

PERSPECTIVES IN SECURITY ASSISTANCE MANAGEMENT

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"THE COMMUNICATIONS REVOLUTION"
COMES TO FOREIGN MILITARY SALES LOGISTICS

By

MAJOR DAVID M. RIGSBEE, USAF
Assistant Professor

Defense Institute of Security Assistance Management

One of the weakest links in the Foreign Military Sales (FMS) system has always been the use of international mail systems as the primary media for the transmission of equipment/material requisitions and status documents. The resulting service, both slow and costly, has been the focus of a great deal of customer dissatisfaction. At last, a new (to FMS) system called DATAPHONE is bringing the communications revolution to FMS logistics, and is resulting in significant cost savings, increases in timeliness, and management improvements for the participating FMS customers.

Interest in improving logistics communications for FMS customers was stirred in 1975 when weapon system sales were increasing significantly over previous levels and the requirements for support were skyrocketing due to the greater complexity and sophistication of those systems. At that time, the U.S. Air Force Logistics Command (AFLC), in collaboration with the Defense Automatic Addressing System Office (DAASO), undertook a study to determine the extent of the problem by comparing various communications media, including the DOD Autodin System. The results of the 90 day study were staggering. Over half of mailed requisitions were at least 20 to 90 days old by the time they entered the DOD logistics process. Status reports returned by mail were at least 40 days old. For electrical communications media (AUTODIN), the figures dropped to an average of approximately four days. What did this mean then for the FMS customer using mail systems? It meant long delays in finding out if and when support items were going to be supplied, and it also meant significant amounts of extra money being invested in the logistics pipeline. The first point was obvious -- logistics managers were not in a position to know whether to upgrade priorities, seek alternative sources, or await the FMS shipment. The second point probably wasn't as obvious, at least to customers not familiar with or using some type of requirements computation system. Let us look at a very simplified example of how significant an expansion of the pipeline can be.

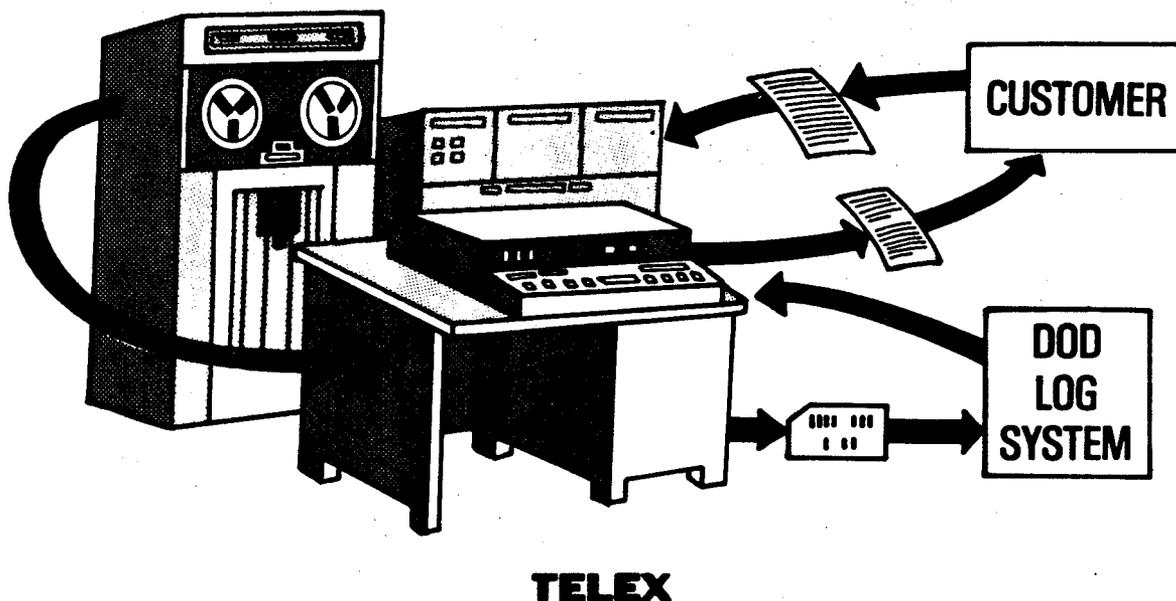
The FMS logistics pipeline consists of all the assets which must be funded by a purchaser to insure the flow of required material from the time of requisition preparation through to item consumption. If Country X was consuming 18 \$1,000 widgets per year, or approximately one every 20 days, then, based on figures from the AFLC study, the use of the mail system for requisition submission would add a minimum of 20 extra days to the requisition process; this then, would result in approximately one extra widget being required to fill the logistics pipeline and an extra \$1,000 investment required of Country X. Multiply this by thousands of different line items, and the potential savings begin to add up. Of course, there are many other factors to requirements determination besides communications time, such as maintenance self-sufficiency, procurement lead times, shipping time, and others. However, one principle remains: reducing communications time reduces required asset investment.

During the period of 1975-1976, communications and data processing were undergoing tremendous advances in capability and equally significant reductions in relative cost. The benefit of these developments were not overlooked by logisticians in industry, and companies of all sizes were increasingly using minicomputers to process and transmit their logistics documentation. The potential for practical application of similar systems to FMS logistics was clear, and in mid-1976, USAF authorized AFLC to explore the options and design a system, based on commercial practice, which would satisfy the FMS requirement. The result is really two compatible systems: one, TELEX, appropriate for customers with small amounts of FMS activity; and the other, DATAPHONE, capable of handling large amounts of logistics documents, as well as performing certain logistics management functions. But before we get too involved in system details, let us bring the historical view up-to-date.

The initial operational system using only TELEX was dubbed the International Logistics Support System (ILSS) and served customer air forces only. Recognizing the success of the ILSS and the need for a tri-service application, AFLC recommended that the Joint Logistics Commanders (JLC) consider a joint service communications system for FMS. In April 1979, the JLC recommended to JCS "the approval of the concept to develop a joint service communications system to support international logistics", and "that Defense Logistics Agency (DLA) be tasked to develop and implement the International Logistics Communications Systems." Final coordination on the expanded system is presently underway.

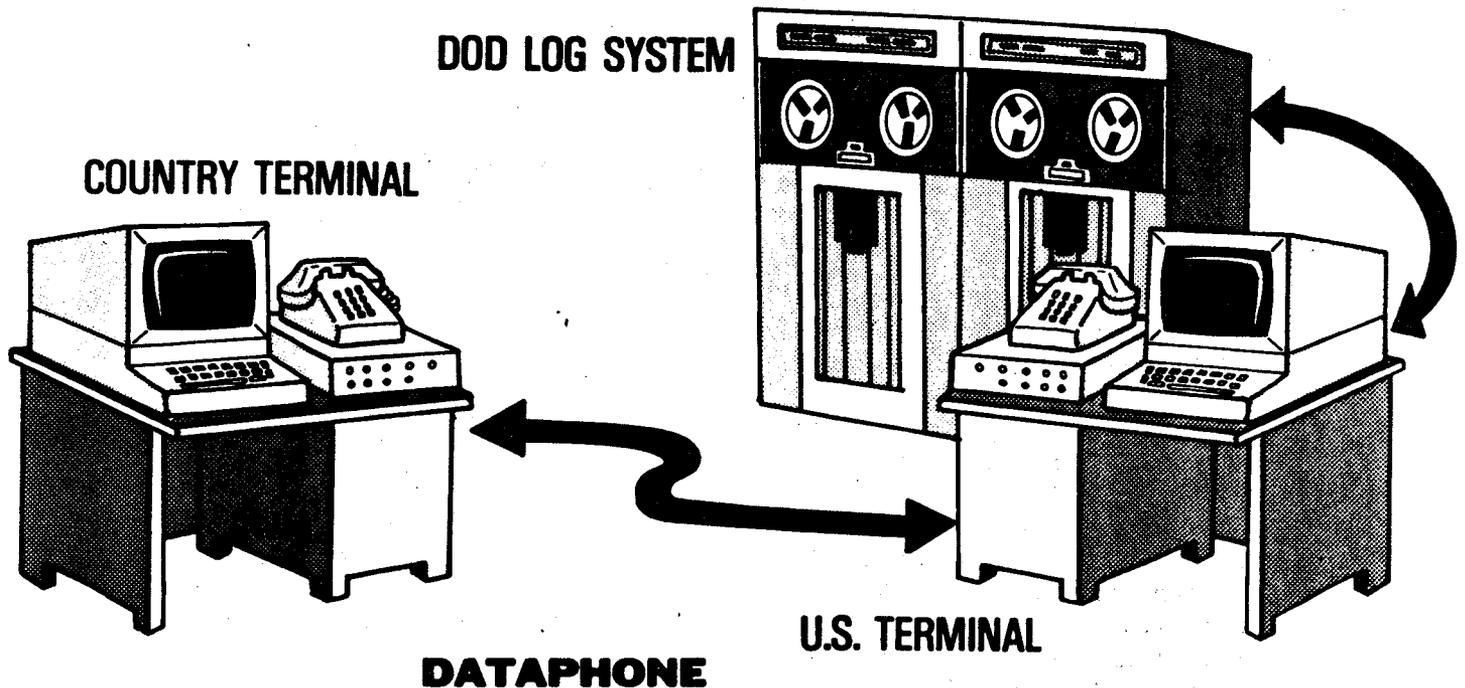
Now, what are TELEX and DATAPHONE and how do they work? TELEX as the name implies, uses standard commercial TELEX, just like those found in banks and hotels around the world. The using FMS customer prepares and transmits an especially formatted message containing as many as 32 requisitions. A small miniprocessor receives the message, converts it to a format compatible with DOD's AUTODIN system, and enters the customer's requisitions into the DOD logistics system. Status documents are returned to the customer via the reverse path. Customers lease the TELEX device and pay per minute use charges for

international transmission circuit time. A major drawback for TELEX is its slow operating speed (five lines per minute) which limits its total capacity. At \$3.00 per minute, TELEX becomes very expensive for the transmission of large numbers of documents.



DATAPHONE, in contrast to TELEX, operates at approximately 140 lines per minute. It consists of a dataset with telephone, coupled to an interface processor which can stand alone or be linked with a customer's existing computer. This results in a direct interchange of data with the Defense Automatic Addressing System (DAAS). At 140 lines per minute, system capacity is increased 28 fold over TELEX, and transmission costs reduced in a corresponding manner. In addition, because DATAPHONE has the expandable, stand alone data processor, it provides the capability for certain customers operating manual supply systems to automate some of their logistics management functions such as: inventory management, stock leveling, requirements forecasting, and others. More about these extra benefits will be said in future

Newsletters, as they are fully explored and developed. In essence, they are limited only by the logisticians creativity, imagination, and finances. Normally, DATAPHONE will pay for itself through savings resulting from reductions in the pipeline.



All logisticians working on both sides of FMS owe special appreciation to Mr. Larry Baldwin of AFLC who led the effort to develop these two systems for FMS use. Without his imagination and perseverance, FMS logistics would not be joining "The Communications Revolution". For more information on the International Logistics Communication System, contact Mr. Baldwin, HQ AFLC/DOI, Wright-Patterson AFB, Ohio 45433; AUTOVON 787-4958.

ABOUT THE AUTHOR

Major David M. Rigsbee has been a member of the DISAM faculty since June 1980, and serves as the Director of Asian Studies. He has had extensive experience in international logistics, and holds a Master of Science Degree in Logistics Management (Air Force Institute of Technology, 1975).