Analyzing Freight Forwarder Performance How Well Does Yours Stack Up?

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Freight forwarder operations are some of the most difficult links to manage in the international distribution channel. However, analyzing freight forwarder operations is a task which can enlighten logistics managers. This article describes such an analysis which was conducted by an international liaison officer who discovered several interesting features of the performance of two freight forwarders. Using simple analytical tools, this article shows how logisticians can measure the performance of freight forwarders and how the analysis may be used to make improvements in international distribution channels.

INTRODUCTION

One of the most critical links in an international distribution channel is the agent who arranges for the physical movement of goods from the supplier to the country of destination. For those countries involved in the United States security assistance program, freight forwarders perform these tasks and play a significant role in the total international distribution channel. They provide the links which connect the suppliers, usually the United States military departments or one of their contracted suppliers, with countries which do business with them. The various services which freight forwarders provide depend on the provisions of the contractual agreements between customer countries and individual forwarders. These services, which form the basis of a legal contractual agreement, range from the simple collection of shipments to the complex tracking and transportation scheduling of material for onward shipment to the foreign country. It is important to carefully manage the international distribution channel because the time it takes to move equipment, supplies, and spare parts from the source of supply to the final user establishes the pipeline time used in setting stock levels. Generally, longer pipeline times require more items in the supply system to satisfy operational requirements. If the pipeline time can be reduced, significant savings, in both time and money, may be realized.[1] Improving the effectiveness of the freight forwarder is one way which can often help reduce the pipeline time.

Most security assistance countries use the services of forwarders, but they seldom perform analyses to evaluate how well a particular forwarder is performing. It is important to periodically assess the performance of the forwarders to determine if they are complying with the terms of their contractual agreements. This paper looks at one study of freight forwarder operations and presents the results of that analysis.

[1]Blanchard, Benjamin S., *Logistics Engineering and Management* (Third Edition), Englewood Cliffs NJ, Prentice-Hall, Inc., 1986, p. 57.

A CASE STUDY

As part of his Air Force Institute of Technology master's degree program, Lt Col Te-chun (David) Huang completed a research project which analyzed the performance of the freight forwarders used by the Taiwan Air Force (TAF) in its security assistance program. The TAF uses two forwarders, one located on each coast of the United States, to ship material from the U.S. military services to Taiwan. The study examined material flow times in each link of the distribution channel to determine if there were differences in the operations of the forwarders, other than differences related to their physical locations, which could account for performance variations in the delivery of goods to the TAF.

The study began with the collection of data on 420 cases involving the shipment of goods through freight forwarders to Taiwan. For each case, flowtimes were recorded for every link in the distribution channel. Approximately 86 percent of the cases (360) moved through a Los Angeles freight forwarder, and the remainder (60 cases) were handled by a freight forwarder located in New York. Those items originating at the New York freight forwarder were shipped to the Los Angeles forwarder for consolidation and onward shipment. From Los Angeles, shipments went to one of two ports in Taiwan. When shipments arrived in Taiwan, they were shipped by land to their final destination (i.e., user). Flowtimes for each link in the channel were obtained using the Security Assistance Management Information System (SAMIS) located in the Air Force International Logistics Center, and also from receiving/shipping records in Taiwan. The distribution channel studied is shown in Figure 1.

FINDINGS FROM THE STUDY

This study looked at the entire international distribution channel and found problems, of varying magnitude, in many of the links. For example, it was found that in some cases the source of supply caused a delay in shipment because it did not provide the freight forwarder with complete information on the delivered item.[2] Problems were also encountered by the New York forwarder when not enough material was received to consolidate into a full shipment container. This caused delays in onward shipment which could have been prevented through different scheduling of the contract carrier.[3]

Other problems surfaced in the study which showed that on the average, items shipped through the New York forwarder took over six weeks longer to reach their destination than did those shipped from the Los Angeles forwarder. Differences in physical location were not the principal cause for this disparity since the additional time required to ship from New York to the West Coast averaged only 15.6 days.[4]

Some of the problems unique to the New York operation were: 1) lack of sufficient personnel which caused shipments received to go unrecorded until several days after receipt; 2) when materiel was received without proper documentation or with incomplete documentation, the forwarder failed to obtain relevant data in a timely manner; 3) minor problems tended to be protracted when resolution could have been made more quickly; 4) not all items were handled on a first-in, first-out basis; and 5) decisions on when to ship other-than-full containers caused delays. The combination of these management practices caused increased pipeline times at the New York forwarder and were not as prevalent at the West Coast forwarder.[5]

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[2]Huang, Te-chun, *Analysis of the Republic of China Air Force FMS Distribution System*, unpublished thesis, Air Force Institute of Technology, Wright-Patterson AFB OH, 1989, p. 88.
[3]*Ibid.*, p. 89.
[4]*Ibid.*, p. 33.
[5]*Ibid.*, pp. 81-83.

FIGURE 1
Taiwan Air Force FMS Distribution System

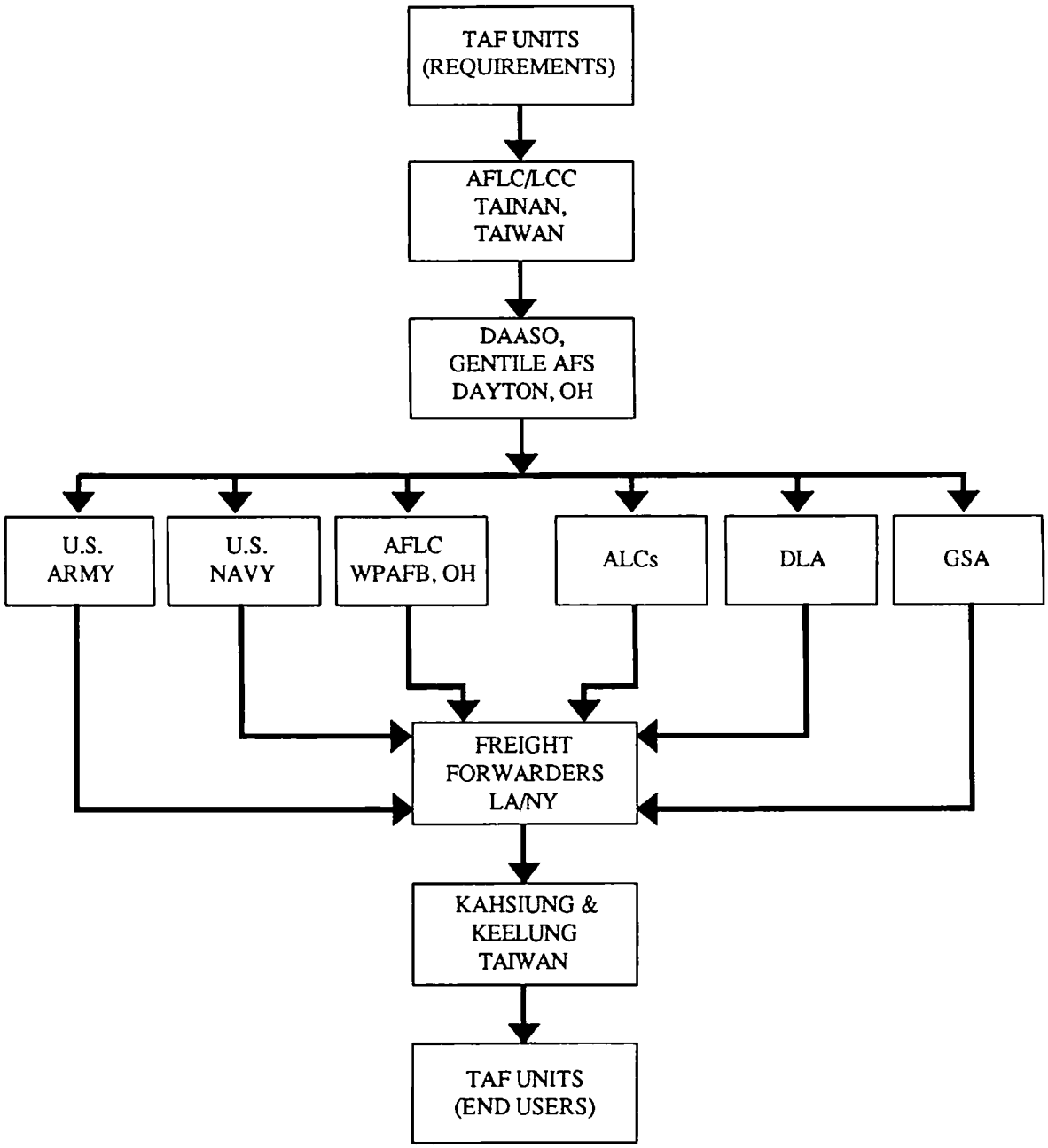
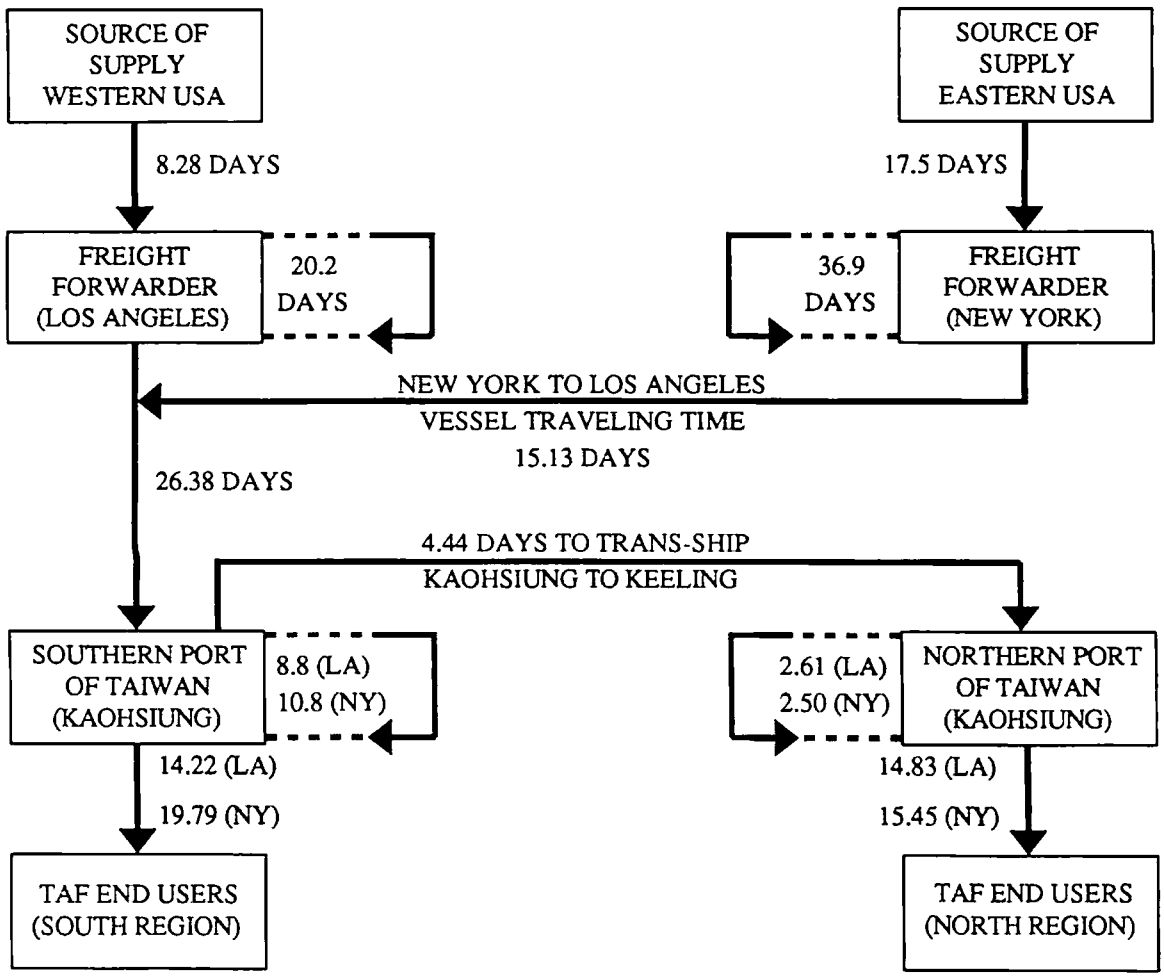


Figure 2 shows a complete breakout of flowtimes. The most disturbing findings, and the thrust of this paper, involved problems related to internal operations within the freight forwarder's organization which were not caused by any outside source. The study showed that during the period under study, the freight forwarder had not complied with the provisions in the contractual agreement concerning shipment times through the forwarder, and that although stipulated in the contract, no penalties were assessed against the freight forwarder for non-performance. These sorts of problems can be corrected fairly easily, and if corrected, should substantially improve the performance of the freight forwarder's distribution link.

FIGURE 2
Shipment Flow Times



AVERAGE SHIPMENT TIME
FROM NEW YORK = 95.5 DAYS
FROM LA = 56.82 DAYS

IMPLICATIONS OF THIS STUDY

Security assistance countries are responsible for selecting their own freight forwarders. By law, the United States military is not involved in the selection process. The contractual agreement is made between the forwarder and the country and contains provisions which, in theory, provide the services each country deems necessary. In many cases, the selection of freight forwarders is made from a political base, but often that selection is made by the competitive marketplace. Countries are free to negotiate for the services they feel will best accomplish their mission for a given compensation. [Editor's note: additional information on this selection process is contained in the Defense Security Assistance Agency (DSAA) pamphlet, *Foreign Purchaser Guide to Freight Forwarder Selection*, which is available from DISAM/DIR.] It is imperative that countries monitor and evaluate these services to ensure they are receiving the services for which they are paying. The United States military is also affected by the selection and effectiveness of security assistance freight forwarders. The heart of the security assistance program is built on mutual defense

capabilities. Through cooperative agreements, both countries agree on what items will be supported and at what levels these items should be stocked. Acting as a single system, these agreements in many cases provide both the United States and the participating country the benefits of quantity purchase discounts. However, as discussed earlier, the pipeline time needed for replenishment affects the stockage policy. Therefore, the effectiveness of both country's distribution systems plays an important part in determining the amount of money needed for spare parts and supplies. If each distribution channel can be improved only slightly, significant savings may accrue to all countries involved.

The freight forwarder link in the distribution channel is an excellent area to evaluate in seeking improvements. Freight forwarder operations, unlike the operations of distribution systems in the United States and most countries, are relatively free of regulations and strict governmental control. The services performed are a function of the terms of the contractual agreements. It may be, as shown in this study, that forwarders are not performing at the level specified by their contracts. Each country should be fully aware of the terms and conditions of the contractual agreement with their freight forwarders. They should ensure their forwarder is living up to those conditions and agreements. If they are not, it may be time to search for a new freight forwarder who is willing and able to perform.

ABOUT THE AUTHORS

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Lt Col Te-chun Huang is the liaison officer for the Taiwan Air Force and is currently assigned to the HQ Air Force Logistics Command/International Logistics Center at Wright-Patterson Air Force Base, Ohio. As a part-time student, he completed his Master's degree at the Air Force Institute of Technology in 1989. Lt Col Huang has been a maintenance officer in the TAF and was a liaison officer to General Headquarters, TAF. He has had two other military tours in the United States.