CHAPTER ONE
INTRODUCTION

1.1 BACKGROUND

From the beginning of human history, we have needed to transport goods not only for economic reasons but also for several scenes since the ancient age. In wartime, the logistics, which supplied food and facilities for maintaining the front, was one of the important elements to win. Nowadays, there are several manners of transportation to choose from such as truckage, air freight and marine transportation.

Though transportation by ship is one of the oldest means, it surpasses the other transportation methods in terms of shipping cost and capacity. Therefore, marine transportation is the best choice for international trade nowadays. According to the statistical report from Ministry of Communications, sea freight played a vital role in Thailand's imports in aspects of both value and quantity between 1998-2005. It was around 62 - 68% of total and around 200% when compared with airfreight. Meanwhile, in the aspect of quantity, almost all of the Thailand's shipments were imported via sea freight (around 95 – 99% of the total). Similar to the other manners, import by sea freight was increasing every year (between 102 and 126% in value). Although there was a decrease in quantity in 2002, the import volume also grew rapidly after that.

Table 1. Value of Thailand's import during 1998-2005 (unit = million Baht)

Manner	1998	1999	2000	2001	2002	2003	2004	2005
1.Sea	1,200,242	1,222,320	1,542,787	1,698,750	1,740,647	2,027,082	2,547,825	3,201,678
2.Air	545,656	622,592	884,110	975,134	938,584	1,003,785	1,107,574	1,359,152
3.Truck	26,260	50,667	60,821	51,549	61,714	79,571	102,379	130,920
4.Post	844	11,821	1,802	1,991	1,956	2,201	2,476	2,580
Total	**1,773,002**	**1,907,400**	**2,489,520**	**2,727,423**	**2,742,901**	**3,112,639**	**3,760,254**	**4,694,370**

Source: From http://www.news.mot.go.th/motc/portal/graph/index2.asp (2007)

Table 2. Quantity of Thailand's import during 1998-2005 (unit = 1,000 tons)

Manner	1998	1999	2000	2001	2002	2003	2004	2005
1.Sea	56,060	67,516	69,918	87,975	75,547	80,624	89,476	107,905
2.Truck	551	1,240	1,566	1,899	1,846	3,136	3,261	3,428
3.Air	245	436	1,791	489	727	473	490	914
4.Post	2	4	113	176	307	1	1	1
Total	**56,858**	**69,196**	**73,388**	**90,538**	**78,427**	**84,234**	**93,228**	**112,247**

Source: From http://www.news.mot.go.th/motc/portal/graph/index2.asp (2007)

Though it is popular, marine transportation has more risks than other methods such as truckage and air freight. Hughes (1989, p.192) reports that ocean vessels have a terrible casualty percentage when compared with aircraft because its average total loss rate was around 0.5% during his 10-year records. However, for the statistic of damage on imported cargo in Thailand, data from Department of Insurance shows that the percentages of damage under Thai marine insurance companies were around 0.012 to 0.018% during the past 4 years.

Table 3. Percentage of damage to the imported cargo under marine insurance companies in Thailand, 2003-2006 (Unit = million Baht)

Year	2003	2004	2005	2006
Imported Cargo (Insured value)	4,061,501.711	4,524,804.503	4,907,635.326	7,144,892.169
Damaged Cargo (Claim value)	721.428	730.324	796.798	878.937
Percentage	0.018%	0.016%	0.016%	0.012%

Note. Modified from http://www.oic.or.th/stat_data/eng-version/eStat_of_Non-life_Yearly.htm (2007)

Since this marine insurance includes all modes of transportation (air, sea and land) and the insured value is normally higher than the real imported value in Table 1, we do not know the exact percentage of damage from sea transportation in Thailand.

Moreover, not all imported shipments had insurance and some of the insured cargo may not be claimed against insurance due to small amount of money.

Nevertheless, according to Table 1 and 3, it is roughly estimated that Thailand has lost at least 100 million Baht each year for the damaged cargo under sea transportation. We had lost a chance to consume these imported cargoes domestically as well as the opportunity to use them as main material for production and further export. At the same time, the statistics in Thailand did not present causes of damage to these claims.

1.2 STATEMENT OF THE PROBLEM

From the background described, the questions that arise are as follows:

1.2.1 What are the major causes of damage to the cargo during marine transportation?

1.2.2 What is the percentage of damage from sea transportation in Thailand?

1.2.3 How can the standard of transportation and cargo receiving be improved?

1.3 OBJECTIVES OF THE STUDY

This study would give some benefits to the relevant parties by providing the following objectives:

1.3.1 Main Objective

1. To find the major factors causing damage to shipments.
2. To find an understanding and carefulness of the relevant parties to the shipment.

1.3.2 Sub Objective

1. To improve the standard of transportation and receiving.
2. To give some basic information to the insurance companies for their further study on loss prevention and recovery action.

1.4 DEFINITIONS OF TERMS

Definitions of terms of this study are the following:

Definition of parties involved in marine transportation

1. Shipper & packing company – the beginning of marine transportation, the party who packs and sends the cargo to the carrier.

2. Shipping line / the carrier – the party who is hired to carry goods through maritime channel.

3. Port – the authority who has a place where the ship and or/merchandise is cleared inwards or outwards such as Bangkok Port, Leam Chabang Port, etc.

4. Inland Carrier – the party who receives the goods from port and uses truck or barge as inland transit vehicle for transportation to the final destination domestically.

5. Consignee – the final destination of marine transportation i.e. factory or rental warehouse of the cargo's owner/buyer who is the receiver of the goods.

Terms of Container Transportation

CFS/CFS (Container Freight Station/Container Freight Station) Container is vanned at Container Freight Station of the loading port and will be devanned at the Container Freight Station of the unloading port. The shipper agrees to send their cargo to the shipping line (carrier) at the loading port. As the quantity of cargo from one shipper is less than the container load, the carrier will count and van the cargoes of many shippers under their responsibilities. After that, the cargoes of many shippers (and many consignees) will be devanned at the designated port under the carrier's responsibility.

CY/CY (Container Yard/Container Yard) Container is delivered from one yard to another or other yards. The cargo is vanned by the shipper and devanned by the consignee. In this case, the shipper will haul the container to their warehouse for vanning. After completion, the vanned container will be sent back to the shipping line for further sea transportation. When the container arrives at the designated port, the shipping line will send it to the container yard. Then the consignee can choose whether to haul it to their warehouse or devan it at port by their own responsibility. So, when there is any damage to the cargo, the shipping lines will reject their responsibilities by referring the wording in Bill of Lading that "shipper's load & count".

1.5 SCOPE OF THE STUDY

This research study is a cross-sectional study to find out the main causes of damage to imported cargo during marine transportation. It aims to collect information from local consignees, mostly in the Industrial Estate via a 5-point scale questionnaire of Likert Scale, part of which includes closed-ended and open-ended question.

1.6 SIGNIFICANCE OF THE STUDY

The study of causes of damage to the imported cargo during marine transportation will be beneficial as follows:

1.6.1 It would be beneficial for the relevant parties who want to decrease damage to the imported cargo such as consignees, cargo owners and cargo insurers.

1.6.2 The results of the study will also help our country, as well as our world, as we can use natural resources with full utility and without waste.

1.7 ORGANIZATION OF THE STUDY

The study of causes of damage to the imported cargo during marine transportation in this paper is divided into five chapters.

The first chapter is an introduction which includes background, statements of the problem, objectives of the study, definitions of terms, scope of the study, significance of the study and organization of the study. The second chapter is the review of literature. The methodology is presented in the third chapter. The fourth chapter provides the results. Finally, the last chapter presents the summary of the study and findings, the discussion of the results as well as the conclusion.

In the appendix, the questionnaire employed as a research instrument of this study is provided in both Thai and English version.