largest were the local, fishermen who own small motor-driven open boats, these constitute 60% of the fishing fleet which at the moment has an approximate number of 5,000 boats.

Group II were small scale operators of passenger and cargo vessels. These account for 25% of the passenger and cargo business.

Group III were the well established Shipping Company Malawi Railways and the Fishing Company Maldeco Fisheries.

2.3. Education for vessel operators

Factors which contributed to the unpopularity of the inland shipping Act are;

- a) Lack of safety education plan for vessel operators.
- b) Lack of policing to enforce the Act.

With reference to a) it will be noted from the table that only big companies were well conversant with the Act, this is because the Surveyors only dealt with big profit making companies which were easy to communicate with as regards to safety control. The second reason was that since the establishment of the Marine Safety Administration nearly forty years ago Safety Administration was a one man show, the Administration had only one man who was both the administrator and surveyor. As the number of big vessels grew the surveyor paid less attention to small vessel operators. The third reason was that most colonial officers did not like travelling to remote areas due to bad roads. Most local fishermen lived in remote areas where there were no good road and so they were not easy to communicate with.

After independence some improvements had been made two small craft surveyors were recruited and given the responsibility of safety control of fishing vessels. The transport problem was solved by providing the surveyors with motor-cycles. A good network of roads was made and so travelling became easier.

It is a fact that if laws have got to be understood by its subjects a system of education must be set up for them. Surveyors must take the trouble to explain to vessel operators the safety requirements. Regulations on safety must be displayed on public notice boards in local communities. The press and radio media must assist through daily papers and radio broadcasts of safety regulations. Such was the case in 1981 when after the study tour was completed by the Author the press were approached to print out the Act and its regulations in the daily papers which they did for a period of three months, the broadcasting unit was approached to make safety announcements on the radio which they did for a period of 1 month and lastly the ruling party the Malawi Congress Party was approached to inform people of safety requirements during political meetings of branch or areal bull. The results were very encouraging, after three months the number of vessel registered increased by three hundred percent and most of these vessels were fishing vessels.

With reference to b) another factor which had to be looked at is that of policing to enforce the law. Every government has provisions to enforce its laws through policing. In Malawi there is on record evidence that almost twenty years ago an attempt was made to enforce the shipping regulations after having passed them in parliament as law, however, this

never worked for the reason that the police did not have an organized Marine Police. In the years that followed a small Marine Police unit was created but never became effective due to lack of patrol vessels. The entire set up once more looked like a joke.

However, the Safety Administration was determined to see enforcement succeed. In 1982 the Marine Safety Administration and the Malawi Police Jointly agreed to work together on restructuring the Marine Police and see to it that the motive for its creation was achieved. Amid financial constraints the police purchased some patrol vessels to strengthen the patrol fleet. A number of police stations were established all along the lake shore and the Shire river.

2.4. The Act

This Act makes provisions for the survey, registration, licensing and safety of vessels used on the inland waters of Malawi for the safety of passengers and cargo for the competency of Masters and crews and other matters connected to shipping. The structure of the Act is simple and easy to understand. A complete reproduction of the ACT is given in annex 13.



Figure 8

The canoe seen in the background has been used for fishing traditionally for a very long time but it is now in the process of being phased out. Wooden boats are taking the place of the canoe in commercial fishing mainly for economic reasons. The canoe is exempted from the Act.

CHAPTER 3

3. MARINE SAFETY ADMINISTRATION AND STRUCTURE

3.1. Organization

The Marine Safety Administration is one of the five departments operating under the Ministry of Transport and Communications with its head-office in Lilongwe the new capital city of Malawi. The other departments are;

- a) Civil Aviation
- b) Road Transport
- c) Posts and Telecommunications
- d) Meteorology

However, it is important to note that since the Marine Safety Administration was created it has not been with Ministry of Transport all the time. During the first years of its creation four decades ago it operated under the Ministry of Labour within the Factories Act. The transfer to the present Ministry was effected just before independence for reasons that it had much in common to share with the above departments.

The Safety Administration had originally been managed by one officer who, as mentioned in chapter one, was appointed by Her Majesty's government in London. The Surveyor of ships was mainly concerned with the safety of ships but eventually took over also safety control of small crafts used in fishing. The reason for including safety

of small vessels was that they registered the highest and only casualty figures year after year as compared to bigger vessels. Towards the end of the sixties two Junior surveyors were recruited to take care of the safety of small boats. In the seventies a boat building industry was established by government in order to boost fisheries and as more people turned to commercial fishing the need of bigger fishing boats grew and the end of the seventies saw a large fleet of fishing boats on lake Malawi. In order to cope up with the rapidly growing fleet of fishing vessels the Marine Safety Administration made the first request to increase its staff. However, government did not respond to this request until in 1982 when the following posts were permanently established to constitute the first true Marine Safety Administration and which became a department on its own. The new structure was arranged as follows:

- | | | |
|----|----------------------------|----|
| 1. | Senior Surveyor of Vessels | -1 |
| 2. | Surveyor of Vessels | -1 |
| 3. | Senior Boat Examiner | -1 |
| 4. | Boat Examiners | -4 |
| 5. | Clerical Officers | -5 |

The above posts do not include any posts for the Marine Training School which comes under the department. The principal activities of the Marine Administration were to be as follows:

- a) Enforcement of the Inland Waters Shipping Act and interpretation of the law.
- b) Survey and examine vessels on a regular annual basis and spot check methods.

- c) Examine Master's ships officers and crew for Certificates of Competency.
- d) Update the Shipping Act from time to time as necessary.
- e) Register all vessels using the inland waters except those exempted.
- f) Issue of Certificates of Seaworthiness.
- g) Issue on behalf of the Minister all Certificates of Competency.
- h) Collect revenue from owners of vessels and taking legal proceedings against defaulters.
- i) Carry out investigations into marine casualties.
- j) Advise government on operation and maintenance of government vessels.

The principal activities to be undertaken by the staff were laid down as follows:

SENIOR SURVEYOR OF VESSELS

Was to be the head of the Marine Safety Administration as well as department. His duties were to advise government Ministries, departments and statutory bodies on ship operation, updated preventive maintenance schedules and aspects of economic ship operation. He would also give ship-builders instructions on new buildings and advise government on suitable designs for new tonnage. Fullfil day to day administrative duties of the Marine department and plan training for his staff. Conduct examinations for engineer classes and organize examinations for deck officers.

SURVEYOR OF VESSELS

His duties would be to assist the Senior Surveyor in all his duties. He would be directly responsible for all survey work on all vessels above 15 tons and issue Certificates of Seaworthiness. Prepare technical reports and correspond as necessary. Control revenue collection from all surveys and examinations for Certificates of Competency. He would also institute proceedings against people contravening the Inland waters shipping regulations and those who default payment of fees.

SENIOR BOAT EXAMINER

His duties would be to supervise the Boat Examiners on surveys and other safety control of all vessels below 15 tons. Prepare technical reports on small vessels for the records of the head of department. He would also deal with those who fail to pay fees for surveys carried out by Boat Examiners.

3.2. The Central Registry

There is only one central registry which handles all matters regarding shipping this registry is in the headoffice in Lilongwe Monkey Bay is the port of registry for all vessels in Malawi but it does not have a central registry. Survey records and the register for ships are in Lilongwe. Certificates of Masters and crews, Certificates of Seaworthiness and licences are all issued from the central registry under the control of the Surveyor of Vessels who is also the registrar of vessels.

3.3. Registration of Vessels

For registration purposes the owner of a vessel will apply for survey and registration of his vessel to the surveyor of vessels and will state in the application where the vessel is situated and awaiting survey.

This application is done by merely filling in Form A (see form A on page 61).

Such an application will be accompanied by the appropriate fee. For any vessel regardless of size the fee for registration is five Malawi Kwachas (MK 5.00). After receiving the application the surveyor will go to survey the vessel and if he is satisfied that the vessel is seaworthy and conforms with the requirements of the Act, that is, equipped accordingly, he will issue a surveyors certificate. This is done by completing the reverse side of Form A. For registration the surveyor shall forward the surveyors Certificate and four copies of Form B

dually completed to the registrar

of vessels who upon receipt of the forms will issue the owner with a certificate of registration by completing the reverse side of form B. (See form B on page 63). He will also allocate the vessel its identity mark and enter the name of the vessel and its particulars in the ships register. The certificate of registration is valid for as long as the vessel is seaworthy but major alterations to the vessel will qualify it for re-registration.

QUALIFICATION AND GRADES

SENIOR SURVEYOR OF VESSELS

the qualifications are; a degree in Marine Engineering and Naval Architecture and a First class Certificate of Competency as a Marine engineer MW, U.K. or equivalent. He must have acquired sound experience as a surveyor with a classification society or any Marine Administration. He must have experience in all aspects of safety from small open boats to large passenger and cargo vessels. He must, be able to advise government Ministries, department and statutory bodies on ship operation, up to date preventive maintenance and all aspects of economical operation. He must be able to give ship builders instructions on new buildings and advise government on suitable designs for new tonnage. He must have experience in management, of a dockyard, building/repair facility together with training of senior personnel. He must be familiar with modern navigation buoyage systems and he must have wide experience in all marine matters and be capable of representing Government on any issues connected with maritime affairs.

SURVEYOR OF VESSELS

He must have a degree in Marine Engineering, or Naval Architecture or equivalent and a First Class U.K. or Malawi Engineers Certificate of Competency. He must have served on a motor ship as chief Engineer officer for a minimum of two years followed by a minimum of 3 years in mana-

gement role in ship repair and maintenance and must have a thorough knowledge of the Inland Waters Shipping Act of Malawi together with Classification Society rules.

BOAT EXAMINER

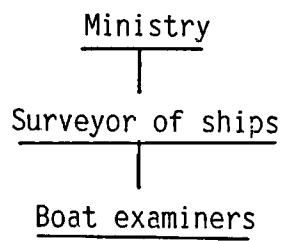
He must have a full Malawi Junior Certificate of Education or Equivalent and a National Trade test Grade I Certificate in Carpentry and Joinery. Boat building experience is essential. He must be self motivated and have the ability to run an office, write technical reports and maintain records.

The wages structure has not been good in the Marine Safety Administration they have been too low to attract the best surveyors. Wages offered are far below the wages set for lake Service Officers. The following are the wage grades:

Senior Surveyor of Vessels	P8
Surveyor of Vessels	P0/CT0
Senior Boat Examiner	S.T.O.
Boat Examiners	T.O.

The minimum wage scale for lake service officer is P8.

STRUCTURE OF ADMINISTRATION IN 1970



STRUCTURE OF ADMINISTRATION IN 1980

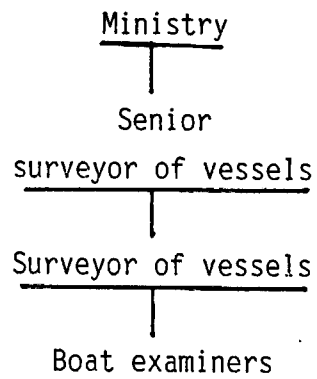




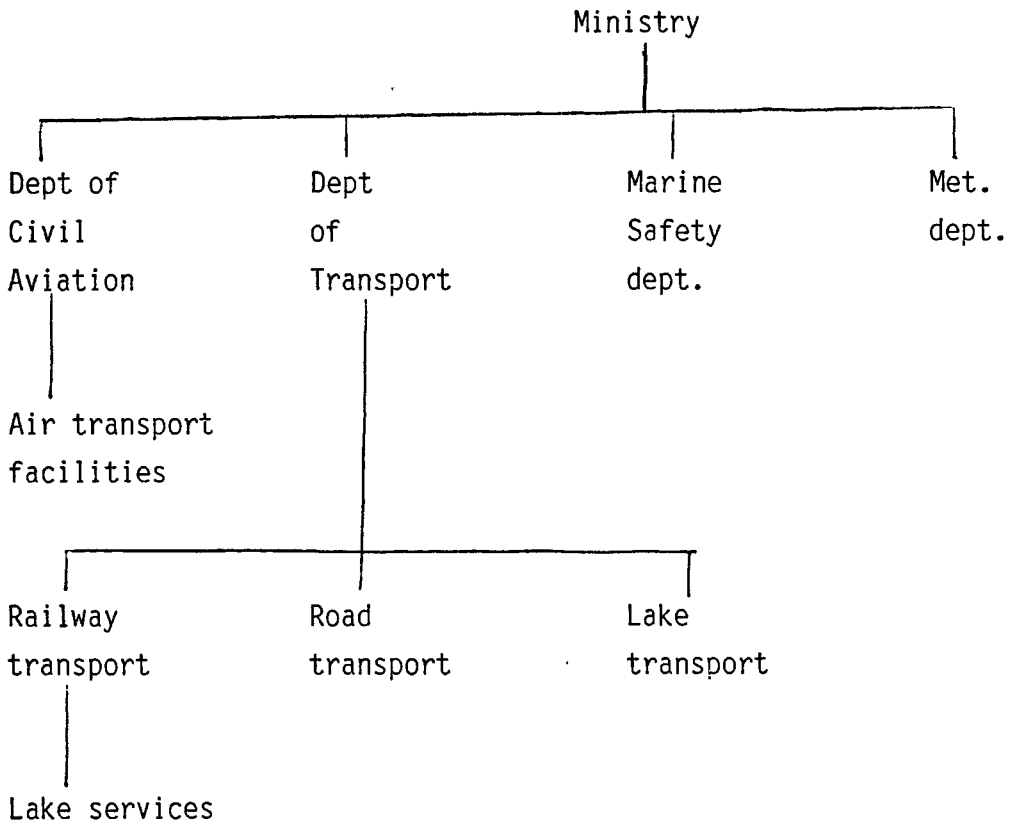
Figure 7

The M.V. Nkhwazi

This 400 grt cargo ship was built in 1955 by Yarrow and Co. of Glasgow. She entered service in 1956. She is mostly engaged in the transportation of fertilizers and maize. It is necessary that the capacity of cargo space be increased by lengthening her. Soon there will be need for coal and container vessels.

Figure 9

The Ministry of Transport and its departments



CHAPTER 4

4. SAFETY OF VESSELS

4.1. Surveys and Certification

The purpose of survey can be for either of the following:

- a) First registration.
- b) Annual survey.
- c) Alteration in tonnage dimensions or methods of propulsion of the vessel.
- d) Change of use.

An application for survey is made on form A and submitted to the surveyor with survey fees. On receipt of the application the surveyor will proceed to survey the vessel and if he is satisfied that the vessel is seaworthy he will issue a surveyors certificate which is valid for twelve months. The certificate could be withdrawn or cancelled if the vessel is found to be unseaworthy within the validity period of the certificate. Where a surveyor in the course of his surveys finds a vessel to be unseaworthy or to lack equipment as required under this act, he shall make a full list of defects in writing and will give a copy to the owner of the vessel and will notify him of the date by which the vessel may be produced for further examination. Only after all such defects have been remedied to his satisfaction will he give a certificate.

In surveying a vessel for the purpose of this act a surveyor will have

regard as may be appropriate to the vessel being surveyed to the standards and requirements relating to the survey of passenger ships, cargo ships, product tankers and fishing vessels as laid down from time to time in instructions to surveyors by the authorities in Malawi.

4.2. Periods of Survey

Each year, the surveyor, by notice published in the gazette specifies dates, times and places where he will conduct surveys, all expenses incurred by the surveyor on such visits are covered by the government. However, any surveys carried out on dates, times and places outside the surveyor's gazetted schedule are at the expense of the applicant. All out of water surveys are carried out at Monkey Bay because of the drydocking facilities. For small vessels Salima and Mpwapwe boatbuilding yards also offer drydocking facilities.

4.3. Survey Fees

The idea behind charging fees is not for the government to make profits from the services but rather make vessel owners contribute towards the surveyors expenses. The fees are charged as follows; the fees are paid before the work is carried out.

For the survey of:	MK. Tambela
A vessel 100 tons and more	250.00
A vessel between 50 - 100 tons	90.00
A vessel between 15 - 50 tons	40.00
A vessel less than 15 tons	8.00
Registration of vessel	5.00

Note: 1 US dollar is equal to 1.6 Kwacha and that the above figures were effective 1984.

4.4. Certificates

In Malawi only one certificate is issued covering all types of safety certificates. The certificate is called Certificate of Seaworthiness. This certificate covers all certificates that would cover machinery, navigation equipment, fire fighting and life saving appliances. With reference to the chart on staff in chapter three, it will be seen that the entire survey work on the inland waters of Malawi which has an approximate total number of 5,000 vessels, is covered by seven officers. Certificate of seaworthiness see form A.

4.5. International Maritime Organization

Malawi is not a member of the International Maritime Organization but it is interesting to note that Malawi has for the past decade enjoyed a silent but warm relationship with this world body. The technical assistance that IMO provided in developing the Marine staff training centre with financial assistance of almost two million US dollars is one major evidence.

The question about becoming a signatory to IMO has for the past ten years been met with mixed feelings by the authorities in Malawi. Some have said that if Malawi became a member she would be compelled to ratify some conventions whose regulations most of the vessels would find difficult to fulfill, a lot of money would be spent to equip the vessels to IMO requi-

rements. Some had argued that IMO regulations apply to ocean going ships only and not to enclosed waters. However, an interesting situation has come up. All new vessels have been built to British standards which are in themselves IMO standards this means that the new vessels comply with most IMO regulations. Also, as the Inland Waters Shipping Act is not up to date, and maintenance schedules used are those from Lloyds Classification Society the administration has unofficially changed to survey regulations which are approved and these regulations are none other than those of IMO. We can therefore say that the Administration has already started applying IMO regulations on vessels.

Government vessels get a general safety certificate.

CHAPTER 5

5. TRAINING

5.1. Training of ships personnel

The Malawi inland waters shipping Act has requirements for certain vessels to be manned with competent personnel. We shall now therefore look at how training for such personnel has been carried out in the past. The country has since the turn of the century had no proper training school of her own, which means that for shipping activities she has relied on expatriate staff. Even at present the majority of professional staff currently employed by both the Maritime Administration and the lake services are expatriate staff. The acute shortage of professional staff has from time to time compelled the laying up of vessels, to overcome this problem a recruitment drive is carried out in Europe every year. In about 1960 a programme was drawn under the British government on request by the Malawi government, to train Malawian deck and engineering officers. In all 14 officers have been trained under this scheme but the problem that has come up is that some of these officers remained in the UK on completion of the course and those that returned to Malawi had most of them left the lake services and joined land based industries. We can therefore say the scheme had not been successful. At the same time a small marine school was started at Monkey Bay to train both deck and engine crew. This was successful as a number of able seamen and engine attendants were trained. In trying to come up with a solution to the training of officers problem the govern-

ment of Malawi made a request for technical assistance from U.N.D.P. to revive the training scheme. In reply to this request IMO organized a consultancy to examine the feasibility of a local training scheme. The IMO visited Malawi in 1980 and prepared a draft proposal for establishing a training centre. The development objective for the training scheme was to facilitate the supply of skilled manpower for the operation of lake services in Malawi so as to achieve self-reliance in a key transportation system and speed up localization.

the immediate objectives of this project were:

- a) Train a total of 40 deck officers and 40 engineers for the lake services and provide similar training for other employees of marine manpower in the country.
- b) Train counterparts to operate the school which would ensure early localization and self-reliance.
- c) Provide in service upgrading courses for existing and future marine staff of all technical and managerial grades in the country.

5.2. The Marine Training School

The project had a good start in 1981 when the IMO's chief technical adviser was recruited and sent to Malawi to run the project. The next two years were followed by activities which involved the Construction of classroom, accomodation and kitchen blocks. Shortage of funds led to total stoppage of construction work and the purchase of training equipment U.N.D.P. had committed nearly two million US dollars and the Malawi govern-

ments contribution was one and a half million dollars, towards this project. However, in 1984, the government of Malawi revived the project by injecting into the project some funds to furnish the school and make ready for a start even without proper equipment and incomplete buildings. Several educational institutions made the start possible by pledging to support the school in providing facilities and teaching staff. The Malawi Polytechnic pledged to provide the most needed engineering training for engineers, outside the country the West German and Japanese governments pledged to support the project on request from the Malawi government by providing lecturers in deck and engineering subjects as well as providing teaching aids and training equipment. The government will provide for the staff houses and the remaining buildings among them a laboratory and workshops.

In 1984 ten candidates were recruited into the school and under an agreement with the Southampton College Correspondence courses for the students has been made available until the teaching staff is organised. The institution which will run directly under the Marine Administration will comprise of a principal and four resident teachers and will accommodate twenty four students a year. Theoretical subjects will be provided in the school and seetime will be done on lake service vessels. Each full time course will last four years.

5.3. Certification of Crew and Officers

The minister issues certificates to persons who have passed the appropriate

examinations for specific classes and who have satisfied him as to their competency. The minister appoints an examiner to conduct examinations for the following certificates:

- a) Malawi Masters Class III
- b) Malawi Engineers Class III
- c) Malawi launch masters certificate
- d) Malawi engine attendants certificate.

When an applicant passes such an examination the examiner shall notify the minister accordingly who will then issue the appropriate certificate. The syllabuses for the examinations are prepared by a board of examiners appointed by the ministers from time to time.

For the following certificates all training is carried out in the United Kingdom.

- a) Malawi Masters Class I and II
- b) Malawi Engineers Class I and II.

With reference to foreign certificates it is worthwhile to mention that for the Inland waters of Malawi the minister has specified that a British Class I foreign going certificate will automatically warrant the holder a Malawi Certificate Class I while a British Class II certificate will warrant the holder a Malawi Class II, and a Malawi Class I, certificate only after ten months of seetime on the lake. All other foreign certificates are accepted if they are acceptable to the British Ministry of Transport's examination board.

It is hoped that when the staff training school is well established

examinations for higher certificates will be conducted at the institution rather than overseas.

It might look strange that the government of Malawi has to impose very high standards of competency on the inland waters. It is a fact that the reason for this can best be understood only if one pays a visit to Malawi and experience sailing conditions on the lake. Before designing the latest passenger vessel "Mtendere" the German ship builders paid a visit to Malawi to see the stormy weather conditions, they did and agreed with the necessity of high standard of competency for officers. David Livingstone on his first encounter with the lake in 1859 called the lake "Lake of Storms", experience had shown records of its unpredictable manifestation, the South West monsoon winds known locally as "mwera" which coming with thunder from a clear sky whip up seas comparable with those of a strong wind in the chops of the English Channel, but steeper and shorter. This makes the lake a true inland sea and the mariner should rid his mind of the popular conception of "lake". It is upon these lines that requirements for higher qualifications were made.

5.4. First Casualty M.V. Vipya 1946

In order to cope with increasing volume of traffic Nyasaland Railways in 1942 ordered a second diesel powered ship for the lake service, the Vipya, built by Harlard and Wolffe. She was assembled and launched at Monkey Bay in 1944. Wartime conditions delayed her completion as she was not ready for the first of her weekly scheduled trips around the lake until 28th June 1946. During her fourth trip she apparently encountered a fierce

squall and capsized and sank in a few minutes on July 30, 1946 near Chitimba. Of the 194 passengers and crew on board 145 were lost including the captain and chief officer. The subsequent court of inquiry laid the blame for the disaster on the captain for setting sail in bad weather. Since 1946 after this casualty highest qualifications on masters and officers were imposed.

Malawi Railways lake Services will still heavily rely on expatriate staff for a long time to come, to operate their lake vessels as there are not enough Malawians trained to do the deck and engineering jobs. If the training programme goes on well the next group of Malawian officers will be ready to work in 5 years time. There are at present eight expatriate officers in the lake service and the figure will rise as recruitment of engineers will start soon in the U.K. There are no deck or engineer officers on training overseas, the only officers on training are those in the Marine School at Monkey Bay of which of the ten, 5 are deck cadets and 5 are engineer cadets. There are only 5 Malawian officers at present of which 4 are deck and 1 is engineer. A further 6 Malawian are undergoing apprenticeship training within the lake service, of these 6, three are engineers and three are deck officers. Shortage of manpower is so severe that an emergency in training must be declared if the situation is to be corrected in less than 5 years.

Table - Malawian officers

Year	Deck	Engine	Class
1985	4	2	I
	3	3	II

Table - Expatriate officers

Year	Deck	Engine	Class
1985	6	2	I
Being recruited	-	4	I

6. RECOMMENDATIONS

Having looked at the Act and its regulations and the Administration with its responsibilities we will now look at the results of the entire study and the recommendations that must be carried out to improve efficiency in Marine Safety Control. Once more it must be made clear that the recommendations given in this paper are not only based on the study carried out but also on the long term experience of the author on Malawi's Maritime affairs. It must also be mentioned that Maritime affairs in Malawi have no written records the study therefore was based on observations. Recommendations drawn that would make Marine Safety Control more effective are:

- a) Complete re-organization of the Marine Administration.
- b) Updating of the Inland Waters Shipping Act with international practice.
- c) Keeping the public aware of the Act and new events.
- d) Co-operation with the police and parties involved in safety at sea.
- e) Training the staff for efficiency.
- f) Administration to be fully involved in decisions concerning water transport matters, like operation of vessels, acquisition of new vessels and development of new ports.

6.1. Re-organization of the Marine Administration

The objective of a Marine Administration is to provide the government with the Machinery which would enable it to satisfactorily and efficiently undertake functions which are embodied within the country's shipping legislation. These functions include the implementation of the requirements of national as well as international rules framed under the authority of the shipping Act. In pursuing its activities in the development of the maritime field, the appropriate government authorities need to have an efficient administration to advise them on the adoption and implementation of the national legislation and other regulations required for operating the maritime programme. This machinery can best be provided through a well organized Marine Administration. Such an Administration should be responsible under the direction of the Ministry responsible for Transport for providing and organizing the appropriate facilities for the survey and certification of ships and the training, examination and certification of ships' masters, engineers and other marine personnel. All in all the areas affected within the Maritime Administration activities are, ownership of vessel, registration, management, operation, upkeep and maintenance of national fleet and related marine activities like shipbuilding, repairing drydocking port operations and marine training.

As indicated earlier, the Malawi Safety Administration is cared for by seven surveyors. The shipping and fishing activities taking place on the inland waters are on a much larger scale now compared to two decades ago.

At that time this staff could manage well because the number of vessels was not as high as it is today. This size of staff is now subjected to much more work. The number of staff must be adjusted to the amount of work if officers have to discharge their duties efficiently. Looking at the statistics of various vessels on the lake we come up with the following results:

a) Lake services - 16 vessels

3 pasenger ferries

2 product tankers

1 dredger

2 dry cargo barges

3 dry cargo ships

4 tugs and

1 floating dock.

b) Maldeco Fisheries - 12

9 fishing trawlers

3 fish carriers.

c) Government - 142

Government departments have some 142 vessels, from small ferries to high speed patrol launches and fishery research vessels.

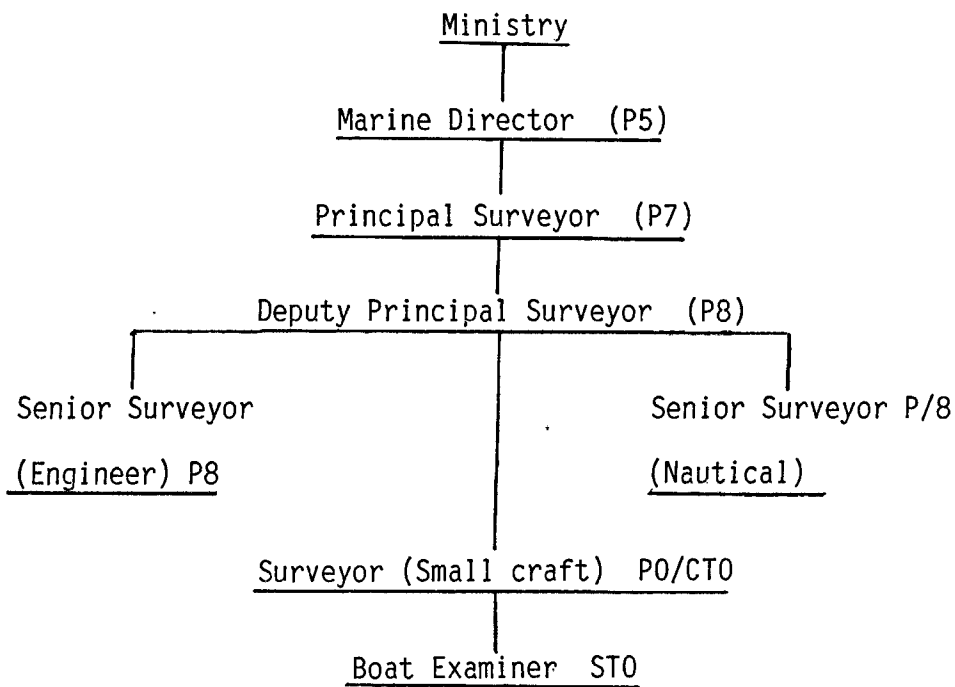
d) Small crafts - 2,365

Used in fishing and ferrying, these are replacing the traditional canoes.

The number of vessels above 50 gross registered tons is about forty and two officers are responsible for their survey these being the Senior Surveyor and the Surveyor of vessels. Each vessel requires three surveys, during time of refit, the first is survey of the hull and structure in drydock, the second is machinery and other equipment and lastly sea trials. For bigger vessels time for refit is two weeks and for smaller vessels is one week. This puts the surveyors in a very awkward position as they can not efficiently carry out their work. The fact that these surveyors have to cover nautical surveys makes the situation worse. As the fleet grows so does the work load. An increase in the number of surveyors is necessary and the addition in staff of a nautical surveyor is something that cannot be left out. Engineer surveyors should stick to their work and nautical surveyors should also do their part.

As for small vessels of below 15 tons which number nearly 3,000 the number of Boat Examiners must be increased from five to ten to reduce the burden presently being faced. Time that officers spend on surveys must be well balanced with time to write technical reports.

The present Administration in Malawi falls short of the required manpower that would constitute a true Marine Safety Administration. In view of the present situation only the following proposed structure of Administration would constitute a fitting Administration:



The Marine director, Principal Surveyor and his deputy including a support staff comprising an executive officer a Clerical officer and a typist would be in Lilongwe while the two Senior Surveyors supported by a typist would be stationed at the port of Registry, Monkey Bay. The Surveyor (Small craft) and his Boat Examiners would be stations in Marine Districts with the busiest districts getting more than one Boat Examiner. A Utility Vehicle must be purchased for use by the senior officers and Boat Examiners must maintain the use of Motor Cycles provided. It should be the responsibility of all officers to minimize transport costs. Permanent government accomodation must be provided to alleviate housing costs.

The duties of the directorate shall be as follows:

- a) Inland waters legislation including implementation of Maritime Conventions and grants of exemptions.

- b) General superintendency and co-ordination of matters affecting Marine affairs.
- c) REgistration of ships.
- d) Policy implementation regarding crew matters and manning of ships.
- e) Granting of various safety certificates to ships.
- f) Datinig of officers for unseaworthy ships.
- g) Granting of Certificates of Competency.
- h) Administration of Marine Safety Training establishment.
- i) Ensuring safety of fishing vessels and other small vessels.
- j) Maintenance of technical records of national ships.
- k) Delegation of certain duties to Classification Society.
- l) Participating in IMO seminars on Administration and Training.

Duties of officers should be distributed as follows:

Director:

To be directly responsible to the Minister and handle problems on management of the Marine Safety Administration. He must be involved in decision making of statutory bodies in respect of marine operations. Carry out updating of the Inland waters shipping Act on a continuous basis. Be responsible for the preparation and issue of Shipping Notices as a result of accidents internationally and nationally and changes in requirements, or necessary alterations in navigational marks. Be responsible for training counter parts for the Marine Department and the Lake Services. Advise on economic operations, fuel utilisation and preventive maintenance. Be re-

sponsible for certification of both deck and engineer officers. Co-ordinate Search and Rescue organization for casualties not necessarily ships and approval. Approve drawings of new buildings.

Principal surveyor

His job would be to assist the Director in all his duties and be responsible for all work done by the Senior Surveyors. He would be responsible for staff housing, office accommodation and transport matters. He would be incharge of the support staff and look after the maintenance of navigation lights and marks.

Senior Surveyors (Engineer + Nautical)

The nautical surveyor shall be responsible for the inspection of navigation aids, radios, life saving equipment, fire fighting equipment. He would be examiner for Deck officer examinations for certificates of competency.

The Engineer Surveyor will be responsible for the survey of hull, machinery and cargo equipment. He will also be examiner for Engineer officers examinations for Certificates of Competency.

Surveyor (Small craft)

He will continue to be responsible for all work done by Boat Examiners. He would report all financial and technical matters regarding small boats to the Principal Surveyor.

6.2. Updating of the Inland Shipping Act with International Practice

The existing shipping Act is almost out of date in that it was drafted for vessels which were built to world war II standards and requirements. The great technological developments that have taken place since the second world war have brought a complete change in ship standards. It is therefore necessary that regulations must be brought to modern standards.

In updating the legislation, however, two points must be considered.

- a) Local safety requirements.
- b) Safety requirements based on international practice.

With reference to local safety requirements regulations must be set to a level suitable to small local vessel operators, who are in majority, considering the economic burden the regulations might bring on them. Safety of both people and vessels must be based also on the type of conditions that are found on lake Malawi. Lake Malawi should be considered as an inland sea where sudden deterioration of weather conditions may occur at any time. Violent squalls can and do occur at a moments notice and rough seas and short steep swells are frequently encountered. Experience has shown that most vessels of below 500 grt have to seek shelter in the most severe weather conditions. In this respect the first safety point would be the size of the passenger and cargo vessels engaged in regular service. The first safety requirement for passenger vessels would be to accept only vessels of 1,000 grt and above and for cargo vessels only vessels above 500 grt.

With reference to international standards, consideration must be made to

IMO Conventions and regulations which are suitable to our nature of shipping. The most important regulations that we ought to adopt are from SOLAS - Safety of Life At Sea and STCW - Standards of Training Certification and watchkeeping, also of importance are the Search and Rescue and Pollution Conventions. Some regulations from these conventions need to be adopted into the national legislation because of their importance to safety of ships and human survival and health.

From the SOLAS Convention the chapters which must be considered for adoption into the national legislation are shown in Annex 12.

Regulations concerning Radiotelephony and Radiography, Safety of Navigation and Carriage of Dangerous goods must also be considered.

Every year many people die on the lake due to unpredictable heavy winds and other perils of the sea (lake Malawi is considered as an Inland sea). Most of those who die are operators of small boats especially those used for fishing. Lack of a Search and Rescue unit makes the situation worse. Most of the lives that are lost go without any search for them until their bodies are washed ashore by waves. It is extremely important that a Search and Rescue unit is organized to assist in reducing lives lost.

Meteorology department, the Malawi naval unit, airforce, Marine police and other lake users would make the best team for Search and Rescue purposes. All the above mentioned organizations are now well developed to be able to provide such assistance.

6.3. Keeping the Public Aware of the Act

It is important that the public is kept aware and informed of the existence of the shipping Act and its regulations. New developments must be communicated to the public to keep them up to date. The Press and Broadcasting media are best for keeping the public informed. The Circulation of "Notices to Mariners" must be encouraged and stepped up.

6.4. Co-operation with the Police

As a matter of enforcing the law the Marine Safety Administration must work together closely with the Marine Police, only then will it be possible to encounter people who contravene with the Act and its regulations. As a result of consultations between the Safety Department and the Police a number of Patrol vessels have been made available by the Police and a number of small patrol units have been set up on the Lower Shire at Nsanje, the Liwande Barrage, Lake Chirwa, Lake Malombe and several others along the shores of lake Malawi. Training of all officers who will be involved in patrols is necessary and seminars where the Shipping Act and its regulations should be discussed must be held by the Safety Administration regularly. Also training in seamanship, and fleet maintenance by Marine Police officers must be set up this would increase the effectiveness of the Patrol fleet by reducing repair periods.

6.5. Training of staff

It is important that the Marine Safety Administration is run like other

government departments, by well trained personnel. Reorganization of the Administration will at the moment be a big problem as there are few Malawians qualified for professional jobs as required by the Administration. Since the Administration was set up decades ago the government has depended on surveyors sent by some foreign developed countries on technical assistance or employed European expatriates. It was only six years ago when the authorities saw the need of training Malawians as a first step in the localisation programme and it so happened that in 1980 a Malawian Marine Engineer was recruited and sent to the World Maritime University for studies in Maritime Safety Administration, and this Malawian is none other than the author of this project document. A training programme must be drawn by the Safety Authorities in Malawi which will involve the training of all the required officers in the Safety Administration. The establishment of the World Maritime University provides the first solution towards the training of surveyors and administrators from the developing countries.

In Malawi the Marine Safety Administration must be re-organized and wherever possible expatriate personnel be used but at the same time Malawian personnel be recruited and trained to take over jobs held by expatriates in future and this must be done now.

The Malawi Safety Administration should draw a plan to train the following personnel to strengthen its Safety Administration:

3 Engineer Surveyors

2 Nautical Surveyors

2 Naval Architects

2 Marine Electricians

2 Engineer Instructors and

2 Nautical Instructors

There is no surveyor on training anywhere at the moment.

With reference to the training of Marine manpower on the lake the Malawi Government must implement the 1980 IMO draft proposals on training with or without any technical assistance. The government must maintain the development objective of facilitating the supply of skilled manpower for the operation of lake services so as to achieve self-reliance in a key transportation system linking the three regions of the country as well as linking the country to international markets. The immediate objectives must be:

- a) Train a total of 50 deck officers and 50 engineer officers for the Malawi Railways and provide similar training for other employees of Marine manpower in the country.
- b) Train counterparts to operate the school thus ensuring early localization and self-reliance.
- c) Provide in service upgrading courses for existing and future Marine staff of all technical managerial grades in the country.

With assistance from friendly developed countries, the UNDP IMO and the World Maritime University the government can be sure that this training scheme can be speeded up. The government must fully support the Marine Training School at Monkey Bay to make the training programme which has

been started a success. With regard to the proper standards of training and certification of seamen it would be very helpful to the Marine Administration in Malawi to adopt the standards as set out in the International Convention on Standards of Training, Certification and Watch keeping for seamen, 1978 suitable to Inland waters.

6.6. Transport economics

The entire marine facilities at Monkey Bay will over the next five years or so have to be expanded due to tonnage increase. Repair facilities which include one floating dock, workshops, workshop machinery and the floating jetty will be inadequate to handle new ships and must be improved.

The Marine Administration must be fully involved in the decision making in respect of Marine operations to avoid the expensive mistakes made in the past. This doubtless would reduce operating losses such as suffered by the lake services in the past, this would also give the Ministry more direct control over marine operations. Until now the Marine Administration has only been involved in safety issues.

As Malawi is to push the tourist industry, the lake will be, as it is now, the principal centre of attraction. The Marine Administration must be geared now to ensure that our passenger ship services satisfy tourism requirements. A minimum of three modern passenger vessels of 1,000 grt each and 600 people capacity would be the best fleet to satisfy transport requirements for the next twenty years. The M.V. Ilala which has now been in service for over 30 years must be withdrawn for technical as well as health reasons. The

establishment of the import and export route through the port of Dar-ess-alaam will greatly influence the expansion of the cargo fleet. Other major factors that will greatly contribute towards the expansion of the cargo fleet are the Sugar Industry at Dwangwa, the tea and rubber industry in Nkhata Bay and the coal industry in Karonga. The Government has issued a directive that the mining of coal should start immediately at Ngana in Karonga in order to diversify the economic base of the country. Cargo ships suitable to the transportation of coal and containerised cargo will have to be acquired as the existing vessels are not suitable for the transportation of this type of cargo. It is the responsibility of the Marine Administration to advise on the types of vessels which should be acquired for various purposes. This clearly indicates that lake transport matters must be handled by or within the Marine Administration.

Table - Number and type of ship Malawi will need, during the next 20 years.

Ship type	No.	grt	Purpose
Passenger	3	1,000	Passengers & tourism
Coal carrier	2	500	Coal and general cargo
Container ship	2	500	Containers and general cargo
Product tankers	2	500	For carrying diesel and petrol

6.7. Ports

The record of port maintenance has not been good and the construction of new berths in new ports has not been seen for some years except that of Dwangwa. Port development and maintenance are two factors that Malawi Railways has not been able to undertake properly due to lack of funds. Good berths and proper cargo handling equipment are vital to lake transport development negligence of improvements to these does affect the efficiency of port operation. Development in the five main ports should take the following trend.

Monkey Bay

A cargo discharging area must be established and the passenger embarkation jetty be improved. The two pontoons being used as jetty will soon be withdrawn as their bottoms are in very poor condition. Construction of a repair berth is necessary as transportation of heavy ship spares from the workshops to ships during repairs has always been a problem as the jetty pontoons cannot handle vehicles or big trollies.

Chipoka

Cargo handling equipment must be acquired to solve the existing problem of slow loading and discharge of cargo. Proper container handling machinery must be acquired.

Dwangwa

A proper berth must be constructed and dredging operations improved to

maintain enough depth for ships with deeper draught. A sugar and fertilizer shed must be constructed.

Nkhata Bay .

The existing jetty must be improved upon to handle tea, maize and rubber products from the district.

Chilumba

A proper container yard must be established and proper container handling equipment must be acquired. Chilumba will be a very busy port as it will be handling all cargo traffic going and coming from the port of Dar-ess-alaam. It is strongly recommended that port construction and maintenance must be taken over by government to save Malawi Railways from the financial burden brought upon them by port maintenance. When government takes over the construction and maintenance of ports a fee should be charged to Malawi Railways as contribution towards the maintenance and this should be done on an annual basis.

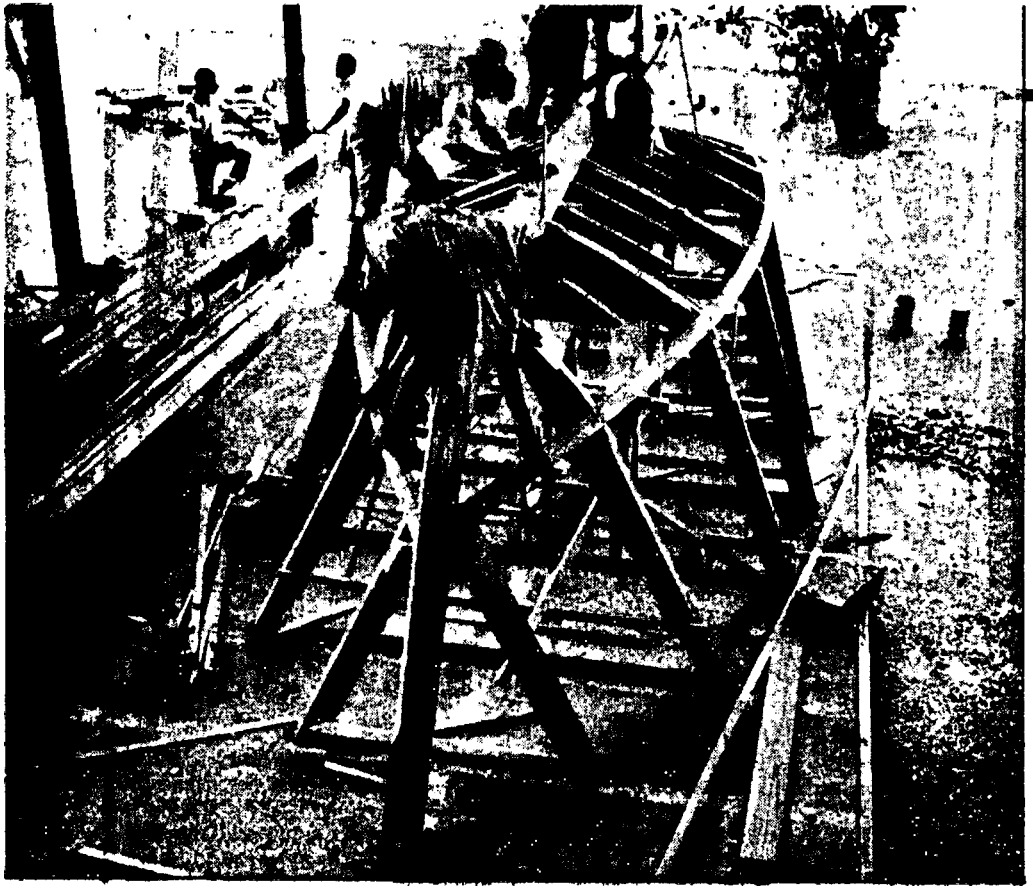
6.8. Buoyage system

Since the Hydrographic surveys of 1957 were made by the Federal government of Rhodesia and Nyasaland which led to the laying of the existing navigation buoys, lights and beacons, no other survey has been made. Since 1957 a number of rocks and shallow areas have been discovered and most are obstruction to navigation. Also the existing navigation maps were plotted in 1957 and there is need of new maps being made. It is necessary

that expansion of transport activities on the lake should go hand in hand with improvements to navigation.

Government must acquire a survey vessel to assist in the laying of new buoys and other navigation marks and the making of new navigation charts. A Hydrographic vessel is useful in many ways and such departments as the Fisheries, Survey and Hydrographic stand to benefit from its services.

Figure 5



Boat-building and construction also take their toll of Malawi's dwindling forests.

Mpwepwe boat yard

The boatyard is run by the department of Fisheries. It is situated in Mangochi which is the busiest fishing area. The boatyard can build fishing and ferry boats of up to 10 metres long. A similar yard is found at Salima and the two boatyards can build up to 100 boats a year. They also carry out repairwork to boats in service. Commercial fishing has made the boatbuilding industry a success.

INLAND WATERS SHIPPING ACT

(CAP. 71:01)

APPLICATION FOR THE SURVEY AND REGISTRATION OF A VESSEL

(To be completed in triplicate)

TO: THE SURVEYOR OF VESSELS,

.....
(Port of registry)

I/We,
(full name in block capitals)

of
(business address)

and
(residential address)

the owner(s) of the vessel described below, do hereby apply for—

- (a) the survey of that vessel for—
 - (i) first registration;
 - (ii) annual survey;
 - (iii) an alteration in the dimensions, superstructure or tonnage or a permanent alteration in the method of propulsion of the vessel or the addition of a superstructure to the vessel;
 - (iv) change of use;

(delete where inapplicable)

(b) registration of that vessel by the registrar of vessels at
(port of registry)

in accordance with Part I of the Inland Waters Shipping Act.

Description of vessel—

(a) name of vessel

(b) location of vessel awaiting survey

(c) purpose for which an area in which it is intended to use vessel

(d) built by

(e) date of construction

Date

.....
(Signature of owner)

INLAND WATERS SHIPPING ACT
(CAP. 71:01)

SURVEYORS CERTIFICATE

TO: THE REGISTRAR OF VESSELS,

.....
(port of registry)

I CERTIFY THAT the vessel described overleaf in accordance with form B No. has been surveyed by me and found to be seaworthy and in a fit and proper condition to perform the services set out in Part III of that form.

This certificate is valid for a period of one year from
(date of survey)

.....
(Signature of Surveyor of Vessels)

INLAND WATERS SHIPPING ACT

(Cap. 71:01)

Annex 3

DETAILS OF VESSEL

**PART I
Purpose of Survey**

The purpose of this survey is for—

- (a) first registration;
- (b) annual survey;
- (c) alteration in the tonnage, dimensions or method of propulsion of the vessel;
- (d) change of use.

(delete where inapplicable)

**PART II
Description of vessel**

Name of vessel _____ Date of construction _____

Builders _____

Full name of owner(s) _____

Residential and business address of owner(s) _____

Full name, address and details of any other person with an interest in the vessel _____

Port of registry _____ Identity mark _____

Type of construction _____

Method of propulsion _____

Tonnage _____ Length overall _____ Breadth _____

Depth _____ Girth _____ Hull condition _____

Freeboard (*minimum*) when loaded to full permissible capacity _____

Hand-pumps (*number and type*) _____ condition _____

Fire buckets (*number*) _____ Bailers (*number*) _____

Sand boxes (*number*) _____ Fire extinguishers (*number and type*) _____

Oars (*number*) _____ Anchors (*number*) _____

Cable (*length, condition and cross-sectional diameter of links*) _____

Navigation lights (*number and type*) _____

Sound signals (*number and type*) _____

Life-boats (*number and type*) _____

to carry (*number of persons*) _____

Life-jackets (*number of persons*) _____

Buoyant apparatus (*number and type*) _____

to carry (*number of persons*) _____

Machinery (*items and conditions*) _____

PART III

Services for which vessel is to be used

Nature of services _____

Limits of operations _____

Number of crew _____

Maximum number of passengers _____ Maximum cargo (*deadweight tons*) _____

Standards of competency: Master _____

Mate _____

Engineer _____

(Date)

(Signature of Surveyor of Vessels)

INLAND WATERS SHIPPING ACT

(Cap. 71:01)

Annex 4

REGISTRATION CERTIFICATE

I HEREBY CERTIFY that the vessel
(name of vessel)

described overleaf has been registered to perform
(nature of services)

with effect from the, 19.....

The identity mark allocated to the vessel is

.....
(Registrar of Vessels)

Place of Registry

AMENDMENTS

1. Date Place of registry

.....
(Registrar of Vessels)

2. Date Place of registry

.....
(Registrar of Vessels)

3. Date Place of registry

.....
(Registrar of Vessels)

REPUBLIC OF MALAWI
MINISTRY OF TRANSPORT AND COMMUNICATIONS
MARINE DIVISION

GENERAL SAFETY CERTIFICATE FOR A:
MALAWI INLAND WATERS SHIPPING ACT
(Cap. 71:01)

Name of vessel	Government's MGW. Number	Gross tonnage	Registered length in fleet/metres
----------------	-----------------------------	------------------	--------------------------------------

I, the undersigned AUSTIN D. MSOWOYA certify that:

The above mentioned has been duly inspected in accordance with the requirements of the Ministry of Transport and Communications, Malawi, so far as these requirements apply thereto.

The inspection showed that the life saving appliances for as total of:

..... persons and no more, viz:

..... Lifejackets

..... Lifebuoys

..... Carley Float (carrying) capacity (persons)

The appliances for the prevention and extinction of fire comply with the Fire-Fighting Equipment Regulations.

The is provided with anchor, chain cable and with such navigation lights, shapes and means of making sound as are required by the Safety Navigation Regulations applicable to her.

In all other respects, the complied with the requirements for the issue of a General Safety Certificate for the work as

This Certificate will remain in force until

..... 19 ...

issued at Lilongwe the day

of 19 ...

Signed:

SURVEYOR OF VESSELS

INLAND WATERS SHIPPING ACT
(CAP. 71:01)

MINISTRY OF TRANSPORT AND COMMUNICATIONS (MARINE DIVISION)

**APPLICATION TO BE EXAMINED FOR A CERTIFICATE OF
COMPETENCY AS:**

- (i) Malawi Engineer's Certificate Class I
(ii) Malawi Engineer's Certificate Class II
(iii) Malawi Engineer's Certificate Class III
(iv) Malawi Engine Attendant's Certificate.

(delete where not applicable)

(A) Name of Applicant, etc.:

Christian Name in full <i>(Block Letters)</i>			Surname <i>(Block Letters)</i>		Permanent Address
Date of Birth			Place of Birth		Nationality
Day	Month	Year	Town and Country		

(B) Particulars of all previous certificates issued in Republic of Malawi or elsewhere. If none, state so across the division:

No. of Certificate	Type of Certificate e.g. Motor endorsement, engine attendant, or general education	Class	Place and date of	
			Examination	Issue

If at any time suspended or cancelled, state by what court or authority	Date	Cause

(C) Statement of service on shore and at sea:

(1) WORKSHOP SERVICE—MARINE OR MECHANICAL

Name and Address of Firm or Works	Nature of the Business of Firm or	Nature of Work done	Dates	Period

INLAND WATERS SHIPPING ACT

(CAP. 71:01)

MINISTRY OF TRANSPORT AND COMMUNICATIONS (MARINE DIVISION)

APPLICATION TO BE EXAMINED FOR:

- (i) Malawi Masters' Certificate Class I
(ii) Malawi Masters' Certificate Class II
(iii) Malawi Masters' Certificate Class III
(iv) Malawi Launchmasters' Certificate
(Delete where not applicable)

(A) Name of Applicant, etc.:

Christian Name in full <i>(Block Letters)</i>			Surname <i>(Block Letters)</i>	Permanent Address
Date of Birth			Place of Birth	Nationality
Day	Month	Year	Town and Country	

(B) Particulars of all previous certificates issued in Republic of Malawi or elsewhere. If none, state so across the division:

No. of Certificates	Type of Certificate e.g. Masters, Mates or General Education Certificates	Class	Place and date of	
			Examination	Issue

If at any time suspended or cancelled, state by what court or authority	Date	Cause

Capacity	Date		Particulars of Applicant's Service						
			Length of Service			Trade in which employed	Remarks	Initials of Verifier	
	From	To	Years	Months	Days				
Total service at sea Time served for which official proof is produced Time served for which no proof is produced									

(E) Declaration by applicant:

I HEREBY DECLARE that the particulars contained in Division A, B, C, D, of this form are correct and true to the best of my knowledge and belief.

And I made this declaration conscientiously, and believe the same to be true. I further declare that I have studied the relevant syllabus in the Inland Waters Shipping (Masters and Crews) Regulations.

Dated at this day of 19.....

Present address

.....
Signature of applicant

.....
Signature of witness

N.B. The attention of the applicant is drawn to the fact that any false representation is punishable under section 36 of the Act.

(F)
 THE DECLARATION was received this day of 19..... and the fee of
 Receipt No.



REPUBLIC OF MALAWI

INLAND WATERS SHIPPING ACT
(CAP. 71:01)

NUMBER
.....

CERTIFICATE OF COMPETENCY

as

MARINE ENGINEER CLASS I

To.....

HEREAS you have been found qualified to fulfil the duties of Marine Engineer Class I of a vessel operating on Malaŵi Inland Waters, I undersigned, Minister of Transport and Communications, hereby grant you this Certificate of Competency in accordance with section 10—(2) the Act.

This day of 19.....

.....
Minister of Transport and Communications



REPUBLIC OF MALAWI

NUMBER
.....

INLAND WATERS SHIPPING ACT
(CAP. 71:01)

CERTIFICATE OF COMPETENCY

as

MASTER CLASS I

To.....

HEREAS you have been found qualified to fulfil the duties of Master Class I of a vessel operating on Malawi Inland Waters. I undersigned, Minister of Transport and Communications, hereby grant you this Certificate of Competency in accordance with section 10—(2) of the Act.

Thisday of 19.....

.....
Minister of Transport and Communications

Annex 8 B

Engine Attendants Certificate Syllabus

An applicant shall:

- a) Be able to read a fuel tank indicator and estimate how many hours the fuel on board will carry the launch in good weather.
- b) Be able to read intelligently the gauges and the engine-room telegraph if one is provided and be able to stop, start and reverse the engine.
- c) Be able to name the principal parts of the engine.
- d) Be able to change an injector.
- e) Understand how to clean and clear a bilge pipe or strume and know where all bilge strume are located.
- f) Be able to top up a battery.
- g) Be able to take a simple deck bilge pump apart and reassemble it.
- h) Name all ships sides, inlet and outlet pipes and the purpose of each valve on these pipes where fitted.
- i) Know the correct procedure to follow in the case of a hot intermediate shaft bearing and a hot stern gland.
- j) Understand the necessity of obeying orders from the helmsman on deck quickly and correctly, the danger of naked lights in the engineroom or the fuel stowage, and that the gearing or oiling of the wheel, rudder lines and pulleys is his concern.
- k) Know the correct procedure to follow in the case of lubricating oil pressure falling below the safe minimum pressure and of a failure of the cooling water.

- 1) Know the correct procedure to follow when preparing to start an engine and the checks to make after starting an engine.

Annex 8

Part I

Engineers Certificate Syllabus Class II

An applicant shall:

- a) Describe how to start up an engine by hand, by air and by electric starter and the precautions to be taken and reasons for taking them.
- b) Describe how to take over watch-keeping duties on a motorship and what things to be especially careful to check before assuming responsibility.
- c) State the procedure to adopt if an engine will not start and state what action should be taken if an engine is running under load and the lubrication oil pressure falls suddenly.
- d) State what precautions should be taken against fire in the engine room and describe how to deal with any fire that did start, and one type of chemical fire extinguisher.
- e) Describe how to prepare an engine for a complete survey and detail the points to check for the information of the surveyor.
- f) Describe with the aid of sketches any of the following:
 - (i) Starting air bottle
 - (ii) Lubricating oil pump
 - (iii) Fuel pump
 - (iv) Starter motor and electric battery
 - (v) Scavenge, pump
 - (vi) Fuel injector
- g) Describe with the aid of sketches the following instruments,

stating clearly what they are used for and the safe working limits where applicable.

(i) Pressure gage

(ii) Pyrometer

(iii) Voltmeter

(iv) Thermometer

(v) Ammeter

(vi) battery hydrometer.

- h) State the essential differences between a petrol and a diesel engine, describing two-stroke and four-stroke cycles in both cases.
- i) Describe an electric generator and how it produces electricity and with the aid of sketches, the general layout of a main switchboard, stating how an "earth" should be dealt with.
- j) Sketch and describe the timing on any four-stroke engine, showing where the valves are situated.
- k) Assuming an engine breakdown, produce a properly dimensioned drawing of an engine part so that a workshop can make this part. The following is a list of parts which may be asked for:
- (i) Bottom end bolt
- (ii) Cylinder cover stud
- (iii) Shaft coupling bolt
- (iv) Gudgeon pin
- (v) Relief valve spring
- (vi) Pump spindle.
- l) Sketch and describe, the fuel lines, tanks etc. of typical en-

engineroom, showing clearly all necessary fittings and tracing the path of the fuel oil from bunkers to injector and state how to clear air locks from any part of the system.

An applicant must be able to answer all questions verbally and must be prepared to answer a written paper for which two hours is allowed. The paper will be set within the framework of the above questions. Question (d) is a failing question if not answered correctly.

Part II

For a Class III Certificate the above syllabus is used but the examination is oral and a general knowledge of (a) to (j) is sufficient.

Annex 9

Syllabus for launchmasters Certificate Examination

An applicant shall:

- a) Be able to read and write english.
- b) Pass a sight and colour test.
- c) Have a knowledge of First-Aid.
- d) Have a knowledge of the rule of the road.
- e) Be able to handle launches and boats.
- f) Answer questions in regard to seamanship and be able to know and splice ropes and wires.
- g) Answer questions on fire fighting, accidents and lifesaving.
- h) Be able to read and understand the compass and answer questions on local pilotage.
- i) Have a knowledge of winds and weather, generally on the lake.
- j) Have a knowledge of dunnaging and stowing cargo.
- k) Be able to read a chart and lay a position and course off on a chart.

Last revised on 8/9/78.

Annex 9

Masters Certificate Syllabus Class III

An applicant shall:

- a) Be able to read and write English.
- b) Have a knowledge of the rules of the road, the compass and the principles on which the compass works.
- c) Pass a sight and colour test.
- d) Be able to take a bearing by compass and lay a position and course off on a chart.
- e) Be able to read a chart.
- f) Have a knowledge of the marks on a lead line and the use of lead on any particular area of Inland water.
- g) Have a knowledge of the International Code of signals in so far as, in the opinion of the examiner, it is necessary for him to know them and local signals.
- h) Know how to moor and unmoor a vessel, keep clear anchor and how to carry out an anchor.
- i) Be able to manage a small motor vessel in rough weather on the lake.
- j) Be able to describe the effect produced on the direction of the ship's head by going ahead or astera, with a right or left handed screw, when the rudder is ported or starboarded.
- k) Be able to rig a sea anchor.
- l) Be able to manage a ships boat in rough sea.
- m) Have a knowledge of dunnaging and stowing cargo.

- n) Have a knowledge of the winds and weather generally on the lake.
- o) Be able to answer questions also on:
 - (i) Seamanship, both theoretical and practical.
 - (ii) Such matters as fire fighting, accidents and lifesaving equipment.

Annex 9

Masters Certificate Syllabus Class II

An applicant shall:

- a) Be able to read and write English.
- b) Pass a sight test, Colour test and an ophthalmic examination by a medical officer.
- c) Know in detail the collision regulations as laid down in the Inland Waters (Navigation) Regulations.
- d) Have knowledge of the compass, the principles on which it works and be able to construct deviation table.
- e) Be able to navigate by chart and compile compass bearings and have a functional knowledge of and be able to apply all navigational instruments, including radio, telephone, radar and echo sounders in use on lake Malawi.
- f) Be able to read the marks on a lead line, and to use the lead on any particular area of Inland Waters
- g) Have a sound knowledge of local signals and such knowledge of the International Code of Signals as may in the opinion of the Examiner, be necessary for him to know them.
- h) Understand the general principles of cargo storage and handling.
- i) Have a knowledge of wind and weather conditions expected on the lake.
- j) Have a knowledge of ship stability and be able to plan the loading of a ship with respect to the safety of the vessel.

- k) Have a general knowledge of the requirements laid down in the Inland Waters Shipping Act and
- l) Be able to answer oral questions on any of the above subjects and in particular on:
 - (i) Theoretical and practical seamanship and
 - (ii) fire fighting and lifesaving equipment.

Annex 10

Qualifications to sit for:

1. Engine Attendants Certificate.

An applicant shall:

- a) Produce proof that he has attained standard VIII education or equivalent standards as the examiner may approve.
- b) Have:
 - (i) either worked as an engineer apprentice or worked in a workshop where engines are made or repaired for a period of 2 years or,
 - (ii) made up this time by service in a dock or ships engine room, such time to account as two-thirds or,
 - (iii) served four years on main watches.
- c) Produce a reference as to his good conduct and sobriety.
- d) Must have passed a medical test.

2. Malawi Engineers Class III Certificate

An applicant shall:

- a) Be at least 21 years of age.
- b) Be a Diesel Fitter in possession of a National Trade Test Certificate grade I.
- c) Have served for at least one year on main engine watches as a Diesel Fitter in possession of a National Trade Test Certificate grade I.
- d) Produce a reference as to his good conduct and sobriety.
- e) Must have passed a medical test.

3. Launchmasters Certificate

an applicant shall:

- a) Produce proof that he has attained standard VIII education or equivalent standards as the examiner may approve.
- b) Have served four years as an apprentice or deckhand in a capacity up to boatswain.

Provided that where an applicant has successfully completed one or more years of training in seamanship in a training course approved by the Minister, each such year shall, for the purpose of this sub-item, be deemed to be two years apprentice or deckhand service, as the case may be.

4. Masters Certificate Class III

An applicant shall:

- a) Be at least 21 years of age.
- b) Produce proof that he has attained M.C.E. education.
- c) Be in possession of a Launchmaster Certificate.
- d) Have served a minimum of three years as launchmaster or, with this qualification as mate on cargo or passenger vessels not under 50 gr.tons or watch-keeping officer on cargo or passenger vessels not under 200 grt.
- e) He must hold a First-Aid Certificate approved by the examiner.
- f) Produce a reference as to his good conduct and sobriety.

5. Masters Certificate Class II

An applicant shall:

- a) Be at least 21 years of age.
- b) Be in possession of a Malawi Masters Certificate Class III.
- c) Have served for at least one year as master of a vessel specified in Part III (b) of the first schedule or as a watchkeeping officer of a vessel specified in Part I or II of the first schedule.
- d) Produce references from at least two masters under whom he has served as to his good conduct, sobriety and ability.

Annex 11

STATISTICAL INFORMATION

Vessels currently in use

- a) Lake services - 16
- 3 passenger ferries
 - 2 product tankers
 - 3 dry cargo ships
 - 4 tugs
 - 2 dry cargo barges
 - 1 dredger
 - 1 floating dock

- b) Maldeco Fisheries - 12
- 9 fishing trawlers
 - 3 fish carriers

- c) Government
- Government departments have some 142 vessels, from small ferries to high speed police patrol and rescue launches to trawlers used on fishery research and development.

- d) Small crafts 2,365
- Used in fishing and ferrying. These are replacing the traditional canoes.

e) Passengers carried per annum

Lake service	200,000
Small ferries	1,250,000

Illegal ferrying at local level count for at least another 750,000.

f) Cargo

In 1982 lake services carried about 40,000 tons. There is also movement of small tonnage over short sea runs by small crafts on which no figures are available. With the development of the coal and timber industries and the import and export route through Dar-ess-alaam it is hoped that tonnage will increase sharply. There will be need for vessels specially designed to carry coal and containers.

g) Fish landed per annum

Maldeco	25,000 tons
Local Fishermen	60,000 tons

h) Personnel directly employed on vessels which come under the Act

Lake service	501
Maldeco Fisheries	630
Government vessels	568
Small crafts	12,400

Shore based back-up personnel are not included.

Annex 12

SAFETY OF LIFE AT SEA - SOLAS

Chapter I

Regulation 6 - Inspection and Survey.

Regulation 7 - Survey of Passenger Ships.

Regulation 8 - Survey of life saving appliances and other equipment
of Cargo Ships.

Regulation 9 - Surveys of Radio and Radar installations on Cargo Ships.

Regulation 10 - Surveys of hull machinery and equipment of Cargo Ships.

Regulation 11 - Maintenance of Condition after Survey.

Regulation 12 - Issue of Certificates.

Regulation 14 - Duration of Certificates.

Regulation 18 - Qualification of Certificates.

Regulation 21 - Casualties.

Chapter II - 1

CONSTRUCTION - SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTAL- LATIONS

Regulation 2 - Definition.

Regulation 3 - Floodable length.

Regulation 4 - Permeability.

Regulation 5 - Permissible length of compartments.

Regulation 7 - Stability of ships in damaged Condition.

- Regulation 9 - Peak and Machinery Space Bulkheads, shaft tunnels etc.
- Regulation 10 - Double bottoms.
- Regulation 11 - Assigning, Marking and Recording of subdivision load lines.
- Regulation 12 - Construction and initial testing of watertight Bulkheads etc.
- Regulation 13 - Openings in Watertight Bulkheads.
- Regulation 14 - Openings in shell plating below the Margin line.
- Regulation 15 - Construction and initial tests of Watertight Doors, Side Scuttles etc.
- Regulation 16 - Construction and initial tests of Watertight Decks, Trunks etc.
- Regulation 17 - Watertight integrity above the marginal line.
- Regulation 18 - Bilge pumping arrangements in passenger ships.
- Regulation 19 - Stability information for Passenger Ships and Cargo Ships.
- Regulation 20 - Damage Control plans.
- Regulation 21 - Marking, Periodical operation and Inspection of Watertight Doors etc.
- Regulation 22 - Entries in log.
- Regulation 23 - General.
- Regulation 24 - Main source of electrical power in Passenger Ships.
- Regulation 25 - Emergency source of electrical power in Passenger Ships.
- Regulation 27 - Precautions against Shock, Fire and Hazards of Electrical Origin.
- Regulation 28 - Means of going Astern.
- Regulation 29 - Steering gear.
- Regulation 30 - Electric and Electrohydraulic Steering gear.

Regulation 31 - Location of Emergency installation in passenger ships.

Regulation 32 - communication between bridge and engine room.

Chapter II - 2

CONSTRUCTION - FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

Regulation 2 - Basic principles.

Regulation 3 - Definitions.

Regulation 4 - Fire Control Plans.

Regulation 5 - Fire pumps, Fire mains Hydrants and Hoses.

Regulation 7 - Fire extinguishers.

Regulation 8 - Fixed Gas Fire Extinguishing systems.

Regulation 9 - Fixed Froth Fire - extinguishing systems in machinery space.

Regulation 10 - Fixed High Expansion Froth Fire-Extinguishing systems in Machinery space.

Regulation 11 - Fixed Pressure Water-Spraying Fire - Extinguishing systems in Machinery Spaces.

Regulation 12 - Automatic Sprinkler and Fire Alarm and Fire Detection Systems.

Regulation 13 - Automatic Fire Alarm and Fire Detection Systems.

Regulation 14 - Firemans outfit.

Regulation 15 - Ready availability of Fire extinguishing Appliances.

Regulation 16 - Acceptance of Substitutes.

Regulation 17 - Structure.

Regulation 18 - Main Vertical Zones and Horizontal Zones.

- Regulation 19 - Bulkheads within a main Vertical Zone.
- Regulation 20 - Fire Integrity of Bulkheads and Decks.
- Regulation 21 - Means of Escape.
- Regulation 22 - Protection of Stairways and Lifts in Accommodation and Service Spaces.
- Regulation 23 - Openings in "A" Class Divisions.
- Regulation 24 - Openings in "B" Class Divisions.
- Regulation 25 - Ventilation Systems.
- Regulation 26 - Windows and Side Scuttles.
- Regulation 27 - Restriction of Combustible Materials.
- Regulation 28 - Miscellaneous items.
- Regulation 29 - Automatic Sprinkler and Fire Alarm and Fire Detection Systems or Automatic Fire Alarm and Fire Detection Systems.
- Regulation 30 - Protection of Special category Spaces.
- Regulation 31 - Protection of Cargo Spaces other than special category spaces intended for the carriage of Motor Vehicles with Fuel in their Tanks for their own Propulsion.
- Regulation 32 - Maintenance of Fire Patrols etc. and Provision for Fire Extinguishing Equipment.
- Regulation 33 - Arrangement for oil Fuel Lubricating Oil and other Inflammable oils.
- Regulation 34 - Special Arrangements in Machinery Spaces.
- Regulation 35 - Structure.
- Regulation 36 - Main Vertical Zones.
- Regulation 37 - Openings in "A" Class Division.

- Regulation 38 - Fire Integrity of "A" Class Division.
- Regulation 39 - Separation of Accommodation Spaces from Machinery, Cargo and Service Spaces.
- Regulation 40 - Protection of Accommodation and Service Spaces.
- Regulation 41 - Deck coverings.
- Regulation 42 - Protection of Stairways and Lifts in Accommodation and Service Spaces.
- Regulation 43 - Protection of Control Stations and Store-rooms.
- Regulation 44 - Windows and Sidescuttles.
- Regulation 45 - Ventilation Systems.
- Regulation 46 - Details of Construction.
- Regulation 47 - Fire Detection Systems and Fire Extinguishing Equipment.
- Regulation 48 - Means of Escape.
- Regulation 49 - Oil Fuel used for Internal Combustion Engines.
- Regulation 50 - Special Arrangements in Machinery Spaces.
- Regulation 81 - Fire Detection and Extinction Requirements.
- Regulation 85 - Practice Muster and Drills.

Chapter III

LIFE SAVING APPLIANCES

- Regulation 1 - Applications.
- Regulation 2 - Definitions.
- Regulation 4 - Ready Availability of Lifeboats, Liferafts and Buoyant Apparatus.

- Regulation 5 - Construction of Lifeboats.
- Regulation 6 - Cubic capacity of Lifeboats.
- Regulation 7 - Carrying capacity of Lifeboats.
- Regulation 8 - Number of Lifeboats to be carried.
- Regulation 9 - Specification of Motor Lifeboats.
- Regulation 10 - Specification of Mechanically Propelled Lifeboats other than Motor Lifeboats.
- Regulation 11 - Equipment of Lifeboats.
- Regulation 15 - Requirements for Inflatable Liferrafts.
- Regulation 16 - Requirements for Rigid Liferrafts.
- Regulation 17 - Equipment of Inflatable and Rigid Liferrafts.
- Regulation 18 - Training in the use of Liferrafts.
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- Regulation 20 - Marking of Lifeboats, Liferrafts and Buoyant Apparatus.
- Regulation 21 - Specification of a Lifebuoy.
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- Regulation 23 - Line-throwing Appliances.
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- Regulation 25 - Muster list and Emergency Procedure.
- Regulation 26 - Practice Musters and Drills.
- Regulation 28 - Davits and Launching.
- Regulation 29 - Stowage and Handling of Lifeboats, Liferrafts and Buoyant Apparatus.
- Regulation 30 - Lighting for Decks Lifeboats, Liferrafts etc.

Regulation 31 - Manning of Lifeboats and Liferrafts.

Regulation 32 - Certificated Lifeboatmen.

Regulation 33 - Buoyant Apparatus.

Regulation 34 - Number of Lifebuoys to be provided.

Regulation 38 - emergency lighting.

Annex 13

THE MALAWI INLAND WATERS SHIPPING ACT IN SUMMARY FORM

SECTION

PRELIMINARY

1. Short title.
2. Interpretation.

PART I

SURVEY AND REGISTRATION OF VESSELS

3. Application of Part I
4. Vessels to be surveyed and registered
5. Survey of vessels
6. Ports and registry
7. Registration of vessels
8. Duration and renewal of certificates
9. Amendments in Certificates of Registration and register
10. Masters and crews of vessels

PART II

LICENSING

11. Licensing authority
12. Licensing of vessels used for water transport

13. Using vessel in contravention of section 12.
14. Duration of licence
15. Licence not transferable
16. Form of licence

PART III

APPLICATION FOR AND GRANTING OF LICENCES

17. Procedure on application for licences
18. Objection to application for licence
19. Discretion of the licensing authority to grant or refuse licences

PART IV

CONDITIONS, VARIATIONS, REVOCATION AND SUSPENSION OF LICENCES: APPEALS

20. Conditions of licences
21. Power to revoke or suspend licences
22. Provision for appeals in connection with treaties

PART V

INLAND WATERS AND INTERNATIONAL ARRANGEMENTS

23. Declaration of inland waters
24. Agreements with certain other countries
25. Power to suspend provisions inconsistent with treaties

PART VI

SURVEYS AND INQUIRIES

26. Power of inspection and unsafe vessels
27. General powers of surveyors and police officers
28. Removal of wreck by a surveyor
29. Duties of surveyors in relation to surveys
30. Inquiries as to shipping casualties

PART VII

GENERAL PROVISIONS

31. Arrest and seizure
32. Duty to give information
33. Damage to navigation marks
34. Certain provisions as to legal proceedings
35. Ensign to be prescribed
36. Offences and Penalties
37. Regulations
38. Transitional provisions
39. Government to be bound
40. Act not to affect Fisheries Act

SUBSIDIARY LEGISLATION IN SUMMARY FORM

1. SHORT TITTLE

The Act may be cited as the Inland Waters Shipping Act.

2. INTERPRETATION

In this Act "Certificate of registration means a certificate of registration issued by registrar of vessels.

"Crew" includes any person employed in a vessel other than the master.

"Fishing vessel" means a vessel irrespective of method of propulsion used which is employed in fishing for the purpose of sale or trade.

"Harbour" means a place or area designated as a harbour by the minister.

"Hire or reward" relating to the use of a vessel means the use of any vessel on inland waters in return for payment or material advantage on one or more occasions, whether or not the vessel is used without the service of a master or crew.

"Home port" means the place at which a vessel is habitually kept when not on voyage.

"Inland waters" here means such waters as may be declared to be inland waters by the minister, in this case means water of lake Malawi, lake

Malombe, lake Chirwa, lake Chiuta, the upper and lower Shire river and all other rivers in the country.

"Master", means the person having command or charge of a vessel.

"Owner" includes in the case of a vessel which is the subject of a hire-purchase agreement, the person in possession of the vessel in terms of that agreement.

"Passenger" means every person carried in a vessel other than the master or crew.

"Registrar of vessel", means a registrar of vessel appointed by the Minister.

"Navigation mark", includes any beacon buoy, light notice and any other mark or aid to navigation provided for the purpose of this act.

"Surveyor" means any person appointed by the Minister as a surveyor of vessels.

"Surveyors Certificate", means a certificate issued by a surveyor, normally for the seaworthiness of a vessel.

"Ton" means the unit of measurement of tonnage of a vessel.

"Vessel" includes every description of water craft used as a means of transportation on water.

3. APPLICATION OF PART I

The provisions of these part apply to every vessel used on inland waters

of Malawi, which is used for hire or reward or whose tonnage measurement exceeds such tonnage as prescribed by the Minister. There are however some exemptions from the provision of this part. These are:

- a) A vessel solely used for private purposes or pleasure and not for hire or reward.
- b) A canoe.
- c) A vessel the home port of which is outside Malawi.
- d) Other classes of vessels as may be prescribed by the Minister.

4. VESSELS TO BE SURVEYED AND REGISTERED

No person shall use on any inland waters a vessel which:

- a) Has not been surveyed and registered in accordance with the provisions of the Act.
- b) Has no valid certificate of registration.

5. SURVEY OF VESSELS

Before an application for the registration of any vessel is made such vessel shall be surveyed in accordance with the provisions of this act.

The Minister shall publish in the gazette appointed surveyors for each port of registry and an owner of a vessel shall submit his application for registry to a surveyor at a port of registry which is the home port of his vessel. The surveyor shall survey the vessel to determine:

- a) Whether the vessel is seaworthy.
- b) Whether the vessel is equiped in accordance with the provisions of this act.

- c) The description, tonnage, dimensions name and methods of propulsion.
- d) The geographical limits or areas of inland waters outside which the vessel may not be used having regard to her construction, suitability for navigation and safe operation.
- e) The maximum number of passengers and quantity of cargo to be carried.
- f) The crew to be carried and standards of competency to be attained by members of such crew.
- g) such other matters as may be prescribed by the Minister.

On completion of his survey the surveyor shall, if satisfied that the vessel is seaworthy and is equipped in accordance with the provisions of this act, issue a certificate giving the information and his opinion relating to his survey observations. If the surveyor, in the course of his survey finds a vessel to be unseaworthy or to lack equipment as required by this act he shall make a full list in writing of all such defects and shall give a copy to the owner of the vessel, also notifying him of date by which the vessel may be produced for further examination. When such defects have been subsequently remedied to the satisfaction of the surveyor he shall issue a certificate accordingly. The surveyors certificate is valid for such a period as may be prescribed by the Minister.

6. PORTS OF REGISTRY

The Minister shall publish in the gazette appointed ports of registry and

shall appoint a registrar of vessels for each port. Every registrar of vessels shall maintain in his port a register of vessels registered in that port.

7. REGISTRATION OF VESSELS

An application for the registration of a vessel shall be made by the owner of the vessel to the registrar of his vessels home port. Such an application shall be accompanied by a surveyors certificate. No person is registered as the owner of a vessel until he has made a declaration as to his ownership of the vessel in question. When the vessel complies with the requirements for registration it is entered in the register of vessels.

A registrar of vessels shall not however register a vessel which has been brought to the inland waters from outside Malawi unless he is satisfied that the provisions of the customs act have been complied with.

8. DURATION AND RENEWAL OF CERTIFICATES

Every certificate of registration shall remain in force and be deemed valid for such a period that may be presented or prescribed. Application for renewal of certificate of registration shall be made by the owner of vessel at any time not earlier than one month before such certificate expires and has to be accompanied by a valid surveyors certificate. Where the owner of a vessel has applied for renewal of certificate of registration one month before expiry of the valid certificate, his certificate will remain valid until he is notified of the results of his application.

9. AMENDMENTS IN CERTIFICATES OF REGISTRATION AND REGISTER

Where particulars of a vessel have been altered the owner shall, not, later than twenty-four days after the alterations, submit the certificate of registration to the registrar of vessels for the purpose of making necessary amendments in the certificate and the register of vessels.

In his discretion he may:

- a) Issue a new certificate instead of amending.
- b) Cancel the certificate and delete relevant entries in the register if satisfied that the vessel is permanently removed from or permanently incapacitated for use on inland waters of Malawi.

Where an amendment in a certificate of registration or register is required due to:

- a) an alteration in dimensions, superstructure, tonnage, method of propulsion or addition of superstructure, or,
- b) use for hire or reward of a vessel for the first time,

The registrar concerned shall not make any such amendments unless the certificate of registration submitted to him is accompanied by a valid surveyors certificate. If an owner fails to comply with the provisions as above the certificate of registration in question shall no longer be valid. Subject to the provisions above the registration of a vessel may be transferred from one port of registry on application to do so. The certificate of registration shall be attached to the application. Malawi has only one port of registration which is Monkey Bay.

10. MASTERS AND CREWS OF VESSELS

Certain vessels shall be under the Command of a competent master and crew. Master or crew shall be competent when he has attained such standards of competency as prescribed by the Minister.

11. LICENSING AUTHORITY

For the purpose of this act a licensing authority shall be such public officer as appointed by the Minister.

12. LICENSING OF VESSELS USED FOR WATER TRANSPORT

No person shall, except under and in accordance with the terms of a licence issued under this act, use any vessel upon inland waters for the carriage of:

- a) Any goods or any persons for hire or reward or,
- b) any goods for or in connection with any trade or business.

The Minister will by notice publish in the gazette vessels exempted from these provisions.

13. CONTRAVENTION

any person who uses a vessel in contravention of the provisions of this licensing requirement shall be guilty of an offence and will be liable to pay a fine of MK 400.

14. DURATION OF LICENCE

A licence shall be in force for a period of one year, however short term licences may be granted for:

- a) purpose of seasonal business.
- b) A short piece of work.
- c) Any purpose of limited duration.

15. LICENCE NOT TRANSFERABLE

No licence shall be transferable except with the licensing authority's written consent endorsed on such licence.

16. FORM OF LICENCE

A licence shall be issued in respect of each vessel separately.

17. PROCEDURE ON APPLICATION FOR LICENCE

Every person applying for a licence to use any vessel for the carriage of passengers or goods shall submit in writing to a licensing authority particulars regarding:

- a) The type of vessel to be used.
- b) The construction and motive power of such vessel.
- c) The total number of crew to be carried in such a vessel.
- d) The number of passengers such vessel is intended to carry.

- e) The places between which such vessel is intended to be navigated including places outside Malawi if any and the services to be provided thereby.

18. OBJECTION TO APPLICATION FOR LICENCE

A licensing authority shall publish in gazette every application for licence and such notice shall specify time within which and manner in which objections may be made to the grant of the licence. When considering an application the licensing authority shall have regard to any objections to the application which may be made by persons who are already providing transport facilities for carriage of goods or passengers between the same places which the applicant intends to serve.

19. DISCRETION

A licensing authority has full power to grant or refuse any application for licence. In exercising its discretion the licensing authority shall have regard to the following:

- a) The extent to which the proposed service is necessary or desirable in the public interest.
- b) The extent to which it is necessary in the public interest to prevent uneconomic competition with other transport.
- c) The extent to which the route or routes in respect of which the applicant is made are already served.
- d) The desirability of encouraging the provision of adequate and efficient services.

- e) The desirability of eliminating and preventing the growth of unnecessary services.
- f) The co-ordination of all forms of passenger and goods transport.
- g) The interests of those requiring as well as those providing facilities for transport.
- h) The applicants reliability, financial stability and the facilities at his disposal for carrying out the proposed services.
- i) The condition of the vessel in respect of which the application is made and the fitness of such vessel for the purpose for which the applicant intends to use it.

20. CONDITIONS OF LICENCE

It shall be a condition of every licence issued under this act that:

- a) The vessel in respect of which it is issued is maintained in a fit and serviceable condition.
- b) The provisions of any law in force for the time being relating to limits of weight, laden and unladen, the loading of vessels and the number of passengers to be carried are complied with in relation to such vessel.

Without prejudice a licensing authority may, in its discretion, attach to a licence all or any of the following conditions:

- a) That the vessel in respect of which it is issued shall or shall not be used in a specified area or over specified routes.
- b) That certain classes or description of goods shall or shall not

be carried.

- c) Specifying the charges to be made for the carriage of goods and passengers.
- d) Specifying the maximum weight of such vessel.
- e) That passengers may or may not be carried.
- f) Specifying the maximum number of passengers which may be carried.

Any person who fails to comply with any condition of the licence held by him shall be guilty of an offence and liable to a fine of MK 200.

21. POWER TO REVOKE OR SUSPEND A LICENCE

A licence may be revoked or suspended by the licensing authority on the ground that any of the conditions of the licence have not been complied with. Grounds for the revocation or suspension will be stated in writing by the authorities to the holder of the licence.

22. APPEALS

If a licence holder is not happy with reasons given for the revocation or suspension of his licence he may appeal to the Minister whose decision shall be final and shall not be questioned in any court.

23. DECLARATION OF INLAND WATERS

The Minister may by notice published in gazette declare any lake or river or area of water to be inland waters for the purpose of this act.

24. AGREEMENTS WITH OTHER COUNTRIES

The Minister may under certain conditions conclude agreements with governments of any country which borders on any lake or river of which a part has been declared inland waters. Every such agreement shall be published in gazette.

25. POWER TO SUSPEND TREATIES

Where the Minister is satisfied that the enforcement of any provision of this act in regard to vessels of any country would be inconsistent with the obligations of Malawi under any treaty, convention or agreement entered into with that country he may by order suspend the operation of that provision with regard to vessels of that country.

26. POWER OF INSPECTION AND UNSAFE VESSELS

A surveyor or any person authorized by the Minister may at any convenient time go on board and inspect any vessel used on inland waters, and if such person or surveyor certifies that the vessel is unsafe in writing he may, if in his opinion if the case so requires direct the master of such vessel to put in to the nearest berth or anchorage and if so directed no person shall use such vessel in navigation upon inland waters until a surveyor has certified in writing that such vessel is no longer unsafe.

A vessel shall be unsafe if the surveyor is satisfied that the vessel is:

- a) In defective condition.
- b) Has defective equipment.

- c) Lacks proper equipment.
- d) Is undermanned, this includes incompetent master or crew.
- e) The vessel is overloaded.
- f) Is unfit to navigate upon that part of the inland waters where the vessel is found with danger to human life.

any master or person who contravenes the above directives shall be guilty of an offence.

27. GENERAL POWERS OF SURVEYORS AND POLICE OFFICERS

Any surveyor or any police officer exercising the powers conferred or carrying out the duties imposed upon him under this act, may go on board any vessel at all reasonable times and inspect the vessel for the following:

- a) Machinery.
- b) Boats.
- c) Equipment.
- d) Certificates of Competency of master or any member of the crew.

He may also enter any dock, boathouse or other premises where a vessel or any machinery may be.

28. REMOVAL OF WRECK BY SURVEYOR

Where any vessel is sunk, stranded or abandoned on any inland waters in such a manner that in the opinion of the surveyor will likely be an obstruction or danger to navigation it shall be lawful but not obligatory

for the surveyor to:

- a) Take possession of and raise, remove or destroy the whole or any part of the vessel, her equipment, stores, fuel cargo or ballast.
- b) Light or buoy any such vessel or part until the raising, removal or destruction.

29. DUTIES OF SURVEYORS IN RELATION TO SURVEYS

In surveying a vessel a surveyor shall have regard as may be appropriate to the vessel being surveyed, to the standards and requirements relating to the survey of passenger ships, cargo ships and fishing vessels concerning machinery, fire fighting and life saving appliances as laid down from time to time in instructions issued to surveyors of ships by the authorities which issue such instructions in Malawi and shall apply those standards and ensure compliance.

30. SHIPPING CASUALTY

The Minister may direct an investigation into any shipping casualty.

According to this shipping act casualty shall be deemed to occur:

- a) Whenever a vessel has been lost, abandoned, stranded or damaged on any inland waters.
- b) Whenever any vessel causes loss or material damage to any vessel on inland waters.
- c) Whenever loss of life occurs by reason of casualty happening on board any vessel which is on inland waters.

When a shipping casualty occurs the Minister may appoint a surveyor or any other person to make inquiries as to the causes and circumstances of the shipping casualty and to report thereafter to him. The person so appointed shall have access to and authority to examine any vessel involved in a shipping casualty, the place where the casualty occurred, documents, material, equipment or components which may be pertinent to his inquiries.

Where it appears to the Minister that it is expedient to hold a formal inquiry into the competency of a master or member of a crew or into the causes and circumstances of a shipping casualty, he may appoint a board of inquiry to conduct such an inquiry, and the board of inquiry will consist of:

- a) A chairman, who is or has been a judge in civil and criminal matters in Malawi and has had not less than ten years experience in the field.
- b) One or more members having knowledge and experience of navigation or engineering.

31. ARREST AND SEIZURE

A police officer having reasonable grounds for believing that any person has committed an offence against this act and that such person will not attend the court in answer to any process which may be issued against him, may arrest such a person without a warrant and may seize any vessel or object which may provide evidence to the commission about the offence.

32. DUTY TO GIVE INFORMATION

Where any surveyor, registrar of vessels, police officer or any person authorized by the Minister has reason to believe that an offence has been committed by any person on board a vessel it shall be lawful to him to require the owner to give information about the alleged offence. Any owner failing to give such information shall be guilty of an offence.

33. DAMAGE TO NAVIGATION MARKS

No person shall wilfully or negligently injure any navigation mark and remove alter or destroy any navigation mark. Expenses incurred in repairing or replacing any navigation mark which has been damaged shall be paid to the government.

34. LEGAL PROCEEDINGS

In all proceedings for the recovery of damages done by any vessel entries in a register of vessels relating to the vessel in question shall be conclusive evidence regarding the owner of the vessel.

35. ENSIGN

The Minister may prescribe an ensign of such colours and design as he may direct which may be worn by vessels in a manner and purpose that may be prescribed.

36. OFFENCES AND PENALTIES

A person shall have committed an offence if he makes a false statement, fraudulently, imitates, alters, mutilates any document issued under this act or wilfully obstructs, refuses to produce to the surveyor, registrar of vessels or police officer, any document issued under this act. He shall also be guilty of an offence, if, while in command, sends or takes upon inland waters any vessel of a class prescribed which is not provided with a competent master or duly competent crew or is a party to taking or sending a vessel in such an unseaworthy state that life of persons is endangered, or fails to comply with any instructions given under this act.

37. REGULATIONS

the Minister may make regulations prescribing all matters as required by this act. Such regulations may provide for:

- a) The measurement of the dimensions and tonnage of vessels.
- b) Agreements regarding treaties.
- c) Surveyors certificates.
- d) The allocation of identity marks to a vessel.
- e) The number of passengers and crew and the quantity of cargo to be carried.
- f) The supply of life saving appliance and fire fighting appliances in a vessel.
- g) The measures to be observed in the construction and equipment of vessels for the safety of cargo and persons carried.
- h) Functions of central registry of vessels.

- i) Production to surveyors of various certificates.
- j) The replacement of certificates.
- k) The standards of competency.
- l) The measures to observe for the prevention of collision including navigation aids.
- m) The geographical limits of inland waters or areas outside which vessels or classes of vessels may not be used having regard to their construction, suitability for navigation and safe operation.
- n) The fees to be paid and the manner of payment.

The Minister may designate places or areas of inland waters or land as harbours and make regulations for the management, control and safety of any such harbours and of vessels and persons and cargo within them, the powers of persons to effect such control and the payment of fees for services within such harbours.

2.5. SUBSIDIARY LEGISLATION

Having looked at the legislation we can now look at the regulations that supplement the legislation. In this paper the regulations are presented in a most comprehensive manner to be understood without difficulties.

REGULATIONS

PART I

MASTERS AND CREWS

1. CITATION

These regulations may be cited as the inland waters masters and crews regulations.

2. A COMPETENT MASTER

No vessel of five tons or more which is used for hire or reward shall be used upon inland waters except under the command of a competent master. But a vessel of under ten tons shall only be required to carry a master if:

- a) The vessel is hired with or,
- b) the vessel is used to carry twelve or more passengers.

3. CERTIFICATES FOR MASTERS AND CREWS

The master of a vessel as may be specified in schedules of ships, shall hold the certificate respectively specified in the columns of the schedule as regards to the attainment of the necessary standards of competency.

The following is the schedule as it appears in the regulations:

VESSELS OF 600 TONS OR MORE

Master or member of crew

Master

Mate

Engineer

Certificates

Malawi masters class I

Malawi masters class II

Malawi engineers class III

PASSENGER VESSELS OF UNDER 600 TONS BUT NOT LESS THAN 200 TONS

Master ~~of~~ member of crew

Master

Mate

Engineer

Certificate

Malawi master class I

Malawi master class II

Malawi engineers class III

CARGO VESSELS OF UNDER 600 TONS BUT NOT UNDER 200 TONS

Master

Mate

Engineer

Malawi master class I

class II acceptable

None

Malawi engineers class I

class II acceptable

PASSENGERS VESSELS OF UNDER 200 TONS BUT NOT UNDER 50 TONS

Master

Mate

Engineer

Malawi masters class II

Malawi launchmasters

Malawi engineers class II

CARGO VESSELS OF UNDER 200 TONS BUT NOT UNDER 50 TONS

Master

Engineer

Malawi masters class III

Malawi engineers class II

VESSELS OF UNDER 50 TONS BUT NOT UNDER 10 TONS

Master

Engineer

Malawi launchmasters

Malawi engine

attendants certificate

Vessels of under 10 tons but not under 5 tons only need a master with a Malawi launchmasters certificate.

All the certificates indicated in the above schedule are issued by the Minister to a person who:

- a) Has passed the appropriate examinations as laid down in the regulations.
- b) Whose competency the Minister is otherwise satisfied in accordance with the act.

The Minister may cancel the certificate of a master or member of crew if such master or member of crew:

- a) Has been convicted of an offence.
- b) Has been found incompetent or negligent on duty.

PART II

TONNAGE AND DIMENSIONS

The tonnage of a vessel shall be determined by applying the following formula:

$$\left\{ \frac{\text{breadth}}{2} + \frac{\text{girth}}{2} \right\} \times \text{length} \times 0.002$$

For steel or aluminium vessels:

$$\left\{ \frac{\text{breadth}}{2} + \frac{\text{girth}}{2} \right\} \times \text{length} \times 0.0018$$

For wooden or reinforced plastic vessels.

The breadth, girth and length being expressed in feet. This form of calculation will remain in force until the next review on regulations. Tonnage of a vessel built outside Malawi and re-assembled in Malawi shall be the gross tonnage as determined by the builders.

PART III

HARBOURS

The Minister has designated the following areas as harbours for the purpose of this act.

1. Chilumba.
2. Nkhata Bay.
3. Chipoka.
4. Monkey Bay.

Each of these harbours is administered and managed by a harbour master who is appointed by the General manager, Malawi Railways Ltd. All persons within the harbour shall comply with such directions as the harbour master may give from time to time for the purpose of carrying into effect the provisions of harbour regulations as laid down. Harbour regulations cover the following areas:

- a) Vessels arriving from any port outside Malawi.
- b) Berthing and movement within harbour.
- c) Ships mooring.

- d) Use of buoys and marks in harbour.
- e) Displaced mooring.
- f) Speed in harbour.
- g) Explosives.

PART IV

NAVIGATION

Regulations on navigation apply to all vessels used on the inland waters with few exceptions. These regulations cover:

- a) Manner of showing lights.
- b) Duties of masters in respect of lights.
- c) Sound signals.
- d) Distress signals.
- e) Navigation aids.
- f) Notices to mariners.

PART V

LICENSING OF VESSELS

Regulations controlling the licensing of vessels apply to all ships engaged in business of profit making. These are:

- a) The issue of licence.
- b) Variation of licence.

- c) Display of licence.
- d) Surrender of licence.
- e) Penalty.

Any person who is guilty of an offence under these regulations is liable to a fine of MK 100.

PART VI

SAFETY APPLIANCES AND CONSTRUCTION OF VESSELS

These regulations apply to all vessels requiring to be registered under this act. They control:

- a) Submission of plans.
- b) Conventional standards.
- c) Stability and freeboard.
- d) Structural strength.
- e) Safety and fire fighting appliances.
- f) Propulsion machinery and steering.
- g) Anchors and cables.
- h) Radio apparatus.
- i) Boat and fire drills.

PART VII

SURVEY AND REGISTRATION OF VESSELS

Regulations on survey and registration of vessels apply to all vessels of 15 feet and over, but lifeboats which are carried on a registered vessel are exempted from separate registration. These control:

- a) Application for survey and registration.
- b) Periods for survey.
- c) Surveyors certificates.
- d) Registration of vessels.
- e) And fees for surveys.