

THEME OF THE QUARTER

THE SAN ANTONIO AIR LOGISTICS CENTER'S ROLE IN SECURITY ASSISTANCE

BACKGROUND

San Antonio Air Logistics Center (SA-ALC) is a major participant in the U.S. Security Assistance Programs, particularly Foreign Military Sales (FMS). The services provided are in direct support of U.S. foreign policy. This article will give an overview of SA-ALC's role in FMS.

CHAIN OF COMMAND

The Department of Defense (DoD) dollar volume of FMS business would rank it in the top bracket on Fortune Magazine's list of the the 500 largest industrial corporations in the United States. In the DoD structure for security assistance, the Air Force Logistics Command (AFLC) with Headquarters at Wright-Patterson AFB, Dayton, Ohio is one of the primary players. The command provides direct support to all Air Force major air commands and operating agencies worldwide. In the international arena, the command is responsible for logistics support of aircraft weapons systems, including spare parts, support equipment, facilities and services for more than 60 FMS customers. Furnishing aircraft sold from the Air Force inventory is also one of its responsibilities.

The command's work is delegated to five air logistics centers, which fulfill the AFLC logistics role for weapon systems within their jurisdiction. The centers are strategically located at Robins AFB, Warner-Robins, Georgia; Tinker AFB, Oklahoma City, Oklahoma; Hill AFB, Ogden, Utah; McClellan AFB, Sacramento, California and at Kelly AFB, San Antonio, Texas.

When dealing with security assistance matters, the air logistics centers work with the International Logistics Center (ILC) at Wright-Patterson AFB, Ohio, the command focal point for the International Logistics program. (Note: Each ALC Directorate of Materiel Management has an established focal point for international logistics support. At San Antonio ALC, the Directorate of International Logistics serves as the systems manager for initial activation of FMS cases for SA-ALC managed weapon systems, and the Materiel Management Directorate provides follow-on support. Action is presently in progress to merge international logistics as a division into the Directorate of Materiel Management.)

BASE LOCATION AND HISTORY

The San Antonio Air Logistics Center is located on Kelly Air Force Base in San Antonio, Texas. San Antonio is a city rich in Spanish culture since its roots stem from the "mission era" when the area, which is now Texas, was under the rule of Spain and subsequently Mexico. San Antonio's stormy past is well remembered to this day. An armed revolt against Mexican domination

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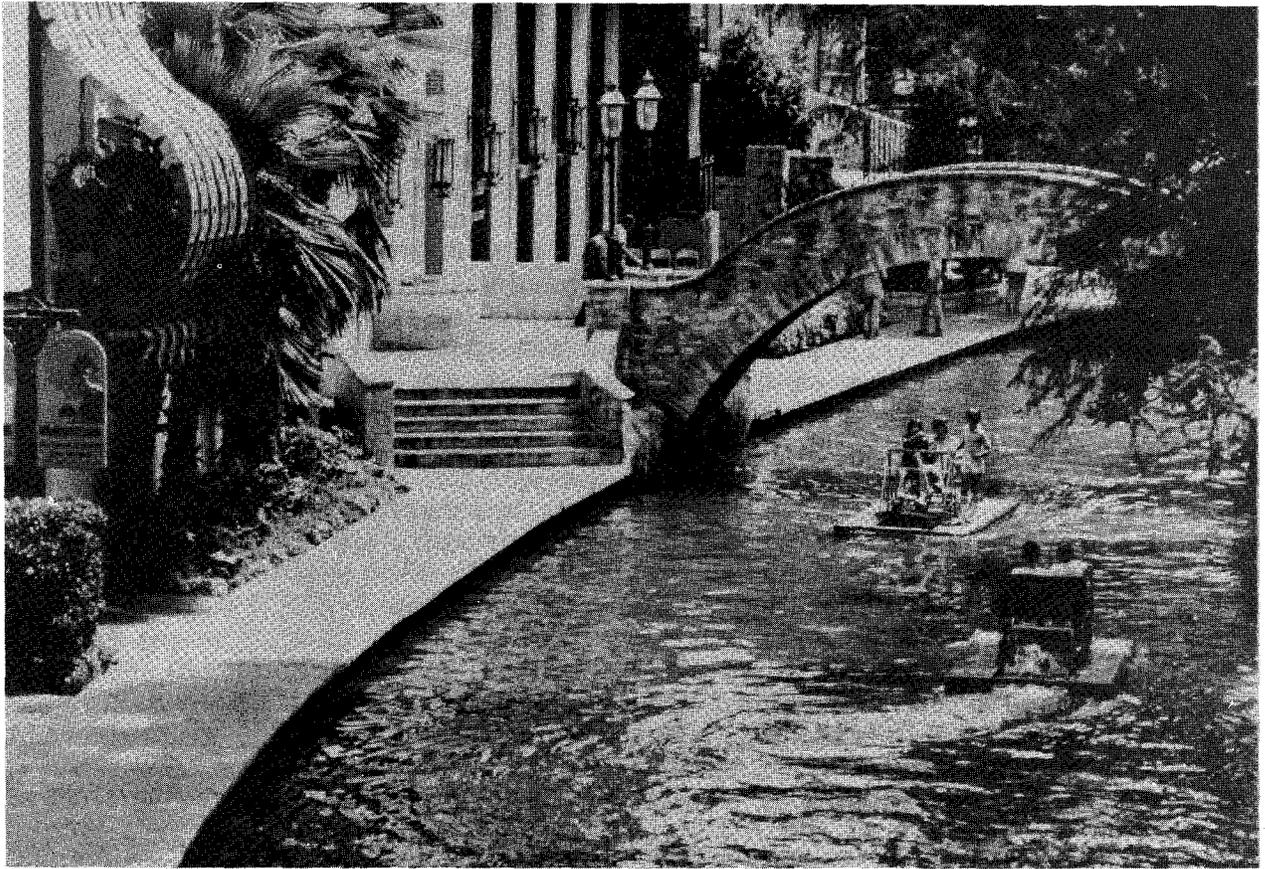
in December 1835 led to Mexican President Santa Anna's infamous attack on the "Alamo." The Alamo, part of Mission San Antonio de Valero established in 1754, still stands today and is open to visitors. San Antonio became part of the Republic of Texas following General Sam Houston's defeat of Santa Anna in March of 1836. Annexation of the Republic of Texas to the United States came in 1845.

San Antonio, the 11th largest city in the United States, is a picturesque combination of old world charm and modern city. It is often labeled as one of America's four unique cities mainly because of its predominately Spanish, Mexican, German and French influence on everyday life and the beauty of the San Antonio River Walk. This downtown river development features landscaped walkways, restaurants, hotels, and specialty shops.

The city has occupied a position of key importance in the Southwest since the Franciscans founded the Mission San Antonio de Valero. Today a two-billion-dollar agribusiness, high technology industry, tourism, and education, medical, and research facilities all play dynamic roles in the city's economy. Further, the city, whose population exceeds 750,000, is host to five military installations with a variety of missions -- Lackland AFB, Randolph AFB, Brooks AFB, the Army's Fort Sam Houston, and Kelly AFB.



San Antonio "One of America's Four Unique Cities" -- The downtown skyline of the nation's 11th largest city has changed considerably in recent years with the addition of several hotels and the Tower of the Americas. Now the third largest city in Texas, San Antonio has maintained its old world charm and international flavor. [Photo Courtesy: San Antonio Convention & Visitors Bureau]



Paseo Del Rio - The Downtown River Walk. Along the banks of the meandering San Antonio River is this picturesque shopping, dining and nightclub spa. In the heart of "One of America's Four Unique Cities" amid banana trees and passing sightseeing river taxis one can dine indoor or outdoor on continental cuisine such as Irish, Spanish, Italian, German and Mexican, plus sizzling Texas steaks. [Photo Courtesy: San Antonio Convention & Visitors Bureau]

Kelly AFB, seven miles southwest of San Antonio is the home of San Antonio ALC. The base, named in honor of Lt George E. M. Kelly, the first pilot killed in a crash of a military aircraft, is one of the busiest and largest air depots in the nation. Its size and scope of operation rivals that of many large industries. In fact, with its 4,000 acres of prime real estate and physical assets of nearly \$3 billion, it is the largest single industrial complex in the Southwest. There are more than 800 buildings including storage facilities, a dedicated jet engine repair facility, automated warehouses and a hangar containing over a million square feet.

Kelly's history goes back to 1917 when Camp Kelly consisted of a little airfield and a wooden hangar surrounded by squat one-story buildings. During World War I, Kelly grew into the largest flying field in the world. Subsequently, it became well known as a pilot training center, graduating such famous fliers as Charles Lindbergh and General Curtis LeMay. Throughout World War II, the Korean conflict, the Cuban crisis, and the Vietnam conflict, Kelly continued to play a vital part in our nation's defense.

MISSION OF SAN ANTONIO ALC

Flying training activities have been dispersed to other air bases; and today "logistics," the term used for buying, distributing and maintaining the items needed to keep the Air Force operating worldwide, is the primary mission at Kelly. To accomplish this job, 16,000 employees perform 400 distinctly different industrial, technical and administrative assignments. The core of the operation is a large scale worldwide logistics task, which is a coordinated effort between the systems and item managers, maintenance and distribution activities. The center manages on a worldwide basis the F-20 new generation "Tigershark" fighter, the F-5E/F international fighters, the T-37 side-by-side primary jet pilot training aircraft, the T-38 basic pilot training jet aircraft and the C-5 Galaxy, the world's largest cargo aircraft. Additionally, the center manages the O-2 light observation plane, the OV-10 dual engine observation and forward air control aircraft, the C-9 Nightingale, the T-43 primary navigation trainer, the F-106 delta wing fighter interceptor and the T-46A, the next generation trainer replacing the T-37.

Systems managers for 17 types of aircraft are responsible for an inventory of 5,487 airframes, which includes logistics support for nearly 2,000 aircraft of friendly foreign nations. The major workload consists of controlling more than 35,000 aircraft propulsion engines and more than 50,000 airborne auxiliary and ground power engines. Center personnel are responsible for more than 58 percent of the Air Force's total jet inventory. They overhaul and modify the B-52 bombers, C-130 Hercules, and C-5 Galaxy. In an automated jet engine facility, approximately 1,300 engines per year are repaired and overhauled, including the TF39 for the C-5 Galaxy, the T56 for the C-130 Hercules, and the J79 for the F-4 Phantom fighter. The F100 engine, installed in the F-15 and F-16 fighters, is also a management and depot maintenance responsibility.



A C-5 Galaxy, the world's largest cargo aircraft, is being prepared for airlift of F-5 aircraft to a Foreign Military Sales country. Up to eight F-5s fit into a C-5. Both the F-5 and the C-5 are managed at the San Antonio Air Logistics Center.

The San Antonio center follows the basic organizational structure which is standardized throughout the command. The core of the structure consists of four directorates -- Materiel Management, Maintenance, Contracting and Manufacturing, and Distribution.

FMS PROGRAM RESPONSIBILITIES AND ACTIONS

Providing logistics support to FMS customers requires close teamwork between country/system and item managers, contracting officers, distribution and comptroller activities. The logisticians play a vital role from beginning to end of an FMS program which includes initial activation, aircraft and system delivery, and follow-on support for the life of the system. The following summarizes these integrated support elements involved in delivering and supporting an FMS program.

INITIAL ACTIVATION

At the ALC level, a typical FMS program begins when Headquarters U.S. Air Force, through the ILC, directs a price and availability (P&A) study be accomplished for a potential FMS customer interested in purchasing an SA-ALC-managed aircraft weapon system, defense article, or service. A country/systems manager becomes a key player in compiling this pricing data which will be a decisive factor for the country in making the buy decision.

For an initial weapon system sale, SA-ALC personnel have developed and maintain a spare parts and support element data base, which is used to project a weapon system support package tailored to a particular program. The completed P&A data is provided to the Air Staff, through the ILC, and ultimately forwarded to the interested country. The package becomes a primary part of the USAF/DSAA Letter of Offer and Acceptance (LOA), the purchasing agreement between the United States and the foreign government.

Often, especially with a new customer, a site survey is performed in country to determine the country's capabilities for operating a successful program. Considering funding constraints, a maintenance plan is designed which will support the country's concepts. This survey should be performed before acceptance of the LOA. Within 45 days after the LOA acceptance, the center hosts a post-acceptance review, definitization and training conference. Headquarters U.S. Air Force chairs the post-acceptance review, the ALC country/system manager chairs the definitization, and Air Training Command chairs the training portion.

Such a conference provides the customer's representative an opportunity to review and refine the recommended quantities of spares, repair parts, support equipment and technical data required to support and maintain the system or equipment during its initial phase. Conference participants normally include representatives from the customer country, contractor personnel and ALC country and support personnel, and technical specialists for the various systems being provisioned.

When the program dollar obligation authority is received, the support manager requisitions the items through the International Logistics Management

Information System/HO51 (centralized requisition and case control system)*, which forwards them to the applicable supply source. From then until the aircraft are delivered, every supply item is monitored to assure timely shipment of spares and support equipment. SA-ALC is responsible for resolution of all problems connected with each program task. To keep track of the overall status of a program, ALC personnel participate in program reviews every six months. The location usually alternates between the United States and the customer's country.

AIRCRAFT DELIVERY

In a typical program, aircraft delivery begins two to three years after LOA signature. If a customer desires earlier delivery, an accelerated program must be followed. A normal program allows sufficient time for procurement and lay-in of required spares and support equipment. An accelerated program is one in which the desired delivery date of the weapon system is anywhere from six to 18 months. This type of program does not allow sufficient lead time to use normal processes for the acquisition of spares and support equipment and, consequently, requires intensive management effort by all involved activities.

An FMS country has three options concerning delivery of the weapon system: "high flight," airlift or surface shipment.

- "High flight" delivery involves the actual flying of an aircraft to the country. This option may be accomplished by U.S. Air Force pilots, the recipient country's pilots, or contractor pilots.
- Airlift requires disassembly of the aircraft at the point of departure and reassembly at the destination. In that case, the C-5, C-141 or C-130 aircraft are used for transport if the aircraft are "outsized" commercial cargo. To date, 711 F-5s have been delivered by C-5 and 19 by C-141 aircraft.
- Surface shipment is delivery of the aircraft by ship.

When requested, a Kelly AFB team comprised of personnel from the 2956th Combat Logistics Support Squadron reassembles the aircraft in country.

When the aircraft weapons system, all equipment and parts are delivered and the finances reconciled, the FMS initial sales case is closed. At this point, the country's program totally transitions to follow-on support of the weapon system's operational phase.

FOLLOW-ON SUPPORT

Follow-on support involves spare parts, repair parts and equipment, and such areas as publications, maintenance services, and technical assistance. As mentioned above, requirements -- separate from the initial acquisition programs -- are established for these types of support.

*Editor's Note: See W. David Carey's "Security Assistance Management Information System (SAMIS)," this Journal issue, p. 26. SAMIS replaces HO51, effective 1 October 1983.

The Cooperative Logistics Supply Support Arrangement (commonly referred to as the CLSSA) is the main method used in replenishing spares and repair parts for a customer country. The country makes a dollar investment to establish an equity in the U.S. logistics system. This investment allows the buying, storing, and maintaining of the purchaser's assets in the system and provides them with essentially the same support as that provided to U.S. units. CLSSA is the only way items needed for follow-on support are procured in advance for foreign customers.

Another method of follow-on support is through repair. This category involves the repair, overhaul, or rebuilding of unserviceable units which require maintenance beyond the capability of the country. In some cases, returns from repair are the sole source of supply.

The International Engine Management Program (IEMP), formerly Component Improvement Program (CIP), conducted on behalf of purchaser members, is a continual follow-on engineering effort to improve engine reliability and maintainability (improved parts, maintenance techniques, modifications, etc.). Costs are incurred subsequent to engine sales and are paid for on an equitable sharing basis.

SA-ALC established the F-5 Technical Coordinating Group (TCG) to accomplish follow-on support for customer countries which purchased that aircraft. A technical/engineering staff provides support and services to resolve any functional problems experienced by the customer.

These problems may range from replenishment requisition difficulties to a specific engineering change requirement. Assessments are made as to whether a specific problem has multi-country applications. When applicable, material improvement projects are established to investigate a reported problem in depth. Technical benefits that are unilaterally identified are offered to all TCG participating countries. The TCG further supports safety investigations, i.e., crash damage repair problems, and provides support for country peculiar equipment/problems.

As with the IEMP, customer country TCG participants are required to share program costs on a proportional basis. Both of these programs are mandatory conditions for purchase of new weapon systems via FMS.

Logistics support to the foreign customer would not be complete without assistance from the ALC contracting, distribution, maintenance and comptroller activities. The contracting officers in the directorate of contracting and manufacturing procure material, supplies, and services. Their effort for a particular FMS program often begins with participation in the LOA negotiations. This participation can include negotiation and award of a contract for the program effort and management of that contract throughout its performance.

In the Directorate of Distribution, supply and transportation specialists are responsible for receipt, storage, issue, and transportation of FMS requisitions. A special inspection, packaging, and processing area is used. Packing, crating, handling, and transportation are often critical elements, especially in the initial phase, since it is essential that timing of delivery of

initial spares and support equipment be concurrent with the delivery of the aircraft weapons system.

Skilled technicians in the Directorate of Maintenance perform repair and overhaul work for FMS customers.

The comptroller activity accomplishes billings for deliveries of reimbursable and "direct cite" requisitions for the ALC prime items shipped from both contractor and on-hand inventories. They are also responsible for billing contract depot maintenance and all ALC services provided foreign countries.

MAGNITUDE OF SERVICES

Currently, SA-ALC supports 16 countries with weapon system programs in the initial activation phase involving 330 F-5Es, 116 F-5Fs, 2 RF-5Es, 42 A/T-37s and 30 T-38s. The value of open cases at this initial phase is approximately \$2.4 billion.

The largest program assigned to the center supports the Saudi Arabian Government. In addition to acquisition of the F-5 aircraft and related equipment, this Peace Hawk Program includes training, construction, and other related services. The program, now in its 12th year, consists of eight phases; and its final cost will amount to approximately \$4 billion. Peace Hawk has been extremely successful, because it is a dedicated team effort by the U.S. Air Force, AFLC ILC, the Logistics Support Group in Saudi Arabia, and ALC people.

It must be pointed out, however, that numbers of aircraft sold or dollar values of services performed are not an indicator of workload. For example, a program consisting of the sale of only two or three heavily-modified aircraft often is more difficult to manage than one consisting of 30 aircraft.

SA-ALC Directorate of Distribution personnel process an average of 45,000 FMS materiel shipments per year.

During fiscal year 82, ALC Materiel Management item managers processed 127,712 FMS requisitions in support of the various U.S. aircraft flown by foreign countries, e.g., F-5 series aircraft, F-15, F-16, F-4 and C-130. This amounted to nine percent of the total requisitions processed. Much of this material was for support of engines. For example, the F100 engine which powers the F-15 and F-16 aircraft has been procured by Belgium, the Netherlands, Norway, Denmark, Israel, Japan, Saudi Arabia, Egypt, Korea, Venezuela, and Pakistan. This engine, an outstanding technological achievement, is an augmented turbofan engine in the 25,000 pound thrust class. It is the first United States fighter engine built for modular maintenance and consists of five major modules, with each module interchangeable from engine to engine at the intermediate maintenance level. This process means the whole engine isn't put out of action when repairs are needed. Thus, the number of spares is reduced.

CUSTOMER SUPPORT

In addition to selling quality products and services, maintaining good diplomatic relations with the foreign customer is a vital factor in the

successful management of international logistics programs. A basis for integrity must be established at the first contact with a country. Logisticians at this center routinely deal with foreign personnel from junior officers to chiefs of staff, and other defense officials. The objectives of these contacts vary, based on the problem being worked at that specific time. For example, it is not uncommon to require contract changes to expedite procurement or to require adjustments to the LOA itself.

As most customer countries have stringent financial limitations, it is important that supply and/or services recommendations be tailored to those restrictions. Whatever the reason for dealing with foreign country representatives, strict adherence to protocol is a must. The protocol rules often differ from country to country. What is appropriate in one country may be totally out of place in another, and a representative's rank is not always an indication of his level of authority. However, one essential requirement for quality support applies to all customers -- providing accurate and timely responses to their communications and questions. SA-ALC personnel meet unusual challenges by remaining flexible and putting the needs of the customer first within the confines of public law, regulation, and United States military requirements.

FMS OUTLOOK

The first years of this decade have witnessed a continued increase in the need for security assistance to friendly countries and international organizations. Threats to U.S. interests and to its friends and allies in many areas have grown. Further, defense modernization continues to increase in cost while the systems needed for this purpose expand in complexity. Many countries will therefore continue to look to the United States for the defense articles, services, training, and economic support they cannot provide for themselves, but which are necessary for defending their independence and territorial integrity.

At the ALC level, there will be new challenges. ALC personnel expect to provide increased logistics support for America's newest export fighter, the F-20 Tigershark; and, since it was developed without government funding, the contractor will assume a more active role in its total management. Estimates for sales for the F-20 look promising. In addition, negotiations for the sale of the RF-E5, new reconnaissance fighter aircraft, are in progress with a number of FMS countries. Also projected is FMS support to a number of countries who do not require the sophistication of larger aircraft systems, such as an F-20 or an F-16. For example, the A/T-37 program is still very active and will be limited only by availability of the aircraft. As foreign governments continue to spend their money and American dollars for equipment, goods and services, FMS will continue to be an important part of the ALC mission.



Management responsibility for America's newest export fighter, the F-20 Tigershark, is assigned to the San Antonio Air Logistics Center. The aircraft can fly at twice the speed of sound with a combat ceiling of 53,050 feet.