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Crossing the waters: managing and operating the passenger ferry services between Trinidad and Tobago

Dwynette D. Eversley

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CROSSING THE WATERS:
MANAGING AND OPERATING
THE PASSENGER/CAR FERRY
SERVICE BETWEEN TRINIDAD
AND, TOBAGO

by

DHYNETTE D EVERSLEY

REPUBLIC OF
TRINIDAD AND TOBAGO
CROSSING THE WATERS: MANAGING AND OPERATING THE PASSENGER FERRY SERVICE BETWEEN TRINIDAD AND TOBAGO

by

Dwynette D Eversley
Republic of Trinidad and Tobago

A paper submitted to the Faculty of the World Maritime University to fulfil partially the requirements for the award of a MASTER OF SCIENCE DEGREE in GENERAL MARITIME ADMINISTRATION

The contents of this paper reflect my views which are not necessarily endorsed by the University.

Signature: Dwynette D Eversley
Date: Nov 01

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Faaborg-Gelting Line, Denmark
DEDICATION

To Ky, my love

"somewhere, somehow our roles have inter-changed you have been the one supporting me, caring for me, giving me the will and incentive to succeed ...."
ACKNOWLEDGEMENTS

I am greatly indebted, and hereby express my sincerest appreciation to the persons and institutions named hereunder for providing a range of supportive input towards the completion of this document:-

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The Stena Shipping Group of Gothenburg, Sweden, for affording me invaluable insight into management and operation principles in the "fantastic world of ferrying" during my one month on-the-job-training with the Company;

Nordisk Faergefart a/s of Faaborg, Denmark, where I underwent one week field training, and benefitted from the professional guidance of this Company which is well acquainted with the inter-island ferry service;

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The Eversleys and the Chandlers — my parents and family whose support has been a soothing comfort;

The Wonderful Wizard of Oz — whose magic sustains me in ways too special to measure; and

Kyane Kadel — my son, for his love and patience.
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List of Abbreviations

1. BWIA - British West Indian Airways, (Trinidad and Tobago International)

2. CFTDI - Caribbean Fisheries Training and Development Institute.

3. GSS - Government Shipping Service, also "the Service".

4. JMTI - Jamaica Maritime Training Institute

5. ILO - International Labour Office

6. IMO - International Maritime Organization

7. PATT - Port Authority of Trinidad and Tobago.

8. POS - Port of Spain.

9. SGH - Scarborough

10. TT - Trinidad and Tobago

11 TTT - Trinidad and Tobago Television

12.UNCTAD- United Nations Conference on Trade and Development
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FIGURE 1: FERRY ROUTE BETWEEN TRINIDAD AND TOBAGO
ABSTRACT

"No dignity on the ferry - When will the Port Authority treat citizens like human beings !?!?! "

This lurid caption appeared in one national newspaper in June, 1987. The writer lamented the delays and other disservices visited upon himself and his family when they decided to sail to Tobago for their vacation.

This complaint mirrors myriad others whose sole variation from the major theme is the intensity of the invective used. This state of affairs has prompted the author to examine the reasons why the existing ferry services does not address the human factor more precisely, and in such a manner that is evincive of the hospitality industry where customer patronage is crucial for generating revenue.

As such, this study will indicate avenues which may serve to upgrade the service to reflect the status, image and professionalism of ferry operations most peculiar to the requirements of Trinidad and Tobago.

It is hoped that the study can be a vade-mecum for any national agencies desiring an insight into the organization of this aspect of passenger shipping, and relevant procedural concepts may be applied, mutatis mutandis, in case it is ever considered politic to restructure the existing facility, or in case the widely mooted new inter-island ferry route is ever initiated.
CHAPTER ONE

CAST OFF: AN INTRODUCTION

We bridge the geographical separation of Trinidad and Tobago by air and by sea. This distance is spanned by a fifteen minute flight and a five and one quarter hours port to port sailing (See Figure 1). These inter-modal links in addition to their immanent transport functions provide the crucial means of perpetuating the social economic and political coalescence of the two islands. They are integral to the concept of nationhood, providing an extension of other land transport modes that are in use.

While the combined inter-modal service supplies a steady demand for movement of passengers and cargoes between the island, each mode has been quite distinctly perceived by the travelling public, and has therefore catered to separate demands. Briefly, the domestic air service attempts to satisfy the perspicacious traveller who wants quick and professional transportation. The domestic sea service on the other hand, is often relegated to ranks of a mere cargo transportation, patronized by those of limited option.

Where the level of the service with respect to reliability and frequency is considered acceptable, other areas are decidedly contentious. The crucial aspect of catering to the needs of passengers has remained one pronounced inadequacy of the ferry service, despite sure influxes of State subventions and other assistance towards improving the facility. In other words, the genuine and concerted efforts made on the part of the State, and the Port
Authority of Trinidad and Tobago, managers of the Service have not yet yielded a sufficient parallel to the standard which is dictated by the demands of the industry. This study will therefore suggest ways in which the existing management and operation structure may be reviewed in order to achieve a service which is more geared towards one of its major consumption markets, i.e., passengers.

It is the author's view that the ferry service, which operates currently as a division of Port Authority of Trinidad and Tobago enjoys none of the flexibility, autonomy or accountability which generally characterize operations of the smallest shipping company.

While bureaucracy has been a useful structure for programmed decision making and customized control, it is not essentially ideal in the shipping environment where there should be sufficient dynamism in the organisation to permit ready adoption to new circumstances.

A glance at the hierarchy of authority for the management of the ferry service shows how far removed from the echelons of decision making power are those staff members who execute day to day functions in the Services:
The Port Authority of Trinidad and Tobago in itself a semi-autonomous body, and must rely substantially on the Ministry of Finance and Economy and the Ministry of Works and Infrastructure when major projects and investments are implied. Having reached the effective level of management, i.e. the Port, planning and decision making functions are still filtered horizontally and vertically through several divisions before they are put in practice in the GSS.

The hierarchical structure of a contemporary shipping/ferry service with operations on a scale similar to those of inter-island service would show less vertical differentiation. There would be clearer line and staff function and authority relationships (horizontal differentiation) in specialist units or groups, as follows:
Studies which have been completed on the ferry service(1) have situated many of its problems as integral to specific operational issues at the Port. There has therefore been the concerted call for the service to "... be totally divorced from the present Port Authority ...(and be) ... a separate Authority" (1,i).

These studies have further explored several pertinent issues within the ferry system and have advanced proposals to cover a range of uncontents. The proposals incorporate:

(a) the varying measures which might secure its economic transformation, inter alia, by re-structuring the financial management system, (1.iv), (referred to in more detail in Chapter Three); and by reducing State subsidies through new fare and freight schedules based on traffic forecasts and other criteria (1.ii);

(b) the technical design and safety criteria for vessels operating the inter-island route (1.iii);

(c) equipment and machinery to be introduced for cargo handling efficiency, and other operations;

(d) personnel matters i.e crew training and general employee working hours and conditions; and

(e) overall issues to be addressed in passenger handling.
With respect to the final area, while general indications have been given on the nature of improvements necessary to effect a more enhanced passenger facility, there has been no clear outline of the structures, operations or procedures to achieve this aim. This may explain in part why major recommendations for the improvement of the service have not been instituted, or once instituted, why they have not produced the desired results, as difficulties must arise in attempting to supersede inadequate systems without first acutely addressing existent organizational constraints.

Therefore, this study does not repeat analytical detail on financial, technical or economical measures for improving the Service. Where necessary, findings have been used to complement ideas and concepts which have been put forward in developing the issue of passenger handling.

In selecting this issue of passenger handling for attention as a means of developing the Service, several parameters have been applied.

   (iii) SHIPDECO Feasibility Study, 1980
These premise:
(a) operation systems and techniques suitable to ferry services must emanate from a management structure that is geared towards the production of such services;
(b) personnel are more motivated to realizing a company’s objectives, where there is unambiguous communication of their participatory roles and responsibilities within the management structure;
(c) human beings perceive what we expect to receive, as such new perceptions can be created by an "awakening" to new expectations;
(d) with a new "user perception", the ferry service in addition to its existing market function i.e a transport link between the islands, can satisfy a leisure and tourism market;
(e) the development of a tourism/leisure sail supply is not impractical in view of recent indicators within the national tourism programme, and in view of national economic constraints which will largely prelude overseas travel, and thereby catalyze demand for domestic travel and affordable short sea travel possibly to and from neighbouring Caribbean Islands and the South American Mainland.

The human element has been greatly stressed throughout, as it is felt that the organization (personnel and systems) must interface effectively with the market (passengers) for satisfactory results.

Finally, the protagonists for a ferry service can be abstracted as vessels, users and employees. This study will emphasize the network within which these protagonists must interrelate.
CHAPTER TWO

CROSSING THE WATERS: PERSPECTIVES AND DEFINITIONS

Before any analysis of the ro-ro ferry service between Trinidad and Tobago is undertaken, certain general perspectives and definitions which are germane to an understanding of the major theme should be adumbrated.

As such, this chapter will precis Trinidad and Tobago in the context of the social, economic and political actualities that impact upon the ferry service. In addition, it will give a global focus on passenger ferries, their development and operations in key regions of the world. This latter review is calculated to fulfil a double coincidence of functions, i.e., to categorize the diverse and accepted patterns of operations in which ferries are engaged, and to situate and project the national service from within this scenario. Certain terms and concepts which are used throughout this paper will also be clarified.

2.1 Trinidad and Tobago in perspective: (1)

Political:
Trinidad and Tobago is an archipelagic State, having ratified the UN Convention on Law of the Sea in 1986. In adapting from the legal interpretation of "archipelagic State", we can define Trinidad and Tobago as "an intrinsic geographical, economic and political entity,...which historically (has) been regarded as such."(2)

(1) See Appendix I - Basic facts on Trinidad and Tobago
(2) See UN Convention on Law of the Sea - Part IV Art. 46.
Trinidad and Tobago is a parliamentary democracy. The locus of decision-making power rests with the Cabinet which sits in Port of Spain. However, Tobago's day to day internal affairs fall to be considered by the Tobago House of Assembly, a special government department established in 1980 which exercises appropriate administrative and financial powers in expediting Tobago's activities.

The Government obviously regards the ferry service as an important life-line between the islands. In an effort to ensure that the cost of this service is as affordable as other public transportation services, substantial subventions have been transferred to the Port Authority over the last fifteen year period for its upkeep. Indeed the Service has repeatedly featured as one aspect of the politically volatile issue of the State's commitment to Tobago's economics.

Economic:
The ferry service transports all major food, industrial and other vital supplies to customers in Tobago. These shipments are mainly containerized cargo, breakbulk on pallets, bagged cement and other general cargo transported in trucks as roll-on roll-off shipments. Table 1 shows the disaggregation of general cargo shipments to Tobago over a six year period.
Table 1: Transport of goods from Trinidad to Tobago by ferry service for period 1981 - 1986 (3)

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of trips</th>
<th>No. of trucks</th>
<th>General cargo (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>343</td>
<td>8,302</td>
<td>41,632</td>
</tr>
<tr>
<td>1982</td>
<td>461</td>
<td>11,480</td>
<td>52,784</td>
</tr>
<tr>
<td>1983</td>
<td>594</td>
<td>15,033</td>
<td>52,972</td>
</tr>
<tr>
<td>1984</td>
<td>580</td>
<td>11,464</td>
<td>55,996</td>
</tr>
<tr>
<td>1985</td>
<td>546</td>
<td>10,762</td>
<td>59,383</td>
</tr>
<tr>
<td>1986</td>
<td>568</td>
<td>9,833</td>
<td>67,658</td>
</tr>
</tbody>
</table>

Unfortunately the above cited PATT data does not document the actual tonnage carried by each truck. If we assume, however, from the size distribution and the typical loads carried by each truck that there is an average cargo movement of seven (7) tons per trip (4), we can therefore derive a total average annual cargo flow of 133,092 tons carried by the ferry service.

Social:
As with the transport of goods from Trinidad to Tobago, the ferry service can be said to satisfy a relatively to perfectly inelastic demand for the shipping of passengers between the islands. Many of these passengers are citizens of Tobago who conduct business in Trinidad and use the ferry service as the preferred mode for facilitating the traffic of goods between the islands. The supply of service for these clients, known as "traffickers" has remained fairly constant in the long-term.

(3) Source: Port Authority of Trinidad and Tobago.
Other patrons consist of Trinidadians with business interests in Tobago, those who travel for pleasure and to visit friends and relatives, primarily at seasonal peaks such as Easter, Carnival and long weekends. There is also the modicum of tourists who use the sea alternative.

Table 2 below, reflects the overall societal perspective for the four year period between 1983 and 1986. Passenger figures reflect the sum total transported yearly by the two vessels operating the Service for the period under reference:—

Table 2: Passenger carried by vessels MF Gelting & MF Tobago, 83-86 (5)

<table>
<thead>
<tr>
<th>Year</th>
<th>No of Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>287,925</td>
</tr>
<tr>
<td>1984</td>
<td>314,539</td>
</tr>
<tr>
<td>1985</td>
<td>275,741</td>
</tr>
<tr>
<td>1986</td>
<td>294,190</td>
</tr>
</tbody>
</table>

2.2 Passenger/car ferries in perspective:—

Ferries constitute the peculiar group of ships fitted to the short sea transport of passengers with or without their cars, and freight. They represent one of the three established categories of passenger shipping of which the remaining two are liner passenger services, i.e the provision of a regular service between fixed ports at regular intervals for passengers, their baggage and/or accompanying cars, and cruising, the select market in

(5) Source: Port Authority of Trinidad and Tobago
shipping which serves tourism and features sailings to "exotic" destinations using specially built or modified cruisers. In all three areas, passenger satisfaction has been recognized as an important voyage product.

Ferries in general are characterized vessels which:

(i) only have equipment for deck passengers and possibly for carrying vehicles;
(ii) operate on a short route with frequent departures from two destinations;
(iii) follow the most direct route and thus provide a public service function similar to a bridge or funnel. (6)

Passenger car ferries are only one sub-division of the versatile fleet of ro-ro (Roll-on/Roll-off) ships. These ships have exercised considerable influence on maritime transport for over the last fifteen years. Their practicality-large access openings in their shells facilitating ready adit to cargo spaces, have provided many possibilities for vessel use. The development of the passenger/car ferry is but one manifestation of the "ro-ro revolution".

There are some 930 (7) ferries operating worldwide whose size exceeds 1000 grt. Eighty-five (85) percent of this global figure represents passenger/car ferries. (8)

(7) Lloyd's Register of Shipping, 1986.
(8) The remaining 15 % are railway/passenger ferries.
The two vessels for the Trinidad-Tobago route fall within this quoted index, having 1,500 grt (MF Tobago) and 5,330 grt (MF Panorama) respectively. Forty-five (45) percent of the vessels are night ferries and feature extensive sleeping and other facilities for the majority of their passengers. The residual forty (40) percent represents day or domestic ferries which may ply between a mainland and nearby islands as in the UK and in Canada, or those which may ply between islands, as in the case of Trinidad and Tobago, Phillipines and Indonesia. Domestic ferries also transverse fjords, rivers and the like.

The most advanced of the ferries are the jumbos which are over 30,000 grt and rival cruise ships in luxury and on-board facilities. They offer a floating motorway, hotel and shopping areas in one attractive package, thus maximizing all possibilities to generate revenue from freight, ticket sales and on-board passenger facilities, especially tax-free shops.

The most simple of the ferries offer a mere short service across an estuary where revenue is generated solely from ticket sales. Many however operate within the wide grey space between the two extremes.

The length of passage to be undertaken by the ferry usually dictates the facilities which are required and so predisposes the design concept and revenue earning capability. The national characteristics of potential passengers, their travel patterns and their centres of population will also contribute to what may be entitled as a "rule of thumb" for car/passenger ferry design.

The Baltic for example, is one major route/region where
passenger services have been operating almost 100 years. As a result, ferry travel is now accepted in its own right. Many companies operate daily out of large centres of population. What predominates choice among all these ferries remain the peculiar facilities and features offered by the individual ship. The enzymatic incentive of low, and in some seasons, no fares proffered by a cross-section of operators may initially induce large crowds to a particular vessel. It is however the synthesis of on-board "service" i.e. shops, bars, restaurants, and other catering facilities which re-captivates the discerning passenger.

Short North Sea and Channel Services which operate more out of ferry ports than population centres have on the other hand been perceived in another fashion. They have served mainly as a "spring-board for a leisure plunge", in that the voyage has been the endurable beginning of another series of activities, in which case focus has been placed on the outcome of the sailing rather than the voyage itself. This perception is slowly being altered due to pertinent marketing of the vessel itself, and the facilities available to passengers.

Mediterranean and Greek passenger/car trades which are a prevalent transport mode, feature mainly inter-island services. Here, substantial subventions are offered operators by the State. Even though the preponderance of domestic routes precludes the benefits of duty-free shops, efforts have been made to upgrade operations along the lines of the "Baltic philosophy" relating to passenger "service".

The Japanese industry continues to emerge successfully,
and simultaneously in terms of design and building capabilities as well as in its intensification of passenger amenities and marketing programmes. These initiatives are all calculated to entice travellers away from rail and air alternatives. The Japanese have always relied heavily on coastal and inter-island ferries for the transportation of cargo and passengers throughout the country. While freight earnings have been the major incentive traditionally, different expectations caused by an acceleration of business and tourist clients, are now resulting in considerable efforts being made to address passenger satisfaction and comfort.

It has already been indicated that the proposed service route, and the potential trade and its users are two factors which largely impact upon the design of a ferry. Integral to these factors are naturally the avenues available to the operator for generating revenue. Considerations of climate, weather, ancillary issues such as terminal facilities and so on, as well as the time of operation i.e whether day or night, also weigh substantially.

Some attention will now be focused on this last consideration—time of operation. The single crossing time of a day ferry can be cited as anywhere between twenty minutes to 3 hours. The independent variable is the distance involved. Schedules and the number of crossings per day will also constitute important variables. A day-ferry can therefore be designated as one whose total round voyages on a set route can be completed within 24 hours.

Night ferries on the other hand may generally feature evening departures from respective harbour with the
necessary over-night accommodation of passengers, on board and en route. They have usually been of considerably greater tonnage than day ferries, given the demands of the trade which necessitate inter alia, maximum cabin capacity, more shipboard decks, spacious halls and corridors, greater storage space for luggage, and more varied eating and entertainment outlets. Some night ferries equate cruise ships in luxuriousness of design and facilities. The over-riding factor warranting all elements of the luxurious, remains the very attractive profits made by operators through earnings from cabins, bars, discos, restaurants and so on.

It should also be mentioned that the provision of comprehensive conference facilities in both day and night ferries attracts and retains a large business sector, and creates an additional area of revenue for the operator.

Having broadly explored the global framework relating to features, routes and other incidental perspectives on ferries, we can therefore infer certain axiomatic considerations with respect to their operations viz:

(i) a ferry is an element in the logistic system of a country, i.e. its provides a natural extension of land routes where both ends are separated by water;

(ii) ferries initially provide a pure transportation facility, with varying degrees of on-board "service" and attractions available;

(iii) ferry operations are distinguished by the specific route or region, the vessel design, and the characteristics of the passengers and the trade. They can be further typified as a day or
a night service, functional to the justification for overnight shipboard accommodation for passengers en route to or from the port of origin;

(iv) improvements in facilities and on-board "service" for passengers are now Zeitgeist on the global ferry market. Strategies have been mounted concurrent with this new trend to create new "user perception" and demands.

Having clarified the following factors, which may not all weigh equally as objectives for a ferry service, the case of Trinidad and Tobago cannot be viewed anachronistically. Essential distinctions exist in the extent of state, ownership and subventions, ticket and freight price controls, operating motives (where profit maximization is not necessarily projected as the main motive) and the levels of capital available for injection into repairs, improved facilities and new buildings. In these respects, our operations are more closely aligned with those of other developing states such as Indonesia and the Philippines.

Nonetheless, there may be avenues for growth which can be explored further. Suffice it to say that the "pure transportation facility" between the islands, takes new focus when possibilities are rife for travel experiences, refreshments, buying, selling, and meeting people. The idea of being at sea in itself, can also present some excitement and generate certain attractions. Moreover, as the inter-island ferries operate both on a day and a night schedule, special events may be tailored to select markets for day and night services. These ideas will be developed further in Chapter IV.
2.3 Management and Operations:

The themes of "managing" and "operating" ferries will tend to pervade in this research. Their purport in respect of this undertaking is clarified as follows:

Management: This refers to the systems that are in place for planning, organizing, commanding, co-ordinating and controlling the business of a company or organization. It involves responsibility for administering, staffing, maintaining and supplying the service product. It also ensures that the service product is available and adequate to the environment as and when required. As such, the concept of "managing" the service will revolve around the division of labour, the hierarchy of responsibilities, and the inter-organizational relationships affecting the focal organization whose line and staff units are collectively charged with the common goal of administering the Service effectively.

Operations: The implementation of management functions to fulfil the company's objectives and to yield the service product can be described as operations. In the context of this study "operating" the service will focus attention on those areas which generate the earnings of the Service. In this case, customers-service, schedules, purchasing, cargoes, chartering and all related activities will be included, in so far as they are reflected in the management objective of producing the transport Service between the islands.

2.4 Passenger Catering: While catering generally means the range of primary and ancillary services associated the
provision of staff and full hotel and entertainment facilities aboard a vessel, passenger catering in the context of this document will be enlarged to connote all those factors which contribute to a safe and enjoyable voyage for the traveller. These embody the systems that are set in place to ease the lot of the passengers from the minute the decision is made to undertake a voyage, up to the moment of disembarkation. These will include information and advertisements, reservation and ticketing systems, terminals, on-board accommodation, and other general amenities and recourses available to the customer including the attitude of personnel and the availability of systems to address complaints.

As a natural corollary, passenger catering may also comprise the factors in place to promote a punctual and reliable service. This has direct bearing on the vessel, how she is maintained, and the systems of shipboard management and control in use, and as such relays back to the overall operating objectives and modus operandi of management.
CHAPTER THREE

SLOW AHEAD: AN ASSESSMENT
OF THE INTER-ISLAND FERRY SERVICE.

3.1 History of the Government Shipping Service (GSS)

As mentioned previously, the ferry service is under the operation and management of the Port Authority of Trinidad and Tobago. It is legally designated the Government Shipping Service, which is interpreted as "the service supplied by vessels owned by the State and engaged in the carriage of passengers and goods between Trinidad and Tobago." (1)

The specific provisions on the Service are found in the Port Authority Act, Chapter 51.01 of 1980 which states:—

"the Authority shall operate the Government Shipping Service, in this part referred to as the "SERVICE", as the Agent of the State and subject to such regulations as may be made by the President in that behalf." (2)

This legal indication has been the basis for the relationship of Principal (the state as owner of the vessels) and Agent (the Port Authority of Trinidad and Tobago) under which the Service exists.

(1) Laws of the Republic of Trinidad and Tobago Chapter, 51.01 Part 1
(2) Ibid.
This "carriage of passengers and goods between Trinidad and Tobago" has undergone several metamorphoses since its earliest tracing in 1901. This earlier period can be chronicled as follows:

1901-1915: Establishment of a contract between Trinidad and Tobago and Royal Mail Steam Packet Company of Great Britain for two vessels to operate the inter-island service;

1924-1929: Government acquisition of SS Belize which made weekly feeder services along the coastlines.

1930-1957: Government acquisition of two (2) conventional type ships, the SS Tobago and SS Trinidad with capacities for three hundred and eighty four (384) passengers and four hundred and eighty eight (488) dwt of cargo. Both vessels made scheduled weekly inter-island sailings. SS Trinidad also called along Tobago's coasts once monthly.

It is interesting to note that in those days, the responsibility for storage and shipment of goods to Trinidad, and the delivery of goods into Tobago was vested in agents of the Government Shipping Service. These agents were located at depots at each of the "ports of call". They received a commission on all passengers and cargo handled, in addition to a small retainer.

The completion of deep water facilities in 1953 at the Port of Scarborough occasioned significant developments in the Service. From that time up to 1980, there was further evolution as follows:

1960: Acquisition of ro-ro vessels Bird of Paradise
and Scarlet Ibis with a capacity for 302 passengers and 325 tons of cargo.

1961 The Port Authority was established as a Statutory Body. The Shipping Service was operated thereafter as an Agent of the State.

1976 Acquisition of a 6-year ro-ro day ferry with capacity for 650 passengers and 400 tons of cargo called MF Tobago.

1980 Trinidad and Tobago chartered MF Gelting, a Danish registered ro-ro ferry with accommodation for 1,000 passengers and 700 tons of cargo. The original time charter party was negotiated for a 2-year period. The traffic handled by the Service doubled in one year with the introduction of the Gelting, largely due to the improved service offered by the vessel in terms of capacity, comfort of passengers and convenience.

Both vessels, MF Gelting and MF Tobago continued operations up to 1987.

3.2 Existing Management and Operation Structure:

3.2.1 Vessels:
The two vessels currently serving the route are the MF Panorama and the MF Tobago. There are notable differences in design and particulars as shown from Table 3:-
Table 3: Characteristics of Vessels Serving the Inter-island Route

<table>
<thead>
<tr>
<th></th>
<th>MF Tobago</th>
<th>MF Panorama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build</td>
<td>1970</td>
<td>1986</td>
</tr>
<tr>
<td>Length OA (m)</td>
<td>75.52</td>
<td>99.00</td>
</tr>
<tr>
<td>Length BP (m)</td>
<td>68.27</td>
<td>90.61</td>
</tr>
<tr>
<td>Gross tonn.</td>
<td>1499.69</td>
<td>5330</td>
</tr>
<tr>
<td>DWT</td>
<td>433</td>
<td>900</td>
</tr>
<tr>
<td>Speed (kn)</td>
<td>18 (max)</td>
<td>19 (max)</td>
</tr>
<tr>
<td></td>
<td>15 (serv)</td>
<td>17 (serv)</td>
</tr>
<tr>
<td>Capacity</td>
<td>630 pers. (incl. crew)</td>
<td>777 pers. (incl. crew)</td>
</tr>
<tr>
<td></td>
<td>40 TEU or 100 cars or 33 trucks</td>
<td>145 cars or 100 cars or 40 trl.</td>
</tr>
<tr>
<td>Facilities</td>
<td>cafe, lounge fr. and aft</td>
<td>2 cafes &amp; lounges conf. room (101)</td>
</tr>
<tr>
<td>Classification</td>
<td>Lloyd's Register Class 100A1 T&amp;T</td>
<td>Lloyd's Register Class 100A1 T&amp;T</td>
</tr>
<tr>
<td></td>
<td>Windward Is.</td>
<td>Services.</td>
</tr>
</tbody>
</table>

The MF Panorama, the newer of the two vessels has been designed and built in consonance with the findings of a feasibility study which was undertaken on the technical requirements and other particulars of the vessel most suited to the inter-island route. (3) From as early as 1981 however, the MF Tobago has been deemed unsuitable for the demands of the service. She has been plagued by a series of breakdowns, machinery failures and other vicissitudes and remains an operating liability.

3) See ibid SHIPDECO Report, 1980
The Inter-Ministerial Committee which conducted an extensive review of the Service in 1987 has made the following observations with respect to the two vessels:

"The economies of scale which can be achieved operating two similar vessels viz:

(i) Purchasing of equipment, spares, goods etc.
(ii) Scheduling of crews
(iii) Planning of passenger/cargo operations
(iv) Emergency re-scheduling of voyages
(v) Training of all personnel

will not be possible operating two ships with such widely varying specifications.

The accommodation on the MF Tobago is not comparable to the MF Panorama, therefore, separate fares will have to be arranged for the two dissimilar vessels, making operations more costly." (4)

In the light of the severe economic constraints under which the country now operates, it is unlikely that a sistership will be constructed for the route in the near future. It cannot be denied however that the sister ship system offers greater possibilities for income earning, and reduces operational and other problems to the minimum.

Each vessel makes six (6) round trips weekly covering the 80 nautical miles route. On weekdays, the vessels spend

about three (3) hours in respective ports for loading and re-loading before the return voyage. On weekends, there is only one round trip. Each vessel lies in port until late evening of the following day. Table 4 describes this system:

Table 4: Typical Round Ferry Schedule (5)

<table>
<thead>
<tr>
<th>Day</th>
<th>Hour</th>
<th>POS to SGH</th>
<th>SGH to POS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Fri.</td>
<td>1430</td>
<td>Panorama</td>
<td>Tobago</td>
</tr>
<tr>
<td>(a) Sat.</td>
<td>0900</td>
<td>Tobago</td>
<td>Panorama</td>
</tr>
<tr>
<td>(a) Sun.</td>
<td>2200</td>
<td>Panorama</td>
<td>Tobago</td>
</tr>
<tr>
<td>Mon. to Thurs.</td>
<td>1430</td>
<td>Tobago</td>
<td>Panorama</td>
</tr>
<tr>
<td></td>
<td>2200</td>
<td>Panorama</td>
<td>Tobago</td>
</tr>
<tr>
<td></td>
<td>1430</td>
<td>Tobago</td>
<td>Panorama</td>
</tr>
<tr>
<td>(b) Fri.</td>
<td>2200</td>
<td>Panorama</td>
<td>Tobago</td>
</tr>
</tbody>
</table>

(a) Passengers and cars only
(b) There are two sailings fortnightly on Fridays

(5) Source: PATT
3.2.2 Administration and Personnel:

Notwithstanding the provisions of Chapter 51.01 of the Laws of Trinidad and Tobago which have been previously quoted, specific regulations have never been detailed to define the Principal/Agent relationship between the State and the Port Authority of Trinidad and Tobago (PATT) for the management of the Government Shipping Service (GSS).

As the GSS is operated as a division of the PATT, as seen at Appendix II, it is greatly divorced from any model of decentralization which the provisions of the law seem to suggest. More pointedly, the structuring of the GSS under a port profile, can in itself be inimical to operating interests. This is so because the economic profile of a port, whose principal business is to render services to cargoes and ships, is not necessarily compatible with that of a shipping company, which should enjoy a specific economic, legal and organizational framework in the pursuit of its principal activity, i.e. the commercial operation of ships.

Offices of the GSS are located on the compounds of the ports of Port of Spain and Scarborough. These offices are staffed by employees of PATT who are rotated as necessary from other port divisions to perform the functions relating to:

- ticketing and reservations;
- scheduling of time tables;
- book keeping/accounting;
- cleaning;
- receipt and tabling of cargo for shipments
- stevedoring and long shoring.
Appendix III (A&B) show the organizational configuration of the Government Shipping Service for Port of Spain and for Scarborough respectively.

It has been sufficiently documented elsewhere that these configurations are "designed for port administration and cargo handling rather than a shipping service or shipping company" (6). Likewise, it has been repeatedly recorded that the grades of shed managers, foremen and clerical officers who administer the Service have "hardly any specialized or expert knowledge in the handling of passengers or catering to them.....as a result, users of the Shipping Service are treated as human cargo rather than as guests". (7)

Both commentaries levelled against the Service can be construed to weigh more as an indictment against the organizational structure than against its human resources who perform within the confines of their channelling and training. Nonetheless, the tenor towards staff rotation and shift systems which categorise the organization of labour in the Service, have been known to be more detrimental to individual productivity and motivation. The sum of these deficiencies contribute to the overall ineptitude of the Service.

No discussion of the administration of the Service is complete without mentioning the related roles of other departments of the Port Authority. Figure 2 shows the network of divisions which contribute to the overall functioning of the BSS and further indicates the areas of input peculiar to each division.

(6) See Commission of Enquiry Report
(7) ibid
Figure 2: Chart to show GSS and network of functional relationships with PATT

Ministry of Works & Infrastructure
- channel for annual allocation from National Estimates, for subsidies
- limited policy control through Cabinet; decision making and monitoring

PATT
Chairman
- overall accounting
- decision making

PATT General Manager
- overall accounting
- decision making

- passenger/cargo service
- cargo transport service
Port of Spain <--- Barkerough

PATT Operations Division
- passengers handling
- terminals & onboard facilities
- passenger entertainment
- damage to property
- cargo accounting, leading
- (un) stuffing containers

PATT Marine Division
- officers and crews; schedules
- catering staff; victualling
- ordering spares; stores

PATT Accounts Division
- accounts; cash flow
- budget, purchasing policy
- salaries and wages

PATT - Administration Division
- Personnel Division
- all staff assignments
- leave relief
- performance appraisal
- records
- public relations
- market studies
- research statistics
- advertisements
Among those units which have specific operational roles in the GSS conglomerate are:

(a) The Marine Division - All vessel personnel, that is, deck, engineering and catering personnel have posts within the Marine Division. Apart from the implicit manning function, this Division has responsibility for uniforms, victualling, stores, spares, minor repairs and maintenance of the vessel, scheduling and upgrading of training for its marine personnel.

As with other port divisions, the Marine Division has no separate budget. Expenses which arise in shipboard management are defrayed from allocations which are available from within overall PATT annual estimates.

Acute problems tend to arise when new stocks are required for the vessel. The Marine Division does not control purchasing policy for the vessels. Instead, requisitions for purchases are passed to the Purchasing Officer of PATT, who dispatches these orders accordingly. This policy has occasioned instances where orders are not fulfilled over a substantial period of time, a factor which may contribute to vessel deterioration.

Moreover, there is no clear inventory and stock control policy so that stores can be periodically replenished, and the essential cost functions of victuals for marine personnel, and food for passenger catering are not kept distinct.

(b) The Operations Division - The GSS has often been more precisely niched as a department of the Operations Division of the PATT. Indeed, responsibility for the all-encompassing area of passenger catering and cargo handling
lie with the purview of the Operations Division.

One specific feature of the Operations Division which has been passed directly on to the GSS relates to the distribution of gang labour. With an estimated average throughput of three hundred and sixty-five (365) tons of cargo per day (5), handled by the GSS, gangs used are deployed within the same system (four gangs in Port of Spain and three in Scarborough, sized from twenty-four to three men, working three shifts per twenty-four hours) as those for handling international cargo ships where the estimated average throughput may be in the vicinity of 1,300 tons of export cargo.

This practice has caused GSS container handling to be very costly. Overall costs are further exacerbated because the GSS working hours are computed along the same industrial terms of agreement as for port work, i.e, from 0800 hours to 1600, with the remaining sixteen hours calculated as overtime. The proliferation of overtime payments is economically crippling to the GSS and must be regulated in concert with current initiatives throughout all sectors to limit government expenditure.

A separate agreement for smaller-knit crews, with working time predicated on a twenty-four hour basis is more adequate for the existing demands of the Service. Such an agreement is not unprecedented as may be seen by the example of the Point Lisas Industrial Port (PLIPDECO) which has tailored working contracts to suit the specific demands of the trade.
3.2.3 Services and Facilities:
The services and facilities available to passengers using the GSS are as follows:

(a) Ticketing and Reservations: Tickets are sold on weekdays from 0700-1900hrs, and until 22.00hrs on any day preceding a holiday. They are available a maximum of seven(7) days in advance of the voyage and remain valid for fourteen(14) days after sale. Reimbursements on unused tickets may be obtained upon written application to the Chief Accountant, PATT.

Tickets are handwritten in triplicate and validated by a cashier once the customer has paid. The same ticket completed in duplicate serves for single voyage. The customer usually retains two (2) copies, one of which is surrendered to the boarding clerk on embarking. A manifest is prepared per trip from copies retained by the cashier for a total tally of passengers against tickets sold. The only tickets outlets are at the GSS offices. This is severely inconvenient to customers from outlying areas who must travel to Scarborough and Port of Spain respectively to purchase tickets.

This deficiency is further vitiated by the "myopic" practices regarding reservations. In Scarborough and Port of Spain for example, potential customers are unable to make reservations by telephone. Bookings are only entertained for group travel, (where there is a limitations of thirty (30) members per group), on written application to the Port Authority General Manager, one month in advance. Special fares and concessions may be negotiated.

Figure 3 overleaf shows a sample of the GSS return ticket. The actual fare and freight structures applied for the
Service up to December, 1987 immediately antecede as Table 5. The estimated unit subsidy per fare/charge which this Table also comprises, provide an interesting co-relation between real and existing rates. The unit subsidy has been assumed from the average unit cost per charge derived from a unit cost relationship of 1 to 3 approximated from relevant fares for passengers and vehicles or cargo. (B)

(b) Catering:-Onboard catering is limited to the sale of sandwiches, the occasional hot meal, and soft drinks and alcohol. No other entertainment facilities were in evidence at the time when this author made a round trip with the Service in January, 1988. It is understood however, that there are several projects at PATT, which are as yet inchoate, whose aim is to reduce the general ennui which usually pervades during crossings.

A public address system conveys notices and information to travellers while they are on board or at terminals. Should scheduled sailings not be possible for reasons of weather or other unforeseen circumstances, a notice to the effect is placed in the national newspapers.

(B) See ibid Transportation Report op cit p 26-23
PORT AUTHORITY OF TRINIDAD & TOBAGO
GOVERNMENT SHIPPING SERVICE
P.O. Box 849, Port of Spain.
Tel: 625-4906.

No 103297

Sample of GSS Return Ticket.

Departure and arrival dates refer to the day of sail and return respectively.

Trip numbering is from 1-1000 then restarted.

TICKET COST
CABIN $35.00
TOURIST CLASS $15.00
CHILD under 12 years $ 6.50

VOYAGE NO.

VEHICLE IDENTIFICATION
REGISTRATION NUMBER
MAKE/MODEL
UNDER 909 KG $25.00
909 - 1,364 KG
OVER 1,364 KG

TARE WEIGHT:
MAXIMUM GROSS WEIGHT:

TICKET NOT VALID AFTER 14 DAYS OF ISSUE

32
Table 5: (1)  
Inter-Island Ferry Service  
Fare/Charges and Estimated Unit Subsidy (TTD) 
1987 figures

<table>
<thead>
<tr>
<th></th>
<th>Charges</th>
<th>Estimated Unit Sub.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passengers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tourist Class:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults</td>
<td>13.00</td>
<td>95.00</td>
</tr>
<tr>
<td>Children (under 12)</td>
<td>6.50</td>
<td>101.50</td>
</tr>
<tr>
<td>Cabins</td>
<td>20.00</td>
<td>88.00</td>
</tr>
<tr>
<td><strong>Vehicles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cars:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 909 Kg.</td>
<td>24.00</td>
<td>300.00</td>
</tr>
<tr>
<td>910 - 1818 Kg.</td>
<td>48.00</td>
<td>276.00</td>
</tr>
<tr>
<td>1819 - 4545 Kg.</td>
<td>70.00</td>
<td>254.00</td>
</tr>
<tr>
<td>Trucks (loaded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 4545 Kg.</td>
<td>72.00</td>
<td>900.00</td>
</tr>
<tr>
<td><strong>Freight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 foot</td>
<td>300.00</td>
<td>630.00</td>
</tr>
<tr>
<td>8 foot</td>
<td>150.00</td>
<td>700.00</td>
</tr>
</tbody>
</table>

(1) Source: PATT 
(2) Estimated Unit Subsidy is not precise due to the method of determining average unit cost. The extent of the unit subsidies is nonetheless revealing.
(c) Terminal Facilities: The confined terminals at P.O.S and Scarborough, which accommodate two hundred and fifty (250) and two hundred (200) customers respectively, serve both as waiting and ticket purchasing areas. Queuing facilities can admit fifty (50) persons at any time. There is a disposition towards overcrowding at either terminal, and especially at seasonal peaks when some 1000-1200 customers at both terminals vie for the attention of some four attendants.

In the author's opinion, the existing terminal congestion and chaos are symptomatic of the inadequate procedures for reserving and issuing tickets, as well as for boarding the vessel. It is therefore felt that any effort to increase and upgrade waiting room facilities, should be concurrent with efforts to install improved systems for customer processing, in order to achieve overall improvements.

(d) Cargo Handling: A non-negotiable Boat Note is completed on receipt of goods for shipment. Cargo is surrendered for the Boat Note and an attached waybill upon proof that freight has been paid. The Boat Note is valid for claims once the authorizing signature and the declarations made are valid.

(e) Claims: Claims must be declared three months from the date of receipt of cargo. The PATT Operations Division processes all claims. Passengers are more likely to lodge claims for vehicle damage arising out of fallen cargo. A few claims have arisen for injury sustained in the disembarkation process or during the crossing. Unfortunately, the limits or standards applied in entertaining claims could not be ascertained. These legal aspects of passenger shipping will be discussed further in
Chapter Five.

(d) Marketing:— The GSS maintains a low public profile. There are few attempts made to attract a wider market than its current users. Except for seasonal peaks, the vessels sail at about 50% below capacity. Given the natural curiosity and vivacity of the average national, it is thought that more use could be made of merchandising the vessel as an entertainment facility in order to capture select target groups, such as in the seventeen to thirty-five year age bracket who generally are in search of active leisure options on weekends and on holidays.

3.3 Finances.

It is clear that Government considers the provision of a quality and widely affordable sea transport service between Trinidad and Tobago to be essential to the continuing integration of the two islands.

The two pre-requisites of quality and affordability are not mutually compatible in respect of a capital intensive service as shipping. As such, the PATT has always received substantial annual subsidies to operate the inter-island route. Table 5 overleaf disaggregates the extent of Government’s subsidization of the GSS over the years 1984–1988.
Table 5:  (Source PATT)  
Government Shipping Service  
Summary of Revenue, Expenditure and Subsidization  
over the years 1984 - 1988 (TTD 00,000,000)

<table>
<thead>
<tr>
<th>Year</th>
<th>P</th>
<th>F</th>
<th>M</th>
<th>C/B</th>
<th>TR</th>
<th>TE</th>
<th>GR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>3655068</td>
<td>5539950</td>
<td>249649</td>
<td>577503</td>
<td>10022170</td>
<td>47807494</td>
<td>37785324</td>
</tr>
<tr>
<td>1985</td>
<td>3638262</td>
<td>5116403</td>
<td>111729</td>
<td>638399</td>
<td>9504793</td>
<td>41071366</td>
<td>31566573</td>
</tr>
<tr>
<td>1986</td>
<td>3696205</td>
<td>4650086</td>
<td>204805</td>
<td>526190</td>
<td>9077286</td>
<td>37938833</td>
<td>28861547</td>
</tr>
<tr>
<td>1987</td>
<td>4848375</td>
<td>4244596</td>
<td>204732</td>
<td>582987</td>
<td>9880690</td>
<td>32798148</td>
<td>22917458</td>
</tr>
<tr>
<td>1988*</td>
<td>3442962</td>
<td>3870357</td>
<td>186681</td>
<td>300000</td>
<td>7800000</td>
<td>33040300</td>
<td>25240300</td>
</tr>
</tbody>
</table>

Key: P - Passages; F - Freight; M - Miscellaneous; C/B - Cafe & Bar; TR - Total Revenue; TE - Total Expenditure; GR - Government Reimbursement
* 1,072,500 earned on trips was included in passages
* 1988 figures are draft estimates.
However, Government has now become concerned about sustained reliance on subventions for operating the Service, (TTD 50,800,320 in 1985; TTD 48,270,940 in 1986; TTD 49,325,00 in 1987) in the absence of revenue generation and commensurate levels of service and facilities to travellers.

As has been stated earlier, it is not the intention of this author to advance any detailed financial or economic assessment of the Service. Thorough analyses (9) have been made on the existing situation in terms of the total cost of the inter-island service revenues, operating subsidies, traffic, and level of service. Based on PATT data, forecasts have been also made relating to traffic, and passengers volumes up to the year 2000, and these have shown the necessary cross-indications on fares and freight structures.

Some concise indications on the financial accounting structure of the GSS are however included towards an overall appraisal of the Service.

(9) See ibid National Transportation Policy Project
    ibid Commission Report;
    ibid Inter-ministerial Committee Report
The Port Authority receives a management fee from the State which is computed at a rate of twenty-five (25) percent of the total cost of operations. In the most recent review of the financial structure of the GSS, it has been documented that up to 1987, the PATT has incurred the accumulated sum of TT68,147,224 for which the State is now indebted for management and operating costs.

In the light of this large outstanding sum, the review has concluded that insufficient measures were implemented either to reduce costs or to have a comparable enhancement of the service product, because neither factor precluded the payment of management fees by the State.

The large deficit to the account of the State has also prompted the Committee to recommend that the financial accounting system of the GSS should be divorced from that of the PATT, as the current classification of revenues and expenditure does not permit a true reflection of the operation of any one activity in the GSS.

Furthermore, it has been reasoned that the existing consolidated accounting structure may occasion instances where joint expenditure on operations is passed solely to the GSS.

As the GSS is guaranteed a sure and ready source of income for its budget, i.e., State subsidy, the lack of checks and balances in the current accounting system may also inadvertently facilitate the deflection of GSS funds to make up short falls in other areas of port activity, which completes the vicious circle of the financial constraints of the Service.
It has been recommended that the financial accounting system should recognize clear assets of the GSS (i.e. its vessels, buildings, equipment) and evaluate costs for acquiring or disposing of these assets in conformity with established practices for a shipping company.

A shipping company, irrespective of size or specialization, basically includes the elements of capital and labour. Capital refers to the means of production, essentially the ships, but also includes buildings, vehicles and other factors linked to the production of services. (10)

Accounting in shipping provides the method of recording the money value of all financial transactions. Accounting in shipping must also view each ship as a separate unit whose origin of expenses can be identified, and reciprocally, whose income can be arranged individually. It is from this general procedure of allocating costs to a ship that information is garnered to justify or negate certain operating practices.

From these abstractions, it can be seen that concerns for the Service are valid in the interests of operating efficiency. A separate accounting system should disencumber management tasks for the GSS. There would be less distortions on operating results, and accurate accounts would serve as indicators and warnings for controlling or adjusting operations.

(10) See: An Introduction to Shipping Economics opcit p 33
It is also acknowledged that effective cost accounting offers decision makers a more sophisticated analysis of the various activities inherent to the production of the company service.

As such, more insight would be available to the GSS in setting targets and standards of service, identifying corrective measures to reduce conflict and error, appraising performances, and controlling the results. Most importantly, these factors would impact positively on the overall motivation and productivity of personnel.

The standard international system at Figure 4 overleaf, may provide a point of departure for instituting a revised accounting system for the GSS. Necessary adaptations to follow Government accounting standards may be inserted as necessary, but not in such a way as to prejudice the overall efficacy.
FIGURE 4 GENERAL ACCOUNTING SYSTEM (*)

GENERAL ACCOUNTING SYSTEM

FINANCIAL ACCOUNTING
- generating information for controlling operations

OPERATIONS STATEMENT

INCOME STATEMENT USA

PROFIT & LOSS ACCOUNT UK

BALANCE SHEET
- fixed asset
- depreciation per ship

Notes to the accounts (UK)
- financial statements (US)

CONSOLIDATED BALANCE SHEET

MANAGEMENT ACCOUNTING
- assisting management in planning and decisions through cost-analysis

RECORDING

ANALYSIS

COST ACCOUNTING
- per function
- per ship

PLANNING + BUDGETING

CONTROLLING DECISION MAKING
3.4 Passenger Markets:

The human element mentioned earlier redirects us to one underlying premise of this study, i.e an individual is actuated as a result of varying stimuli in the environment. From this psychological base, we can derive two key assumptions with respect to the ferry service. Firstly, we can infer that personnel would be more impelled to perform effectively in an organization where roles and goals are clearly communicated. Secondly, we can assume that customer perception of the Service can be enhanced by feeding new impressions on the basis of the customers' known expectations, and their latent corollaries. This idea relates to the subjectivity with which human beings perceive reality, and our need to relate new situations in order to accept them. In other words, it should be possible to create new demands for the ferry service by superimposing our national and cultural habits on to ferrying practices that have been accepted elsewhere.

Within the last two years many economic measures instituted on the national scale have effectively reduced the travel/holiday options of the average citizen of Trinidad and Tobago. Spending power has been lessened by a currency devaluation of some 40% in the last few years, as well as by the loss of income as salaries and wages have stagnated or actually dropped in real money terms, while living expenses have continued to spiral. (by some 11.4% in 1987)

In the face of this economic climate whose fundamental reality is dwindling foreign exchange reserves, (some
TT670m at the end of December, 1987) overseas travel will decrease. This awakens new prospects for domestic travel.

But this theory is not only derived by economic realities. The Trinidad and Tobago Tourist Board has included among their strategies for the development of the Tourism Industry, "the growth of domestic tourism by deliberately stimulating nationals to travel and enjoy facilities and attractions within our national boundaries". These twin-factors have direct repercussions for our domestic inter-modal transport services. (11)

With respect to domestic travel, the following travel statistics apply for the years 1986 and 1987 respectively:

<table>
<thead>
<tr>
<th>Direction</th>
<th>1986</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobago to Trinidad</td>
<td>399,437 persons</td>
<td>399,642 persons</td>
</tr>
<tr>
<td>Trinidad to Tobago</td>
<td>387,866 persons</td>
<td>386,910 persons</td>
</tr>
</tbody>
</table>

Though the author was unable to ascertain what separate amounts reflected travel by nationals and by tourists, respectively, from an analysis of the inter-modal transport figures (see Appendix IV) for the same two year period, the clear preference for the air mode was emphasized.

(11) See Trinidad and Tobago Draft Tourism Policy: August, 1987

(12) Source: Central Statistical Office of Trinidad and Tobago
These findings at Table 6 seem to corroborate the view that the sea mode is not accepted as a tourism service.

Table 6: Statistical Series of Air and Sea Traffic between Trinidad and Tobago

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Air Pass.</th>
<th>% Market Share</th>
<th>Total Sea Pass.</th>
<th>% Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>799079</td>
<td>504890</td>
<td>64</td>
<td>292189</td>
</tr>
<tr>
<td>1987</td>
<td>768595</td>
<td>496068</td>
<td>65</td>
<td>272528</td>
</tr>
</tbody>
</table>

Several hypotheses can be put forward to explain this predilection for air travel. These include, inter alia:

(a) the "international" and professional ambience of inflight service which the domestic operations maintain;
(b) greater flexibility in flight schedules than offered by the ferry service; and
(c) the short travel time. (15 minutes)

This last factor is specially attractive to the traveller who wishes to attain his destination as quickly as possible in order to begin some new venture, be it business or pleasure. The preference remains despite two salient disadvantages.

The first relates to the disparity in fare structures for both modes. The cost of a return flight is some 60% higher than the cost of a round sail. As air travel may be more susceptible to international market fluctuations, domestic
fares may tend to increase proportionately in the future. Secondly, both airports, situated at some 15 kilometres from the main centres of population on either island, are not as easily accessible as the ferry terminals which are ideally located in the capital centres. Thus, the overall cost of the air trip will be even higher if the equivalent cost for road transport is included.

One interesting and indicative phenomenon remains the tendency of individuals to transport their vehicles by ferry between the islands, while they reach their destination by air, primarily because of the short flight time, as has been already established, and also because the inter-island crossing is a monotonous undertaking, subject to varying sea conditions, which many patrons only endure because of necessity.

It is clear however that there are several leisure and touristic possibilities which are more appropriate to a longer voyage time. The ferry service has not fully exploited this inherent advantage over the air industry to enhance its user market. Chapter Four includes a look at these prospects.
CHAPTER FOUR

FLANK AHEAD: ADDRESSING MANAGEMENT AND OPERATION ISSUES IN THE GSS

4.1 Delimitations.

The three previous Chapters have attempted to provide the conceptual framework of the existing ferry service, and to synchronize those areas which most require attention.

This Chapter outlines proposals which are calculated to enhance the overall ferry system. In arriving at these proposals, the author has worked on the premise that Government policy is geared to addressing current problem issues in the Service in the furtherance of national objectives, viz:-

- stimulating economic self-reliance in the industry and simultaneously reducing levels of subsidy;
- facilitating convenient and comfortable transportation of people and goods between the islands;
- eliminating constraints to tourism currently placed by the inconvenience of the sea transport system;
- providing a source of employment and the development of national skills through the operation of a successful ferry system.

However, several pertinent factors have delimited the concepts which are being approximated for our inter-island ferry service.

It has been established that modern ferry operations both coastal and international relate to a business philosophy
and service. Systems in place will be therefore geared concurrently to maintaining the current market by reinforcing levels of interest, in addition to developing new potentials by penetrating new markets.

The existing passenger market has been defined. The tourism developmental potential has likewise been alluded to. Courses of action arrived at will therefore be predicated by these conditions.

Lastly, management and operation systems which are advanced will consider as far as possible extant systems, the labour force and technical skills available for ferry operations, as well as economic constraints.

4.2 Management of the Service

The management strategy has been determined as the set of inter-related, normally sequential functions of planning, organizing, co-ordinating, commanding and controlling a system to accomplish established and emerging objectives.

Management is therefore the art and service of assembling available resources, both human and economic, for definitive organizational performance and output, contingent upon components in the outer environment which may be sociological, psychological, political, technical and ideological.

Management in shipping will normally establish a strategy of goals, both economic and non-economic in purport, which together simulate key operating policies, including finance, labour, research and development, insurance, purchasing, marketing, maintenance and quality.
From the varying in-house and external reviews which have been undertaken to improve the Service, it may be concluded that the GSS with the PATT is interested in achieving the efficient execution of goals and policies. By extension and by reference to the level of service now provided to citizens and tourist, it may be inferred that this ideal has not sufficiently been attained.

The science of management teaches that the structure of the organization (management structure) should be specified in such a way that the team of individuals within the organization has defined tasks and maintenance roles, and are in tune with the flow of interactions and relationships. In addition, the organization should be a dynamic entity geared towards the realization of its goals and objectives through selected activities, and through the network of relationships within its internal and external organization.

It has already been cited that the mandate of the GSS is the carriage of passengers and goods between Trinidad and Tobago. It has also been cited that the existent configuration of the GSS does not facilitate the optimum execution of this mandate.

Figure 5 on the next page presents a mutually dependent system which may be more apposite to current and future requirements of the Service. Tasks and functions have been prescribed accordingly.
Figure 5: Organization Chart To satisfy GSS requirements

MANAGING DIRECTOR

Secretariat

Liaison with Maritime Directorate

HEAD TECHNICAL DEPT.

SAFETY ON BOARD

MAINTENANCE

- Ship inspections
- Repairs
- Dry docking
- Deck control
- Cleaning and sanitation

MANAGEMENT

- Purchasing
- Oil and bunkers
- Stores
- Specifications
- Ship design/structures
- Shipboard management
- Vessel equitation

HEAD ADMINISTRATIVE DEPT.

FINANCE

- Financial accounting
- Mgmt. accounting
- Salaries/wages

MANNING—shore based

- Personnel policy
- Social welfare
- Security
- Training

MANNING—sea personnel

- Manpower planning
- Recruitment
- Training
- Assignment

LEGAL AND CLAIMS

ROUTINE

- Data systems
- General supplies

HEAD COMMERCIAL DEPT.

MARKETING

- Freight rates/forces
- Market/traffic analysis
- Customer policy
- Tourism/guest services
- Business development
- Public relations/advertising

OPERATIONS

- Chartering
- Schedules
- Ticketing/sales
- Reservations
- Passenger catering
- Public relations/advertising
4.2.1 The Organizational Chart
The Chart has been designed to identify and relate the parts of the organization to each other. While each division has been assigned distinct responsibilities, it must be clear that this should not preclude the flow of interchange and communication within and throughout the organization.

The Chart attempts to group function relationships in each division. The elements of rank and status have not been so clearly delineated, such as the vertical hierarchy for authority and accountability, and the delegation of duties. It is intended that authority is commissioned vertically from the Managing Director and that "workable authority", which is the legitimate range of responsibility assigned to each officer, will be designated accordingly.

4.2.2 Personnel
The greatest difficulty in addressing the re-structuring of a functional organization relates to the superfluity of tasks and people which may result. This difficulty is aggravated in the case of Government administration which traditionally have large staff complement.

At its peak hour, i.e. between 0700 hours to 1600 hours daily, the GSS is staffed by a total of sixteen general and personnel staff supervising and executing primary functions relating to passenger and freight processing. The extra-office tasks relating to the expedition of cargoes are supervised and executed at peak hours by a unit of twenty which has already been described.

The Chart at Figure 5 envisages an office complement of
some 16 staff members in principle. Some clerical functions have however been superseded by specialist functions relating to technical and commercial management such as planning and marketing.

The author does not prescribe to staff cuts or other drastic measures for the sake of meeting an organizational ideal. Instead, should it ever be considered necessary to institute a structure such as Figure 5 for the GSS, much discussion must be focused on the existing staff among relevant Government offices including the Ministry of Works and Infrastructure, the Ministry of Planning (Organization and Management Division), PATT, and the Seamen and Waterfront Workers Trade Union, as appropriate, to determine phased retraining and redeployment policies as far as is feasible.

Having clarified the preceding, the functions and responsibilities of the varying are now further specified.

(a) Managing Director:- It is assumed that the integral qualities and capabilities sought in the recruitment of any manager would apply in this context. This includes the right juxtaposition of "concern for production" and "concern for people", the two most important variables of the managerial style.

The Managing Director would necessarily need a general knowledge of shipping. He would be accountable for the daily management of the Service and would undertake principal liaison with the Union and the Government Agencies, notably the Maritime Services Division of the Ministry of Works and Infrastructure. He should be particularly competent in ship costing and valuation. He would be assisted by a secretary.
(b) Technical Department: This Department would be encharged with the actual running of the ship and the range of technical management functions. The broad spectrum of tasks covering engine and nautical inspection, safety on board, shipboard managements system, planning ship design and specifications, and port liaison would be organized and supervised by the nautical division. The Head of the Department, either an engine or naval architect should be assisted by one port captain/master mariner and two clerical officers. It is not expected that the Technical Department would undertake actual maintenance repair and overhaul functions as the Department would not be physically equipped with the facilities to expedite technical operations. The PATT already has the infrastructure in place for such operations. It is anticipated that they would retain effective execution of these tasks, while the short through long range planning for such services would be the responsibility of the Department. Ongoing rapport and liaison would be required with the relevant PATT Divisions.

(c) Administrative Department: All important personnel policy functions would be undertaken by this department. Recruitment and training of office employees and the catering staff would be organized here. The Head of the Department, an administrator with legal background, should be assisted by an accountant. Other functions in respect of the execution of personnel and general office policy can be undertaken by two experienced clerical officers.

(d) Commercial Department: Control and commercial services, crucial for revenue generation, would be organized and executed by this Department. The Head would
need to be qualified in marketing management and planning for the shipping environment and should have a good grasp of shipping economics. Apart from one assistant head to undertake operation functions as outlined at Figure 5, a sub complement of three clerical officers would be necessary to execute other departmental functions.

The structure described above ideates the optimum close-knit organization, with much horizontal communication and role sharing for efficiency. The path from the present to the conceived would not be a simple process. However, a smooth and phased transition should be possible once:

(a) policy guidelines are clearly set by Government and firm operating (social) and profit (economic) motives are defined;

(b) the range and scope of operations are clearly expressed and implemented;

(c) the level of service (reliability, frequency, passenger comfort and convenience) is an independent variable.

Variations from models are natural occurrences once organizations are operational. The organizational chart is only a guide. The operating climate will influence and necessitate appropriate changes which must be adapted to include the existing personnel, and the reactions from the travelling public.

Lastly, it should be established that these categories of staff (administrative, clerical, technical and catering) should be employees of the GSS and not the PATT. Employment terms and conditions should therefore be predicated as for the civil service or government statutory authorities.
4.2.3 Interdepartmental interface

The success of the management policies will largely depend on the flow of communication within the departments and throughout the organization. There would be the need for constant dialogue between the offices of the GSS in Scarborough and in Port of Spain. Inter-office sessions should be a regular facet of work practice in order to monitor and regulate operating systems in accordance with the ongoing demands of the working climate. This is especially important for a ferry service which will need spontaneity and flexibility in operating practices to cater to seasonal or other demands.

Lastly, working incentives should be clearly defined within the organization. There should be strategies for stimulating motivation and thereby maximizing organization efficiency and effectiveness.

Whatever the strategies which may be applied, the important outcome should be for staff to be challenged by their jobs and rewarded by the organization for doing well. Staff should feel part of the process of decision-making through appropriate delegation and participation, and should also feel that their office evaluation exists on the basis of clear results, and not on the basis of cosmetic adherence to office policy.
4.2.4 Ship/shore interface

It is understood that the effectiveness of the shore management cannot guarantee a successful ferry service. Much depends on the shipboard management systems in place and the degree of accountability and power put in the hands of the shipboard team. Nowadays, such authority has graduated from the traditionally given operational tasks assigned respectively to the captain, the chief engineer and other crew.

In both companies visited by the author, and in concert with contemporary practices, management teams have been established headed by the master, and consisting of-
- the chief engineer,
- the mate,
- the second engineer,
- the chief steward.

This team is charged with the all-inclusive managerial shipboard tasks, including:
- supervising and optimizing onboard resources;
- proposals for training and developing staff;
- planning jobs as a function of available skills, and allocating the required resources, i.e. seagoing maintenance teams, concessionaires and the like, when the occasion demands it;
- monitoring crew performance and examining ways to address deficiencies.

Implementation of such a system first of all demands that the shipboard team enjoys a certain "autonomy" in their decision making. Secondly, it demands an effective balance of ship/shore interface.
Shipboard staff in the GSS currently depend heavily on shore management for the definition of onboard managerial operations and activities. Responsibility does not extend much beyond the tasks relating to the operation of the vessel as a transportation agent.

Staff have been known to experience many frustrations with respect to the limitation of their scope of responsibilities and power. The role of the onboard staff will require careful re-examination in any endeavour to re-constitute the GSS.

The shipboard team should be looked upon as a "fixed" entity in the overall management structure, in much the same way as the any other specialized units described at Figure 5. Thus, definite "workable accountability" may be entrusted with the shipboard unit in cognizance of its specialized professional capability. The international model for good shipboard practice has been enclosed as Appendix IV.

4.2.5 Relationship with Government Agencies.
The administration of the Shipping Act, No 24 of 1987 lies with the Ministry of Works and Infrastructure under whose ambit a Maritime services Division is being established at present.

This Division is to comprised of two functional branches viz, Maritime Safety and Maritime Administration. It has been envisaged that the GSS should operate more closely with the Shipping Policy Section of the Maritime Administration which would oversee, inter alia, the development of coastal shipping.
Whatever the final divisional structure and responsibilities of the Maritime services Division, it is expected that the GSS should liaise closely with the entire Unit for overall safety and policy guidelines.

These guidelines would embody:
(a) the safety policy as reflective of the requirements of Act 24 of 1987;
(b) the labour policy including conditions of manning, and occupational health and safety;
(c) the legal policy defining the conditions for the carriage of passengers and vehicles by the Service, as well as obligations imposed upon the ship and its crew;
(d) the training policy through the creation of an educational system to facilitate training and upgrading of all maritime personnel, seagoing and shore based;
(e) the relationship with other governmental agencies for support assistance; and
(f) the relationship with international maritime agencies, e.g, IMO, ILO and UNCTAD for technical assistance.

Should the Maritime Services Division be established along the same vein as other semi-autonomous technical departments of the Ministry it might be one practicality to situate the GSS as the operational branch of this Division.

However, the problems of too little flexibility and autonomy in decision making could still present a threat to operating efficiency. The ideal would be to establish the GSS as a separate government agency accountable to the Ministry of Works and Infrastructure but with defined autonomy in its day to day operations.
In this way, the GSS (as at Figure 5) would be the effective managers of the Service.

4.2.6 Relationship with the PATT
If the GSS is established as the manager of the Service, the PATT could be contracted under special agreement to undertake all port related services such as vessel maintenance, dry docking, the provision of harbour and ancillary facilities including cargo handling, as well as the supplying of all technical deck and engine personnel to man the ferries.

It would be essential to establish firm guidelines on operating responsibilities and areas of authority between these two agencies, and for this relationship to be given the appropriate legal basis.

4.2.7 Budgetary considerations
As the GSS already has a definite budget from the State which is calculated to satisfy the range of expenditure for shore-based and shipboard functions, an additional area of government expenditure is not being created to satisfy the foregoing management system. It is clear however, that suitable adjustments will be necessary under the varying items and allocations for operations, and that staff salaries, wages and other programmes would need to be revised accordingly.

Once operational, the financial department of the GSS would need to keep close monitor of the cost accounts for the Services provided by the Port and other government agencies.
4.3 Operations.

One undisputed aid to the operations of any travel service is the use of data systems for processing the through-flow of ticketing and reservation functions.

Computerized operations at the GSS would no doubt prove advantageous in the above mentioned functions, and generally for stock control analysis, accounting and budgeting functions. Where systems are linked up from ship to shore, the benefits to be accrued would be measured to a large extent by operating returns.

It may be the Government’s objective in the medium to long term to computerize operations at the GSS. Such a venture offers many improvements once programmes are customized to operations, and appropriate links can be created with the national airline (BWIA) and other travel companies for obvious reasons. It must be recalled however that although the ideal may be to install data systems to meet accelerated operation demands, considerable efficiencies can still be attained by relying on "manual" techniques.

4.3.1 Passenger services
(a) Ticketing: It is not known whether any new ticket codes have been introduced for the GSS since the decision was taken to install fare systems for both first class and economy passengers.

A ticket system should however normally cover all categories of services offered to passengers. The GSS services can now be categorized as follows for single or return voyages.
(i) 1st class passengers;
(ii) economy passengers;
(iii) child at (i) or (ii);
(iv) (i) with car;
(v) (ii) with car;
(vi) car alone.
However, fares are not classed to represent combined
service options such as for a passenger accompanied by his
car. The car is priced as a separate entity.

Nowadays, ferry companies opt for special strategies to
courage passengers to travel with their private
vehicles, which may include fare concessions to families
and repeat users. The actual fares applied will obviously
be much more attractive than for the individual rates
summed for the private vehicle and the given passenger/s.
This strategy may of course be one way to encourage more
passengers to travel with their cars in the ferry, instead
of using the air service.

Until such time that the ticketing system may be
computerized one solution may be to code tickets according
to the varying categories of services offered to customers
so that these may be simply exchanged in return for fares.
This would obliterate the need to complete ticket
information manually, and directly reduce working effort
and costs.

However, the overall ticketing system would depend on
whether the range of services offered by the GSS would
continue as outlined earlier or whether additional tours
and group services are introduced. The ticketing system
may be designed to cover all passenger services offered by
the vessel including pure transportation from either
point, or transportation plus facilities to be used on board, e.g. the restaurant, cafeterias and so on. This latter feature of ticketing may be of special significance if the GSS decides to exploit possibilities for on board catering.

As the success of a ticketing system may also be measured in relation to its accessibility to customers, the GSS may therefore wish to explore the possibility of using travel agencies to undertake the sale of tickets. Agreements would however be needed on commissions and other strategies so that these agencies would also promote ticket sales.

Another idea would be to have Government Post Offices also offer GSS tickets for sale. This alternative should be more practical because of the inherent nature and functions of post offices, and because of the obvious advantage of maintaining operations within governmental departments.

Logistics of sale hours, staff and other attendant conditions may be negotiated with the Post Master General and other responsible State agencies.

Although the advantages of extending ticket accessibility to the public are axiomatic, adequate safeguards and checks must however be built into the system so that real benefits are visible. The changes in the ticket system in terms of structure and accessibility would also impact upon current selling practices at the GSS and necessitate some revisions. Sales of tickets on weekends, even if only on board the ferry, as well as new weekday sale periods from 0700 hours up to 1600 hours, are just two of the
areas which may be more complementary to the revised ticketing system.

While still in the ticketing domain, brief mention will be made of the determination of fares. This area continues to be as a State prerogative. However, the GSS may be required progressively to define fare structures, especially if new operations are proposed.

A fare system should consist of fixed and variable components. The fixed components should in principle cover the costs related to terminal operations, berthing etc. The variable components should be related to the costs of the crossing. In this way, ferry fares are similar to other fares and freight systems.

The determination of fares should also depend on the relationship between car and passenger costs. The difference between the costs of operating a pure passenger service on the ferry crossing to satisfy the expected passenger traffic, and the costs of operating the normal combined service, should normally be covered by the expected car traffic.

(b) Reservations: One essential component for a reservation system would be a reliable switchboard. Like the ticketing system, the reservation system would also hinge upon the range of services offered by the GSS. A manual reservation system should be able to cope with bookings up to two months in advance of sailing, and be a useful indicator to predict car and freight allocations. A simple system of reservation master cards may be introduced, each with subheadings showing;
- the voyage number;
- the day of the week;
- the month/year.

The columns could be fixed in relation to the established ticket numbering system at the GSS and contain pertinent customer information as shown on the sample reservation master card at Figure 6.

---

**Figure 6: Reservation Master Card**

<table>
<thead>
<tr>
<th>VOYAGE</th>
<th>Day of week</th>
<th>Date</th>
<th>Destination</th>
<th>Remarks</th>
<th>1. control no.</th>
<th>2. car type</th>
<th>3. ref: tel/add/reg. no/name</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 A</td>
<td>Friday</td>
<td></td>
<td>Scarborough</td>
<td>506</td>
<td>511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>501</td>
<td></td>
<td></td>
<td></td>
<td>507</td>
<td>512</td>
<td></td>
<td></td>
</tr>
<tr>
<td>503</td>
<td></td>
<td></td>
<td></td>
<td>508</td>
<td>513</td>
<td></td>
<td></td>
</tr>
<tr>
<td>503 B</td>
<td></td>
<td></td>
<td></td>
<td>509</td>
<td>514</td>
<td></td>
<td></td>
</tr>
<tr>
<td>504 A</td>
<td></td>
<td></td>
<td></td>
<td>510</td>
<td>515</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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63
Each Master card may be designed to hold at least one hundred and fifty bookings, and satisfy Scarborough and Port of Spain requirements respectively. Standard GSS practices may be used for the reservation system, for example, car types may be coded on the card as a function of weight divisions.

Reservation cards could be allocated to respective GSS offices on the basis of ticket control numbers. As it is not anticipated that other sale outlets should perform reservation services, it should be possible to monitor the tickets offered to these external agencies on monthly basis while the GSS would retain a definite series for their own sales and to satisfy reservations.

This system would necessitate careful planning and forecasting before implementation. The anticipated monthly traffic should be known in order to define the scope of reservation services to be offered, and the range of ticket control functions between the GSS and support agencies. As an alternative the GSS may seek guidance from BWIA in both ticketing and reservation systems. BWIA may also be in a position to offer training to GSS in order to undertake these functions.

(c) Terminals: Improved facilities are currently being installed for both Scarborough and Port of Spain terminals. In this way many of the physical inconveniences which lead to overcrowding and other discomforts are being rectified.

At the same time however, attention must also be placed on the structure of services offered at terminal so that customers may receive proper service. In this regard, it
might be more practical to institute a numbered queue system at terminals as at travel offices, so that customers may sit and wait their turn for attention. This is one obvious solution to terminal congestion, once the system is enforced and honoured as much by employees as by customers.

Another practical consideration for terminals, also aimed at relieving congestion would be the physical separation, for boarding purposes, of walk on passengers and those with cars. The tickets of these separate categories of passengers could be then independently verified by the staff/crew members assigned to these tasks.

The GSS may also consider the sale of refreshments at the terminals as a revenue earner. Again much planning should go into this venture, and an appropriate market study should be initiated to ascertain that the provision of the terminal refreshment facilities are harmonized with the onboard facilities, and to avoid jeopardizing the operating efficiency of either facility.

At terminals, passengers should also have ready access to basic sailing information, and facilities offered by the GSS. Information leaflets should therefore become a regular updated feature.

(d) Catering: If much focus is to be placed on maximizing on board revenue, equal focus should be placed on facilities offered on board. Until new merchandising prospects are engendered, onboard sales will continue to be derived from bars and restaurant. In this area also studies should be undertaken to obtain the type of food and drink preferred by the average travellers, and the
presentation of the same. This information can be accumulated over a continuous period in the form of questionnaires to customers, after which refreshment can be adjusted accordingly. Should catering demands rise considerably as a result of accelerated operations of the GSS, catering contracts may be offered to reputable concessioners to satisfy these demands.

4.4: Passenger Marketing

We have discussed the concept that new markets can be created for the GSS and that current markets may be increased.

Marketing of the GSS is a function that is crucial to the overall success. Marketing should consider the whole Service from the point of view of its final result, that is, from the customer's point of view.

Marketing strategies at the GSS should aim at satisfying current and potential customers needs and wants through exchange processes. These exchange processes will relate to the service-product that is offered. Both concepts are therefore coincidental in that whatever services are provided must satisfy current and potential needs.

If we attempt to relate the ferry system to the concept of needs and product, several functions may apply namely:
- pure transportation
- cargo transportation
- business travel
- semi-leisure i.e. on the way to a holiday.
- pure leisure i.e. the crossing as a holiday
- other.
The product, i.e., the transport service should be able to fulfill all needs concurrently and with equal efficacy. The two former functions are currently marketed by the Service. If we agree that new perceptions and consequently new demands can be created for the Service, marketing strategies may therefore wish to gear itself to the other target areas outlined above, viz:-

(a) the business traveller - the existent conference facilities on board the MF Panorama are hardly exploited. The time has come to utilize this facility to generate revenue. Where it is not possible to schedule conferences or meetings during crossings, full access should be offered to these facilities when the vessels are in port. The GSS may wish to anticipate the demand for such services and re-schedule crossings primarily at low peaks such as Wednesdays and Thursday to maximize this potential.

(b) semi-leisure - this category of traveller may normally be accompanied by his car and family or friends on the way to their vacation destination. One task of marketing would be to ensure that this category of passenger does not ship his car and fly to Tobago. Here, the proffering of combination fares and special concessions to repeat users may be a successful strategy.

(c) pure-leisure - this category promises much potential but requires aggressive promotion. Pure leisure users may fall into many groups. The Service may be marketed to attract;

- private parties, weddings etc
- special day tours where the vessel itself is offered
as an attraction and passengers are given a "walkthrough". This category may be specially attractive to school children and youth groups. These could be organized in collaboration with the PTSC which will provide road linkages at either end;

- mini cruises which will feature as far as possible, the excitement and ambience of a real cruise. Some leisure options would necessitate special income bracket targeting.

One problem within the range of pure leisure remains the prevailing sea conditions on the inter-island route and of course the length of sailing.

Alternatives would be to operate such leisure services in the Gulf of Paria, where seas are less rough, or to re-initiate mini-cruises to Venezuela, Grenada and other nearby islands.

These programmes should however be effected in conjunction with the Trinidad and Tobago Tourist Board. Many tour options may indeed present themselves. The crucial issue will be effective management of such services and the maintenance of levels of interest.

If mini-cruises or short international crossings are entertained, the BSS should be careful not to limit its role to reserving and providing the transportation services, however attractive and inductive the attendant on-board merchandising may be. The Commercial Division should develop special expertise in suggesting and arranging end-of-route accommodation and activities as necessary. In this way the Commercial Division would be
completing the tasks of a travel service.

Lastly all tour ventures should be aimed not only at the local target group but should try to capture reciprocal markets at destination points. Again the Tourist Board could be instrumental in boosting marketing initiatives. Naturally, where extra-territorial services are contemplated, these would be also include prospects for on-board duty free sales.

In all instances where products are offered to customers for sale, it must firstly be made certain that they truly reflect customers preferences. Secondly they should be displayed and offered in such a way as to attract maximum sales. It should never be assumed that customers will buy products once they are featured on board for sale. The peculiar confinement of the ship demands that the ideal balance of space utilization, product display and colour appeal are applied to captivate initially passengers, and to continue to do so after repeated sailings.

Marketing relies heavily on public information campaigns both to assess passenger needs and to advertise how the Service can fulfil these needs. The information media can be programmed within an advertising campaign. This is a relatively capital intensive function and must be specifically budgeted. Even current services of the GSS may be featured at least once weekly on TTT and in at least one national newspaper.
4.5 Implementation of Operations.

4.5.1 Training
As a pre-requisite to any training programmes, there should be a basic orientation of both shore-based and seafaring personnel to each other's functions, so that there may be better understanding and appreciation of interrelations and a more harmonious approach towards the Company's objectives.

Enough expertise exists locally so that the GSS staff may be trained to undertake their new roles and functions. The range of training-needs for both sea and shore personnel can be undertaken by varying Government Agencies for example:
- crew - the CFTDI and Port Authority
- officers - the JMTI and Maritime Services Division
- catering personnel - the TT Hotel Services, BWIA and the Central Training Unit
- clerical staff - the Maritime Services Division, the Central Training Unit, and BWIA

Effective discussion and planning should precede any training programmes so that the courses provided would aptly fulfil the training requirements.

4.5.2 Schedules
All strategies described earlier may necessitate rescheduling of vessels on a weekly basis. From an examination of the current weekly traffic levels on the basis of sailing-hours, days, new indications may be given so that sailings will be offered to satisfy at least one-third of the vessels capacity.
More time in port would offer greater opportunity for ongoing maintenance, and port side exploitation of the vessel for conferences or meetings as already described, or to attract lunch or dinner customers to the vessels. Port-side revenue possibilities would be relatively much easier to initiate and necessitates less capital outlay.

4.5.3. Control and Security
The systems of control and security on board and at terminals should be maintained to ensure crowd control and to avoid unfortunate incidents. Security officers must also be trained to deal with passengers as the occasion demands. Severity in dealing with malfeasants should of course be tempered to patience and understanding when approached by anxious or uncertain passengers.
We have addressed the management and operational considerations which should be contemplated if the GSS is to be restructured along the lines of a contemporary ferry service. In essence, the current operations of the GSS satisfy a purely domestic range. However, this does not preclude the fact that important international obligations are imposed upon the Government in respect of such operations, precisely by virtue of the global nature of shipping.

This Chapter briefly recounts the fundamental legal and technical considerations which apply to the operations of a ferry service, and which should be well cogitated in the interests of national safety and welfare.

5.1 Legal considerations.

The newly enacted Shipping Act of 1987 supplies an uniform codification of rules pertinent and concomitant to the registration of ships, crews, and the safety of life at sea.

By virtue of this legislation Trinidad and Tobago has enforceable and all-encompassing standards which vessels within our territorial waters, foreignflagged and national, are restrained to observe to ensure safety and the prevention of marine pollution. Many of these standards have been adapted from the International
Convention for the Safety of Life at Sea (SOLAS), 1974 to which the country is a contracting party. SOLAS is the international regime providing mandatory regulations for the construction, outfitting, equipment, surveys and certification of all classes of ships.

It can be stated that the entire provisions of Act 24 of 1987 may be of coincidental application to the operations of the GSS. However, Parts XI, XVII and XVIII bear direct relevance to this theme. Certain factors must nonetheless be incorporated into the enabling legislation which gives effect to the aforementioned Parts in order that their scope is more comprehensively covered.

Part XVII of the Act relates to "passenger ships" and states, inter alia:—

"356 (1) The Minister may make regulations—

(a) respecting accommodation, facilities and provisions on board passenger ships which carry passengers from a port in Trinidad and Tobago;

(b) requiring the preparation and furnishing of particulars as to all passengers to or from a port in Trinidad and Tobago;

(c) regulating the number of passengers which a ship may carry from a port in Trinidad and Tobago whether or not the ship is a passenger ship; and

(d) prescribing the terms and conditions upon which ships may carry passengers between ports in Trinidad and Tobago."

The Act also lays the foundation for the application, mutatis mutandis, of the provisions of the International
Convention on the Carriage of Passengers and their Luggage on Board Ships (Athens Convention), 1974 as amended, in the following manner:—

"The Minister may waive or vary the Regulations ... in respect of their application to Trinidad and Tobago passenger ships operating solely within the waters of Trinidad and Tobago."

It is true that the provisions of the Athens Convention apply to international carriage. However necessary adaptations have been applied to define domestic services in the United Kingdom, Sweden, Denmark and Finland to name a few countries. It is therefore neither impractical nor inconceivable for Government to adapt specific clauses to satisfy the operations of the GSS.

In particular the commercial implications of the carriage of passengers and goods such as treated in the abovementioned Convention, should have basis in Act 24 of 1987. It is true that the concept of "carriage of passengers" is inferred in Part XVII. Nonetheless, it may be prudent to provide more comprehensive representation of the terms "passenger" and "carriage" to coincide more pertinently to the commercial undertakings of the GSS.

The definition of "passenger under Act 24 of 1987 is patterned after SOLAS, 1984 and states:—

"passenger means any person carried on board a ship except—

(a) the master, a member of crew, an apprentice or a person employed or engaged in any capacity on board the ship on the business of the ship;
(b) a child under one year of age; or
(c) a person carried on the ship under an obligation
imposed upon the master to carry shipwrecked, distressed or other persons, by reason of any circumstance which neither the master nor the owner nor the charterer, if any, could prevent or forestall;"

It may perhaps be more judicious to extend this interpretation to include "any person carried in a ship, (a) under a contract of carriage, or (b) who, with the consent of the carrier is accompanying a vehicle or live animals which are covered by a contract for the carriage of goods ...." (1)

This ultimate clause is most relevant to roro ferries. Such a definition would therefore offer more precision to Government should it ever be necessary to defend claims arising out of the operations of the GSS. Equally important, it would provide an overall accepted framework on "passengers" should any incidents ever arise on board foreign vessels navigating the waters of Trinidad and Tobago. With the considerable number of cruise ships calling at the country’s ports on an annual basis, and the increased traffic volumes projected in the future as a joint result of aggressive tourism marketing, and of the upgrading of existing deep-water facilities in Scarborough to facilitate alongside berthing of luxury liners, Government cannot be too solicitous in this area.

By the same token, the notion of "carriage" should also be well covered in the Act. The interpretation of the Athens Convention is also indicative in this regard, with the added imposition "seaworthiness" on to the carrier, that

(1) Source Athens Convention, 1974 op cit Article 1.4
ensuring that the vessel is properly manned, supplied and equipped, so that the passengers and their luggage (including cars) are promptly and safely carried to the port of destination. (2)

In principle, it is to be recalled that when the GSS sells a ticket to a passenger for a specific sailing, the GSS has entered into a definitive contract for the conveyance of that traveller.

As a result, existing national legislation on trade descriptions and consumer rights should therefore be well considered in concert with the Shipping Act. The GSS and consequently the Government should be careful not to place itself at risk before the public, for example by describing services to be offered in a manner that is calculated to increase passenger participation, but which at the same time is not reflective of the actual service and facilities provided. This consideration is especially applicable should the concepts of mini-cruises and other touristic services ever be inaugurated, as their success would be largely dependent upon elaborate and alluring marketing and promotional strategies.

As another legal consideration, Section 357 of Part XVII outlines the punishable offences in connection with passenger ships, that is, the misdemeanours for which a passenger may be found liable in respect of his conduct, or his failure to observe a defined code of behaviour on board a passenger ship.

(2) See: Swedish Maritime Code, op cit Chapter VII.
It is expedient however that these provisions be communicated to the public in such a way as to ensure their maximum digestion and assimilation, on a continuous basis.

In addition to extant "offences", it may also be considered necessary to institute a specific code with respect to luggage, so that it may be deemed an offence to bring aboard goods which may be inconvenient or dangerous to the vessel and the other passengers, without first declaring such goods. In this way, the GSS could reserve the right to prohibit the loading of such luggage or goods, or could treat with it any way as to render it "innocuous" without incurring liability. Again, these safeguards are extremely important should the GSS extend its operations to short international cruises.

The ultimate legal area consequential to the operations of the GSS relate to its role as a cargo carrier, whereby it is engaged in the transport of lorries with drivers and possibly escorts against payment of freight. The implications of cargo transport should therefore carry coverage as deemed appropriate in enabling Regulations to the Shipping Act.

5.1.1 Insurance.
The Port Authority has owned and operated many vessels since its inception, and is consequently well aware of the principles of marine insurance, the formations of such contracts, and the general obligations of the assured.

One complicated task to which specific attention must always be focused in contracting a marine insurance policy relates to the assessment of the value of the ship.
Accurate valuation of the ferries, for example, assumes greater importance in cases where the Government opts to buy or sell, if a salvage award is contemplated, on adjustment for general average, or if the vessel should be an actual or constructive total loss.

To date, such dangers and perils have thankfully had no bases in the operations of the GSS. Nevertheless, an understanding of the basic notions which apply to the valuation of a ship should be always borne in mind:
(a) its market value — which constantly fluctuates and may differ up to 20% for the same ship;
(b) its mortgage — i.e., the assignment of insurance indemnity;
(c) debts attached without mortgage and which appear in the internal accounts,
(d) the book value which is the value after depreciation;
(e) replacement costs which depend upon the newbuilding and second hand vessel market; and
(f) limitation of the owner’s liability, where the agreed value should be able to satisfy the total amount of the fund constituted by the applicable national and international liability limits.

These factors are particularly applicable in negotiating risk coverage with marine insurers. It should not only be left for the insurer to advise on what scope of risks are to be covered and the costs associated with such coverage.

With more specific reference to marine insurance policies, ferries usually carry Hull and Machinery (H&M), and Protection and Indemnity (P&I) coverages. Where circumstances so dictate it, the contents of the restaurants and bars, as well as the furniture on the
ferries are also covered by a separate policy. For obvious reasons, if Government decides to make use of these existing facilities on board the MF Panorama, for example, specifically to generate revenues, care should be taken to minimize losses on investments and earnings by obtaining suitable coverage.

5.2 Technical.

Operating a ferry pre-supposes that systems relevant to the acquisition of new and/or second hand vessels, to ship financing, and all areas incidental thereto, are well in place.

The phased procedures for the acquisition of a newbuilding are provided at Appendix VI as a general guiding principle.

It is also to be recalled that the Government may always have recourse to specialized international shipping agencies of which the country is a Member State should further professional expertise be required on ship building, acquisition, and the attendant factors. Such agencies, as the International Maritime Organization, are usually postured to offer expertise without implying a direct cost to Government for services.

The following aspects are to be recollected if new tonnage is to be acquired for the route:

(a) the type of vessel, (i.e, cargo capacity in tons, containers to be carried, passenger and cabin capacity, physical limitations due to operational conditions, speed, standardization of machinery, equipment, and handling methods to be used) to be
obtained and the purpose for which is it intended, in addition to the current and forecasted demands of the trade;
(b) the technical and design criteria to fulfil these demands;
(c) the yard to be selected; what is its history and professional and technical reputation vis-à-vis the tonnage to be acquired;
(d) sources of financing for the new building making allowances for currency and market fluctuations; and
(e) the terms and interpretation of the building contract.

Shipping contracts require careful attention. The contract is usually drawn up in accordance with the specifications of the additional tonnage sought. Special forethought and planning must be put into contracts to provide protection from problems arising out of construction, and to provide recourses to dispute settlement, i.e., arbitration.

Aspects which should be clearly specified in a ship building contract are:

(a) the delivery clause;
(b) the currency of payment, especially to allow for market fluctuations;
(c) recourses available should the shipyard declare bankruptcy.

With respect to this last issue, it is advisable to build up special equity in a vessel during construction through partial payments so that the contractee is legally entitled to a defined percentage of the partially completed vessel.

The assistance of shipbrokers and bankers may also be sought prior to and during the acquisition procedure.
These agents can invariably provide background information on the credibility and financial standing of shipyards, or the legal and technical history of existing tonnage should the acquisition of second hand tonnage be contemplated.

5.3 General.

We have talked extensively of the GSS and the implications of its operations as a combined passenger / car service. The Service does not only comprise ferries however. The supporting components of a ferry system are:

(a) terminals, including ferry ramps and marshalling areas, and
(b) the ferry crossing, including road connections and access.

These ancillary factors must also receive adequate attention and planning from Government towards the all-inclusive national transport network.

The Port which controls all the marine-related infrastructure to facilitate operations of the GSS will have its engrained policy on the upkeep and maintenance of such structures. It is to be always borne in mind however, that any vessel to be acquired for the Service should be customized to satisfy whatever berths, terminals and ramps are in existence within the system. The inverse should also apply. Where improved access or other conveniences have been supplied in a new vessel, the terminal facilities should expedite thorough benefit of such conveniences.

The planning and design of the MF Panorama no doubt wished to redress the safety hazard and undesirability of walk-on passengers, and vehicles using the same entrance adit. As
a result, separate deck admittance was provided for passengers without vehicles.

Unfortunately the current terminals do not allow this amenity to be exploited, as they contain no walkways up to the passenger deck entrances.

Another factor which can be incorporated for the overall ferry system pertains to the inclusion of suitable linkages to and from operating terminals in Scarborough and in Port of Spain. This area should be explored primarily through the utilization of the transportation service of the PTSC.

This strategy is principally signified should the ferry be used to attract clusters severally. These would comprise school children, youth groups, clubs special organizations, and of course tours. In this way the round public transport service can be fulfilled.

Finally, no discussion of marine passenger services is complete without mention of special dynamically propelled craft such as hovercrafts, hydrofoil boats, catamarans and single hull vessels. This type of craft operate at speeds between 20 to 45 knots. Some hovercrafts have a capacity for four hundred passengers and fifty-six cars at a cruising speed of about forty knots. Such a vessel would cut the existent inter-island crossing time in half.

These vessels however imply high capital costs and require extensive technical know-how for satisfactory operations. Any overtures to introduce such craft must be preceded by in-depth evaluation of inter alia, the operating conditions, capacity and market requirements, productivity
of the craft versus building costs, and the overall opportunity costs of such an investment.

These precursory indicators to Government do not purport to be exhaustive or all embracing. Instead, a general synopsis of the current standing of Trinidad and Tobago in respect of its ownership and operation of ferries has been made, and the affiliated avenues for sustained and rational emergence have been intimated.
CHAPTER SIX

ALONGSIDE: A SUMMARY OF CONCLUSIONS

One difficulty in addressing management and operation issues for any organization relates to surmounting the wide grey area which exists between the existing structure and the proposed model. No matter how deficient the existing organization; it is actually functional and systematically adjusting itself to suit day to day demands while the new model which seeks to redress deficiencies in the current system will still be subject to many adjustments.

There is no ready made solution to cope with this dilemma. However a sure step would be to recognize the need for change in the organization and to accept that benefits will be derived from such changes.

The preceding Chapters do not pretend to solve all management or operation issues at the GSS. It is hoped nonetheless that they would have provided basic indicators to planners interested in undertaking a thorough revision of the ferry system.

Many logistics have been left to the decision of the appropriate government authorities. It will be observed for example, that no effort has been made to provide distinct definitions of the GSS structure for Scarborough and for Port of Spain. The author has merely attempted to make known the elements of management and operation systems which should cater to the provision of ferry services between the islands.
Similarly logistics of physical allocation of offices and attendant details have been excluded. These are outside of the domain of this author as they may be tied to wider national concerns of social, economic and political significance.

To recapitulate, this work has examined the layout of management and operations which are considered most appropriate to the current and potential user demands in Trinidad and Tobago, and which may procure a reduction in operating liability.

Salient assumptions have been that the personnel within the Service would be inclined to be more productive as part of a well defined organization, and that consumers, the ultimate target of all operating strategies, may be further enticed to use the Service if it were to reflect satisfactorily their actual and latent needs. In either case, catering to the human element is paramount.

Management and operation strategies have therefore be advanced to coincide with these assumptions. They stress:
(a) the GSS is providing an important shipping service to the nationals of Trinidad and Tobago, and it should consequently enjoy enough flexibility and autonomy to execute this function well;
(b) the GSS should be instituted as a separate government unit, managing the day to day functions relating to the provision of ferry services. The complement of GSS staff should be trained and capable of expediting the range of technical, administrative and commercial functions which are expected of a ferry company;
(c) the PATT should be contracted to provide technical and port related services to the GSS. A special agreement
should define the working relationship between the PATT and the GSS and the appropriate legal designation should be given;

d) there should be a clear delineation and distinct terms and conditions of employment for the employees of the GSS and those of the Port who will be under contractual obligation to assist in operating the overall ferry system;

e) the financial aspect of operations should be arranged as for a shipping company. The GSS should have as its assets the ferries, buildings and other appurtenances which are inextricably linked to the production of its transport services. Strict cost accounting should be undertaken to identify individual units of expenditure in day to day operations. Management should also view each vessel as a separate operating unit and adjust expenses and revenues accordingly. Depreciation of vessels on a yearly basis would also be an important tool in the overall financial accounting.

The special benefits to be derived from an autonomous accounting system have been disaggregated as follows:
- an unambiguous relationship between individual costs and functions;
- the avoidance of overlapping costs and expenditure between the GSS and the Port;
- the avoidance of diversion of GSS estimates to satisfy other port expenditures;
- the representation of the fixed assets and liabilities of the GSS on the budget sheet; and
- the more precise delineation of operating results so that management may adjust or discontinue operating practices as an indication of accounting indicators.
Necessary additions and amendments will need to be effected to relevant legislation, that is the Port Authority Act of 1980, and the Shipping Act of 1987 in order to redefine appropriate operating parameters for the Port and the GSS, and to give proper legal basis to the functions performed by the Service.

Chapter Five has adumbrated the scope of coverage which Act 24 of 1987 should vest in the GSS, including:
- the commercial carriage of passengers and goods which would also incorporate the transport of cars;
- the contractual obligations of the GSS to passengers; and
- the contractual obligation of passengers travelling with the GSS.

With respect to the above, special attention may be paid to the provisions of the Athens Convention to supply guidelines on the international standards for the commercial carriage of passengers.

Insurance coverage for the vessels should also be adequate to cover all operating risks. Protection of risks against the vessel and its equipment would be covered by H&M Insurance while the range of risks relating to passenger and crew claims and other problems would be covered by P&I Insurance. The facilities on the vessels which are especially exploited to generate revenue may also be separately covered by suitable policies.

It has also been emphasized that adequate attention must be paid to vessel care and maintenance both in terms of physical repairs and upkeep, that is by scheduling systematic surveys, drydocking, inspections, overhauls and so on.
This document has sought above to establish that the management structure of the GSS can cater to and epitomize all policy concepts and operational strategies which the Government may wish to define through the creation of specialist divisional functions, as well as through the establishment of a reliable network of interdependencies with support agencies.

The comprehensive management structure to fulfil this principle comprises the following components:

(a) the Managing Director - who would be charged with the overall supervision and responsibility for the day to day functions of the GSS, and supported directly by a Secretary.

(b) the Technical Department - allocated all technical management, onboard safety and maintenance tasks;

(c) the Administrative Department - responsible for finance, personnel policy, manning both shipboard and shore-based, legal and claims as well as routine administrative functions; and

(d) the Commercial Department - which would control the gamut of commercial services associated with marketing and operations.

The Maritime Services Division of the Ministry of Works and Infrastructure, and the PATT would be the key agencies offering support services to the management in terms of general legal, training and safety policy, and port related functions, operational safety and technical management respectively.
Operating strategies would be centred on executing policy objectives in each department. Where unfamiliar strategies or systems are to be initiated, staff may require upgrading training which could be effectively offered by the government agencies and departments outlined at Chapter 4.5.2.

Government may also specifically wish to explore the feasibility of introducing computerized operations at the GSS, in view of the overall benefits to operating efficiency of the Service which can be accrued by the institution of such systems.

Sufficient planning and analyses would naturally be expected to precede any major operational activities both to predict customer reaction and to project the scope of implementation to be offered by the GSS.

Lastly, the success of all strategies would depend on public awareness and reorientation. The public should be sensitized to regard the GSS not only as a vehicle to and from Scarborough and Port of Spain, but also as a naturally comfortable, convenient, reliable and pleasant travel option. Successful marketing and promotional strategies should be aimed at specific target groups to maximize customer participation of the range of services to be offered by the GSS.

All considerations herein described will depend on the smooth communication flow and the appreciation of the business philosophy among all agencies involved in the provision of the ferry service.

In addition, the three main protagonists already
documented, that is the vessel, users and employees must mutually co-exist and complement each other for the overall success of the organization.
## Appendix I: Basic Facts on Trinidad & Tobago

<table>
<thead>
<tr>
<th>Location of</th>
<th>In the Caribbean Sea - Southernmost of eastern of Caribbean Islands; 11 Km from Venezuela. Tobago is 32 Km NE of Trinidad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1.217 million - Trinidad approx. 1 million; Tobago 0.2 million</td>
</tr>
<tr>
<td>Area</td>
<td>Trinidad - 80 Km x 59 Km; Tobago - 41 Km x 12 Km; Combined State 5,128 Square Km</td>
</tr>
<tr>
<td>Capital</td>
<td>Trinidad and Tobago - Port of Spain; Tobago - Scarborough (capital city)</td>
</tr>
<tr>
<td>Government</td>
<td>Republic; Parliamentary democracy</td>
</tr>
<tr>
<td>GDP</td>
<td>TT$ 15,932,800,000 (1987 prices)</td>
</tr>
</tbody>
</table>

**Balance of Payments**

<table>
<thead>
<tr>
<th>Exports</th>
<th>TT$ 4,401,600,000 (Jan/Oct 1987)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td>TT$ 3,397,800,000 (Jan/Oct 1987)</td>
</tr>
</tbody>
</table>

**Trade Surplus:** TT$ 1,003,600,000

**Exchange Rate:** TT$ 4.25 = US$ 1.00

**Labour Force:** 472,064 (Dec 1986)

**Employment:** 387,866 (Dec 1986)

**Unemployment:** 17.8%

**Economy:** Petroleum 154,779 bl/day (1987 average)

Petroleum base products: - ammonia (world's second largest exporter), methanol, urea.

Agriculture: sugar, cocoa, coffee, citrus.

Asphalt

Tourism(1): approx 312,603 visitors (1987)

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Source: Lloyd's List - Thursday Jan 14th, 1988

Seatrade - North American Yearbook, 1986

(1) Derived from January/August 1987 Travel Statistics from CSO, Trinidad and Tobago and includes temporary halt passengers from mainly cruise ships.
Appendix II Organization Structure of the Port Authority of Trinidad & Tobago
Appendix III A

Organisational Chart – Government Shipping Service – P.O.S. 1987

Shed Manager

- Assistant Shed MGR. (Quay)
  - Assistant Gen. Foreman
    - Foreman Ship & Quay
      - Sub Foreman (Ship)
      - Sub Foreman (Quay)
      - Sub Foreman (Rea./Del.)
      - Sub Foreman (Cont.)
        - Stuffing Gang (8 men)
        - Stuffing Gang (8 men)
        - Delivery Gang (4 men)

- Assistant Shed MGR. (Admin.)
  - Sr. Cl. Officers (Muster) (4)
  - Junior Clerical Officers (8)
    - Ship Gang (5 men)
      - Messenger/Cleaner (1) / (1)

- Principal Officer (Passages & Fr.)
  - Dept. Clerk Class I
    - Dept. Clerk Class II
      - Messenger/Cleaner
Appendix IV:
Series of Air and Sea Traffic between Trinidad and Tobago
1986 and 1987

<table>
<thead>
<tr>
<th>Air</th>
<th>Sea</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To-Tr</td>
<td>Tr-To</td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAN:</td>
<td>19125</td>
<td>18667</td>
</tr>
<tr>
<td>FEB:</td>
<td>18424</td>
<td>19143</td>
</tr>
<tr>
<td>MAR:</td>
<td>17165</td>
<td>19874</td>
</tr>
<tr>
<td>APR:</td>
<td>26336</td>
<td>25360</td>
</tr>
<tr>
<td>MAY:</td>
<td>17523</td>
<td>18526</td>
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<tr>
<td>JUN:</td>
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<td>16934</td>
</tr>
<tr>
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<td>20631</td>
<td>22568</td>
</tr>
<tr>
<td>TOT:</td>
<td>250560</td>
<td>254330</td>
</tr>
</tbody>
</table>

|      | To-Tr             | Tr-To      | Tr-To |
| 1987  |                   |            |       |
| JAN:  | 23055             | 20920      |       |
| FEB:  | 18056             | 19025      |       |
| MAR:  | 19707             | 20972      |       |
| APR:  | 21482             | 26476      |       |
| MAY:  | 15596             | 16652      |       |
| JUN:  | 19551             | 20045      |       |
| JUL:  | 26015             | 26790      |       |
| AUG:  | 28090             | 27025      |       |
| SEP:  | 16060             | 16564      |       |
| OCT:  | 19951             | 20693      |       |
| NOV:  | 19197             | 16580      |       |
| DEC:  | 18403             | 17946      |       |
| TOT:  | 245163            | 250905     |       |

Key: To-Tr: Tobago to Trinidad; Tr-To: Trinidad to Tobago
Introduction and Summary

Merchant Shipping is a specialised and technical business. Its complexity has been increased during the last ten years by the extensive new Conventions developed by the International Maritime Organisation (IMO)* and the International Labour Organisation (ILO), designed to improve safety and social conditions. But regulation - including the recent emergence of port state control - can only go part of the way to achieving the objective of safe and pollution-free shipping. In the end - while the Master is clearly responsible for the direct operation of the ship - the overall responsibility lies with the shipping company.

The purpose of this Code is to provide a broad framework of good practice against which management in companies operating ships may gauge their own organisation and procedures. Its contents are drawn from the best management practices of a number of different companies represented in the International Chamber of Shipping (ICS) and the International Shipping Federation (ISF). It is intended solely for voluntary use, either as a check-list or as a framework for reviewing company methods. Parts of the Code may not, of course, be appropriate for a particular company.

SAFETY and EFFICIENCY are integral to good management. They can only be the result of structured, painstaking policy and a combination of the right skills, knowledge and experience. The direct involvement of decision-taking management in these matters is vital. The attitude of an Owner and/or senior management is reflected in company policy and thus directly in the work of all the company employees. THE INITIATIVE MUST THEREFORE COME FROM THE TOP.

* formerly IMCO
Adherence to the recommendations in this Code also makes sound commercial sense. By meeting at least the basic minimum standards a company will ensure that its ships are available for trading to the maximum possible extent. Time lost - through accidents, avoidable damage, correcting deficiencies detention, or crew unrest - means more expense and less business.

The major recommendations are that:

While the Master and the crew have direct responsibility for the technical and safety aspects of ship operation, every company operating ships should establish a department or at least designate a person ashore, responsible for those aspects of the operations from the shore standpoint. The person(s) involved should have knowledge and experience of the basic technical aspects of the ship (e.g. structure, equipment, documentation, etc.) and of the relevant national and international regulations. The existence of such a department or person does not, however, relieve senior management of responsibility for safe and efficient operation.

Safety and operational practice should be a regular item for discussion at management meetings at all levels. Policy on these issues should be clearly defined and made known to employees.

Management should ensure that shore-based personnel are aware of - and provide for - the needs of the Master and shipboard personnel, in regard to the safe and clean operation of the ship.

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Management should ensure that there is a sufficient number of crew on board to operate the ship and any specialised equipment carried. The crew should be medically fit, properly trained and qualified to perform the tasks required of them.

There should be regular and effective two-way communication (1) between shore-based and shipboard staff and (2) between management (including senior management) and employees ashore and at sea. This should cover company policy on safety and operating practice.

Proper arrangements should be established for use in the event of an emergency involving the ship. These should seek to ensure an effective and level-headed response to the incident both by the crew on board and by the shore-based staff.

Management should review its overall approach to the matters covered by this Code on a regular basis.
This Code, by its nature, covers matters which are not appropriate for regulation. It is intended as guidance for all companies operating ships and does not seek in any way to define or embrace detailed statutory requirements, national or international. It is taken for granted that such requirements have to be complied with.

The guidance can only be expressed in broad terms if it is to have widespread application. Clearly, different levels of management, whether shore-based or at sea, will require varying levels of knowledge and awareness of the items outlined. Persons responsible for particular areas should have more detailed and specialist knowledge of their specific tasks. This Code seeks to provide a framework only.

While the Code is addressed to shore-based management, it is recognised that on board the ship it is the Master (as agent of management) who has the overriding responsibility for the safe operation of the ship. Consequently, a number of the activities recommended may well be delegated to him. It is therefore for management to appoint a Master who is fully conversant with and dedicated to the maintenance of appropriate safety standards, and to ensure that all necessary support is given to him by the shore-side organisation in the performance of his duties.

1. TECHNICAL ASPECTS OF SHIP OPERATION

1.1 Strong commitment to safe ship operation and prevention of pollution should be a paramount principle for management and all serving on board ships. If that principle is to be translated into practice, a proper organisation is necessary, in order to ensure a consistent approach both to the care of the physical state of the ship and also to the manner in which
it is operated. While the Master and the crew have
direct responsibility for the technical and safety
aspects of on-board ship operation, a department
or suitably-experienced person ashore should be
made responsible for those aspects from the shore
standpoint.

1.2 Management - through the responsible department
or person - should ensure that the following are
all in order and should be familiar with the
technical aspects of:

1. the structure and stability of the ship, and the
   safety-related equipment on board;

2. specialised equipment carried, particularly
cargo-handling systems and navigational aids;

3. documentation required to be on board, either
   because it attests that the ship is up to
   recognised standards (e.g. certificates of survey
   crew certificates, etc.), or because it is
   necessary for the safe and proper operation of
   the ship (e.g. charts, guides, manuals). Care
   should be taken to ensure that documentation is
   up-to-date.

Where some of these responsibilities are delegated
to the Master, management should give him full
support in carrying them out.

1.3 Safety and operational policies should be clearly
defined and publicised to all employees. They
should be raised as a regular item for discussion
both at management meetings ashore and at safety
meetings on board.

2. SHORE-BASED PERSONNEL

2.1 Management should ensure that the relevant shore-based
personnel:
1. are aware of the basic technical aspects of the ship and its operation (as in 1.2) and are prepared to respond to the technical and operational needs of the shipboard personnel at all significant decision stages, e.g. from ship design/ordering to actual day-to-day operation;

2. Provide for a full and free exchange of information between shore and ship, particularly on any relevant navigational or operational matters, new technological developments, overall ship safety and personal safety;

3. understand fully the implications of commercial decisions, in terms of the safety of the ship and the possible effect on the marine environment;

4. make adequate provision for crew members' well-being e.g. proper accommodation and recreational spaces, proper catering arrangements, and medical care;

5. regularly review procedures to ensure compliance with all the items in this Code.

3. SHIP-BOARD PERSONNEL

3.1 There should be a clear and planned approach to "personnel" matters concerning the crews employed on ships operated by the company. It is a direct management responsibility to provide ships with qualified and reliable seafarers and to give them additional training if required.

3.2 Specifically, management should ensure that the crew members:

1. are sufficient in number to perform the tasks required of them, bearing in mind the basic principles and guidance contained in IMO Resolution A.481 (XII) and the need for proper duty/rest periods. (Allocation to specific tasks on board should remain the responsibility of the Master);

2. are medically fit and have the requisite basic qualifications and experience in accordance with the Convention (STCW) and Resolutions adopted by the IMO
Conference on the Training and Certification of Seafarers in 1978;

3. have a proper knowledge of the technical aspects of the ship and its operation as necessary for the performance of their duties (as in 1.2);

4. receive any necessary additional training, either in company procedures, or for familiarisation with the particular ship or equipment;

5. continue at regular intervals to receive information, and where necessary training, in order to bring them up-to-date with new technological and other developments;

6. maintain close communication with the shore-based personnel on any relevant navigational or operational matters;

7. are provided with up-to-date navigational and other documentation in a language or languages fully understood by the crew;

8. are regularly reminded of the need at all times for safe and clean ship operations, and for personal safety on board.

3.3 Where the Master finds that the points listed in 3.2 are not satisfactorily covered, for whatever reason, it is important that he take corrective action and/or raise the matter with management, as appropriate.

4. EMERGENCY PROCEDURES

4.1 It is important that the authority of the Master to take action in the event of an emergency involving the ship should not be compromised. Proper arrangements should be established which ensure an effective response to the incident, both by the crew on board and by the shore-based company organisation.

4.2 Management should ensure the development of:
1. proper on-board emergency procedures, including regular and realistic drills;

2. proper emergency back-up systems ashore, including an effective machinery for responding to the emergency;

3. proper procedures to be followed both by ship and shore personnel concerning calls for outside assistance, including particularly the engagement of salvage services;

4. reporting-back arrangements for all emergencies and near-emergencies;

5. a system which will enable an incident to be assessed properly and any lessons to be learned.

4.3 Management and the Master should ensure that the procedures outlined in 4.2 are fully understood and adhered to.

5. COMMUNICATIONS

5.1 It is important that management, including senior management, regularly communicates with sea-going employees. Management representatives should visit each ship from time to time in order to review practices and procedures on the spot. Seminars and briefings for appropriate personnel might also be organised.

5.2 The objective should be to "motivate" sea-going employees by providing information in clear, digestible form on a regular basis - not just during a crisis. The information should cover company policy on safety and operating practice, and conditions of employment. It is essential for a climate of mutual trust to be built and maintained.

5.3 Management should develop effective two-way communication between shore-based and shipboard personnel; and should ensure that technical and company information passed to the ship is properly disseminated and reactions obtained.
6. GUIDANCE

6.1 In parallel with the growing number of regulations, an ever increasing amount of guidance to companies operating ships is becoming available in one form or another. This creates considerable difficulty for companies in keeping abreast of the paperwork which is published.

6.2 In terms of national legislation, management will need to be familiar with the relevant legislation and guidance in (1) the flag state and (2) states and ports visited by the ship.

6.3 Internationally, management should be familiar with the basic contents of the accepted "package" of international instruments. This includes such Conventions/Protocols as SOLAS, Load Line, MARPOL, Collision Regulations, ILO Convention 147, and STCW. A brief resume of the various conventions and instruments — and their inter-relation — is given on the back page.

6.4 Also of direct importance to management is the guidance issued by national and international industry organisations, both in regard to general operational practice and to specific technical detail. These include technical guides concerning ship operations, navigational checks-lists, etc.
APPENDIX VI  Phased procedures for vessel acquisition

- Arrange financing
  - Economics
- Outline/Define needs
  - Objectives
- MANAGEMENT
  - Appoint coordinator
  - Project team
    - Motivate
    - Appoint coordinator
  - At office
    - From charter dept. — Supervisor
    - From operation dept. — Master
    - From technical dept. — Chief engineer
  - At yard
    - Approve yard/contractor
      - Letter of intent
      - Sign contract
      - Approve formal take-over

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<th>Planning phase</th>
<th>Pre-acquisition phase</th>
<th>Post acquisition phase</th>
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<td>Feasibility study</td>
<td>Submit/Obtain blue prints</td>
<td>Supervise guarantee works</td>
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<td>Co-op with class. society</td>
<td>Submit/Obtain detailed specifications</td>
<td>Discharge yard of obligations</td>
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<td>Develop first proposal of adequate tonnage</td>
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<td>Specification</td>
<td>Revise contract details</td>
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<td>Adjustment of proposal</td>
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<td>Co-op with class. society</td>
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<td>Submit concrete proposals to management</td>
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<td>Invite yard tenders</td>
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<td>Evalulate yard tenders</td>
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<td>Enter into tender negotiations</td>
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<td>Periodic reports of progress</td>
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