



"WORLD CLASS DEPOT"

KELLY AIR FORCE BASE

EXECUTIVE SUMMARY

INTEGRATED MISSION:

The San Antonio Air Logistics Center at Kelly Air Force Base is the largest industrial complex in the Southwest and the largest single employer in South Texas. Key missions performed by the Center include the management and maintenance of the F100 engine used to power the F-15 and F-16 front-line fighters; management and repair of the airframe and engines of the C-5 transport--the largest airlift aircraft in the Department of Defense inventory; overhaul of the engines of the C-130 airlift aircraft--the preeminent in-theater transport aircraft in the world; and the management and overhaul of thousands of items of ground support equipment, such as gas turbine engines used in aircraft start-up systems.

But San Antonio Air Logistics Center is more than "just a maintenance depot". Personnel at the Center play a key role in supplying the Air Force and the National Aeronautics and Space Administration with fuel, manage all Air Force nuclear weapons, and are pioneering advances in robotics technology and new approaches to improved aircraft maintainability. The Center is an integral part of the San Antonio community; a role it has filled for over three generations.

AIRLIFT FOCUS: Kelly's missions, capabilities, and demonstrated excellence in performance during both peacetime and periods of conflict make it a vital element of our national strategic airlift capability, both at present and in the foreseeable future. The C-5 cargo aircraft is the backbone of this airlift capability; a role it will continue to fill for the next 15 to 20 years. Kelly is the sustaining heart of the effort to keep the C-5 fleet at maximum readiness. The C-17 airlift aircraft, which will be managed and maintained at Kelly once it achieves operational status, will further emphasize the key role Kelly and the San Antonio Air Logistics Center plays in support of our country's policies throughout the world.

The 433rd Airlift Wing, the 26th Aerial Support Squadron, and the 651st Munitions Squadron--all important components of our national ability to respond quickly during moments of crisis--reside at Kelly. The 433rd Airlift Wing provides the largest C-5 reserve fleet for the Air Force in the event of a national emergency and was the first C-5 unit to mobilize during Desert Storm/Desert Shield, flying over 2,300 sorties and 13,500 hours. The 26th Aerial Support Squadron plays a key role in all aviation operations in the

southwest United States. It provides the personnel and equipment to load and unload military and commercial aircraft. Simultaneously, the 651st Munitions Squadron manages and maintains the largest munitions storage facility and shipping center in the Air Force.

Kelly's role is not limited to the conduct of military operations. Our support for humanitarian and relief operations is felt around the world. Airlift missions to Somalia as part of Operation Restore Hope, the airlift of critical supplies to the Republics of Commonwealth of Independent States (the former U.S.S.R.), and the movement of supplies south to Panama in the aftermath of Operation Just Cause are but a few examples of Kelly's involvement in supplying humanitarian aid to beleaguered peoples around the globe.

A WORLD CLASS DEPOT: The San Antonio Air Logistics Center at Kelly Air Force Base is truly a "World Class Depot" by every measure of productivity, product quality, one-of-a-kind capabilities, unique workforce, lowest labor cost per personnel workhour, and environmental protection. The workforce at the Center is among the best educated in the Department of Defense; 29 percent of personnel possess critical skills, including some 2,563 craftpersons and 851 engineers and engineering technicians. Over two-thirds (68 percent) of the workforce at the Center consists of minorities. The Center has the lowest average salary of any Air Force depot, while simultaneously possessing one of the best productivity records. The Center has pioneered the first, and still only, organic warranty program covering all items repaired or manufactured at the Center. Kelly Air Force Base is the only federal facility included within the "Texas 2000" Industrial Honor Roll, a program recognizing those significant contributions toward the creation of a clean and safe environment.

Our personnel are also vital and active members of the San Antonio community. Large numbers participate in our mentoring programs for local school children. The annual contribution of Kelly employees to the Combined Federal Campaign is the largest among Air Force depots. Kelly personnel perform an important community service in the local Positive Role Model Program designed to encourage young men and women to stay in school and avoid gang involvement. Annually, our career fair offers local high school students the chance to investigate the opportunities available through careers in engineering and science.

Corrosion Control Facilities: Kelly is alone among depots in the Department of Defense in having the facilities to accommodate large and wide-bodied aircraft within its corrosion control facilities. Within these facilities, Center personnel have helped pioneer techniques of "plastic media blasting," a way of removing paint and other airframe coatings without causing environmental damage.

Jet Engine Overhaul Complex: One of Kelly's key facilities is the jet engine overhaul complex, capable of handling the complete overhaul of all five versions of the F100 engine, all series T56 engines which power the C-130 aircraft, and the TF39 engine which power the C-5--the largest cargo engine within the Department of Defense. Within the complex are a variety of state-of-the-art electronic and mechanical equipment items, creating a complex which is unmatched within the Air Force. Among these unique capabilities are the only Unified Fuel Control Repair Facility, the only Cryogenic Spin Test Facility and the only engine test cell configured to test the TF39 engine within the Department of Defense.

Gas Turbine Engine Repair Facility: The San Antonio Air Logistics Center overhauls 52 percent of the small gas turbine engines used by the Department of Defense, including those of the Army's Patriot Missile system. Other gas turbine engines repaired by the Center include the secondary power systems for the F-15, F-16, and B1B aircraft; the engine starter system for the F-16; and all Air Force air turbine starters and cartridge pneumatic starters.

Integrated Reverse Engineering and Remanufacturing Capability: Imbedded within the resources of the Center is a unique integrated infrastructure which allows our personnel to reverse engineer and then manufacture a wide variety of items. Among the items which make this effort possible is our stereolithography equipment. Center personnel have pioneered new and innovative ways of using this equipment, attracting widespread attention from other depots and from private industry.

Electroplating Facility: The San Antonio Air Logistics Center is the only Air Force depot with a facility enabling it to apply metal surface treatment plating and finishing for aircraft and large components.

Conventional Munitions Storage Facility: Operated by the 651st Munitions Squadron, the conventional munitions storage facility at the Center is the largest stockpile of such munitions in the United States. Through the 651st Munitions Squadron, the Center provides explosive safety support in response to worldwide demands, utilizing a significant amount of air freight support beyond that provided by the local aerial port squadron. During Operation Desert Storm/Desert Shield, the Center shipped 17 million pounds of munitions to the Middle East; an amount equivalent to 59 C-5 flights.

Nuclear Weapons Repair Facility: Currently, the Center is the only Air Force depot capable of performing complete Nuclear Ordnance Environmental Stress Screening, as well as the testing and overhaul of intercontinental ballistic missile re-entry vehicle components.

COMMUNITY COMMITMENT AND SUPPORT FOR CENTER

MISSIONS: For over three generations, Kelly Air Force Base has been closely connected to the City of San Antonio, Texas. This connection involves more than simply the economic benefit provided by the base; it has been an active involvement of base and city, creating a symbiotic relationship which makes the base and the city two halves of a single whole. In recent years, the City of San Antonio participated actively in support of the base on the issue of the Air Installation Compatible Use Zone, a cooperative effort that long predates the inclusion of Kelly on the base closure and realignment list. Encroachment is not the issue; the Comprehensive Land Use Plan had been in place since 1975, and new plans, reflecting new conditions in the area and revised Air Force priorities, were developed and published in 1983, 1986, and 1992.

The City Public Service Commission recently established new lower electric power rates for the base. Annual savings are projected at \$1.8 million.

HOSTED ORGANIZATIONS:

DEFENSE DISTRIBUTION DEPOT: The mission of the Defense Distribution Depot is to receive, inspect, store, inventory, pack, and ship quality material, making sure our customers get what they want, when they want it. Our goal is to accomplish this mission while protecting the environment and accepting our responsibility to the American taxpayer to carry out our mission in the most economical and cost-effective manner possible.

DEFENSE INFORMATION SERVICES ORGANIZATION: The Defense Information Services Organization provides world class service to our customers, allowing them to enhance their productivity through the effective use of information technology. As a logistics processing Center, we provide crucial information processing services to the San Antonio Air Logistics Center and the associated hosted units on Kelly Air Force Base. As a regional center, we also do this for other Air Force and Department of Defense facilities in our geographic region.

AIR INTELLIGENCE AGENCY: Air Intelligence Agency provides direct intelligence support to Air Force, joint, and allied commanders as they carry out their missions. The agency provides all source intelligence in support of electronic combat; command, control, and communications countermeasures support; electronic combat data; communications security; and secure communications.

433rd AIRLIFT WING: During peacetime, the mission of the 433rd Airlift Wing is to manage, maintain, and train Air Force reserve personnel to standards of combat readiness established by Air Mobility Command, the Air Intelligence Agency, and Air Force Materiel Command. The 433rd Airlift Wing performs

peacetime missions compatible with Air Force Reserve training requirements and the maintenance of mobilization readiness. Upon wartime mobilization, we are ready to provide the aircraft, air crews, and support personnel necessary to meet combat requirements.

149th FIGHTER GROUP (TEXAS AIR NATIONAL GUARD): The 149th Fighter Group operates F-16A aircraft from Kelly Air Force Base. The facilities required to support a fighter unit, such as munitions storage, fuels storage, bombing ranges, and military operating areas, are all available through Kelly. The 149th also benefits from the synergistic effects of having engine, egress systems, and life support systems all supported by the base from which we operate. Closure of Kelly Air Force Base would require the 149th to move its operations to another location, entailing considerable expense in the construction of new facilities and the need for additional personnel to perform functions now carried out by organizations at Kelly.

**KELLY and SAN ANTONIO--A Team
"Dedicated to the Nation's Defense"**

MISSION STATEMENTS

SAN ANTONIO AIR LOGISTICS CENTER

San Antonio Air Logistics Center is one of the major Air Force Materiel Command organizations providing large scale logistics support to the United States Air Force worldwide. SA-ALC will exceed customer expectations for products and services in peace and war. We are a world class organization renowned for aircraft management and maintenance, particularly for large aircraft systems, airborne and ground base engine systems maintenance and management. We provide products and services that are better than anything available from any other source. We will adopt best management practices, maintain modern physical plant and infrastructure, and develop a workforce second to none. As a integral part of the Air Force war fighting team, we contribute to affordable combat superiority, readiness, and sustainability.

AIR INTELLIGENCE AGENCY

Air Intelligence Agency (AIA) provides direct intelligence support to Air Force, joint and allied commanders to help them perform their missions. AIA provides all source intelligence support to electronic combat; command, control and communications countermeasures support; electronic combat data; communications security and secure communications to USAF combat commanders.

DEFENSE INFORMATION SUPPORT ORGANIZATION

Defense Information Support Organization provides world class service to our customers to enhance their productivity through information technology. As a logistics processing center, we provide logistics information processing services to the San Antonio Air Logistics Center and hosted units on Kelly AFB. We are the Air Force regional processing center and the DOD centralized computer processing center.

DEFENSE DISTRIBUTION DEPOT

Defense Distribution Depot commits its personnel and resources to provide the Armed Forces of the United States and designated worldwide customers with the material and services of the highest quality. Our mission is to receive, inspect, store, inventory, pack and ship quality material in order to provide our customers what they want, when they want it. Using computer systems, we manage and control our stock and distribution. We accomplish our mission with quality people motivated by a positive work environment based on teamwork and trust. Our goal is to accomplish this mission while

protecting the environment and accepting our responsibility to the American taxpayer to do our job in the most economical, cost-effective manner.

433rd AIRLIFT WING

During peacetime the mission of the 433rd Airlift Wing is to manage, maintain and train Air Force Reserve personnel to achieve combat readiness according to training standards established by Air Mobility Command, Air Intelligence Agency and Air Force Materiel Command. The 433rd performs peacetime mission compatible with Air Force Reserve training requirements and the maintenance of mobilization readiness. Upon wartime mobilization, provide the aircraft, air crews, and support personnel necessary to meet combat readiness objectives.

149th FIGHTER GROUP

The mission of the 149th Fighter Group is to maintain a combat ready General Purpose Fighter Wing with a subordinate fighter squadron. Eighteen F-16 aircraft and ten support units train and prepare to conduct tactical fighter missions in a deployed contingency situation. Peacetime activities include supporting daily flying missions at home station and various deployed, joint and combined exercises.

INTERNATIONAL AIR FORCES ACADEMY

The Academy provides courses in Spanish on management of defense resources, professional advancement, flying training preparation, and technical training in aviation occupational specialties for Latin American Air Forces. The Academy support the U.S. Air Force efforts to foster democracy, promote human rights, counter low-intensity conflict and forge strong airman relationships throughout the region.

Air Force News Agency

The Air Force News Agency is a Field Operating Agency of the Secretary of the Air Force Office of Public Affairs. AFNEWS is the source of leadership communications for the Air Force and gathers, packages and disseminates electronic and printed news and information products during wartime and peacetime. The Agency is comprised of three mission elements: Air Force Broadcasting Service; Air Force Internal Information; and Army and Air Force Hometown News Service. AFNEWS is the executive agent for DOD work force standards, wartime planning for AFRTS and wartime panning and support for Air Force public affairs.



Biography

United States Air Force

Secretary of the Air Force, Office of Public Affairs, Washington, D.C. 20330-1000

MAJOR GENERAL LEWIS E. CURTIS III

Major General Lewis E. Curtis III is commander, San Antonio Air Logistics Center, Air Force Materiel Command, Kelly Air Force Base, Texas. He commands and directs the activities of approximately 16,000 military and civilian personnel who are responsible for system support of 35 types of aircraft, including the C-5, T-38, OV-10 and other aircraft operated by U.S. allies; the Air Force inventory of jet engines for the C-5, F-15, and F-16; turboprop engines for the C-130; and nearly 94,000 non-aircraft engines. He is also responsible for the management of more than 100 other property classes, including special weapons and aerospace fuels, as well as automatic test, precision measuring and aircraft ground equipment.



General Curtis was born Jan. 20, 1941, in Biloxi, Miss. He earned a bachelor of science degree in mechanical engineering from the University of Wyoming in 1964, a master of science degree in mechanical engineering from the Air Force Institute of Technology in 1969, and a master's degree in business administration from Troy State University in 1985. The general completed Squadron Officer School in 1970, Royal Air Force Staff College in 1974 and Air War College in 1984.

Enlisted in the Air Force in 1960, he served as an F-105D radar maintenance technician. He completed the Airman Education and Commissioning Program, and received his commission through Officer Training School, Lackland Air Force Base, Texas, in December 1964.

After completing technical training at Chanute Air Force Base, Ill., General Curtis served with Strategic Air Command as a maintenance officer on the U-2, DC-130, CH-3C and other special reconnaissance systems at Davis-Monthan Air Force Base, Ariz., and Bien Hoa Air Base, South Vietnam. In April 1969 he returned to Southeast Asia and served as an F-4D, RF-4C, C-130 and AC-47 maintenance officer at Udorn Royal Thai Air Force Base, Thailand.

Assigned to Headquarters Military Airlift Command, Scott Air Force Base, Ill., in April 1970, he was chief of the Systems Analysis Branch, Office of the Deputy Chief of Staff for Logistics. After completing Royal Air Force Staff College in December 1974, he served an exchange tour with the Royal Air Force at Headquarters Strike Command, Royal Air Force Station High Wycombe, England, where he managed the F-4K and F-4M. He subsequently served as commander of the 834th Organizational Maintenance Squadron, 1st Special Operations Wing, Hurlburt Field, Fla., maintaining AC-130, MC-130, UH-1N and CH-3C aircraft from January 1977 until March 1978. He was director of logistics for the AIM-120 advanced medium range air-to-air missile (AMRAAM), Eglin Air Force Base, Fla., until January 1982 and deputy director of logistics for the B-1B at Headquarters Air Force Logistics Command (AFLC), Wright-Patterson Air Force Base, Ohio, until July 1983.

After completing Air War College in June 1984, General Curtis was assigned to the Office of the Deputy Chief of Staff for Materiel Management, AFLC headquarters, and served in both engineering and logistics positions.

In August 1988 he became deputy chief of staff for plans and programs. A year later he assumed command of the Acquisition Logistics Division, AFLC headquarters, where he remained until its deactivation in September 1991. The general next served as deputy chief of staff for engineering and technology management. He assumed his current command in March 1992.

The general's awards and decorations include the Distinguished Service Medal, Defense Meritorious Service Medal, Meritorious Service Medal with oak leaf cluster, and Air Force Commendation Medal.

He was promoted to major general Oct. 1, 1991, with same date of rank.

General Curtis is married to the former Kathleen Taylor, also of Biloxi. They are the parents of two sons, Gig (deceased), and Paul.

Biography

United States Air Force

Office of Public Affairs, San Antonio Air Logistics Center,
Kelly Air Force Base, Texas 78241 (512) 925-7951

BRIGADIER GENERAL WILLIAM F. MOORE

Brigadier General William F. Moore is the vice commander, San Antonio Air Logistics Center, Air Force Materiel Command, Kelly Air Force Base, Texas. He acts on behalf of the commander in the command and direction of more than 14,000 military and civilian personnel who are responsible for logistics support of 33 U.S. Air Force aircraft systems. These systems range in size from OV-10s to C-5s. Also, he assists in the management of more than 90,000 engines for such aircraft as the C-5, F-15, F-16 and C-130, as well as many non-aircraft engines. Additional responsibilities include management of more than 100 other assets, including special weapons, aerospace fuels, automatic test equipment, ground equipment, and precision measuring equipment.

General Moore was born on July 12, 1947, in Meridian, Miss., and is a 1965 graduate of Meridian Senior High School. He received a bachelor of science degree in aeronautical engineering from the Air Force Academy in 1969 and was commissioned a second lieutenant upon graduation. The general earned a master's degree in business administration with a dual major in operations research and finance through the Air Force Institute of Technology (AFIT) at the Wharton School of Finance and Commerce, University of Pennsylvania, in 1977. He completed Air War College in 1986 and the program manager's course at the Defense Systems Management College in 1989.

The general began his Air Force career with an assignment to the former Aeronautical Systems Division (ASD) at Wright-Patterson Air Force Base, Ohio, where he served in the Drone/Remotely Piloted Vehicles System Program Office. While at ASD, General Moore was responsible for the development of a series of RPVs used extensively during the Southeast Asia conflict.

In November 1974 he transferred to the Office of the Deputy Chief of Staff for Development Plans, Headquarters Air Force Systems Command (AFSC), Andrews Air Force Base, Md. While there, General Moore helped initiate the long-term development planning process known as Vanguard.

After graduation from AFIT in December 1977, General Moore was assigned to the Ballistic Missile Office, Norton Air Force Base, Calif., where he served as both executive officer to the commander and as a project officer in the Peacekeeper Engineering Directorate. While in this assignment, General Moore was primarily responsible for developing the launcher for the Peacekeeper missile.

In July 1982, the general was appointed as the director of program control in the joint System Program Office for the advanced medium range air-to-air missile (AMRAAM) at the Armament Division, Eglin Air Force Base, Fla. In this position, he was responsible for financial management and program integration during AMRAAM full-scale development.

Following graduation from Air War College in May 1986, General Moore returned to Headquarters AFSC, this time as director of cost, for the Deputy Chief of Staff, Comptroller. Here he was accountable for program cost estimates and contract cost and schedule performance measurement throughout the command.

General Moore returned to the Ballistic Missile Office in August 1987 as the deputy program director for the Small ICBM. After completing the program manager's course at Fort Belvoir, Va., in September 1989, he was named Small ICBM program director. In this capacity he directed both the development and acquisition programs for the Small ICBM.

In January 1991, General Moore became the deputy director of Strategic, Special Operation Forces, and Airlift Programs for the Office of the Assistant Secretary for Acquisition at the Pentagon. General Moore assumed his present position in August 1992.

His military decorations include the Legion of Merit with one oak leaf cluster, Defense Meritorious Service Medal, Meritorious Service Medal, Air Force Commendation Medal with two oak leaf clusters, Air Force Organizational Excellence Award with one oak leaf cluster, National Defense Service Medal, Armed Forces Expeditionary Medal, and Vietnam Service Medal.

General Moore is married to the former Carol L. Satterfield of Mendian. They have two daughters, Rachel and Laurel.

(Current as of June 1993)



Biography

United States Air Force

Office of Public Affairs, San Antonio Air Logistics Center,
Kelly Air Force Base, Texas 78241 (512) 925-7951

EDWARD RIOJAS, JR.

Mr. Edward Riojas Jr., a member of the Senior Executive Service, is the director of the Financial Management Directorate, San Antonio Air Logistics Center, Kelly Air Force Base, Texas. He directs a workforce of over 650 personnel. He is responsible for providing San Antonio ALC complete integrated financial and accounting services; guides the development of worldwide logistics processes, materiel requirements, industrial workloads and infrastructure for 5,400 aircraft, 90,000 engines, 700,000 federal stock listed items, and over 240,000 items peculiar to specific aircraft and propulsion systems. His major responsibilities also include war and contingency response plans.

Mr. Riojas was born Aug. 30, 1937 in San Antonio, Texas. He graduated from San Antonio Vocational and Technical High School in 1955. He earned an associate degree in mid-management from San Antonio College in 1976, and a bachelor's degree in logistics management from Southwest Texas State University in 1978. Mr. Riojas graduated from the Air War College in 1986.



Mr. Riojas began his civil service career in 1958 as an aircraft electronic equipment apprentice in the Directorate of Maintenance at the San Antonio Air Materiel Area, predecessor to the current air logistics center. From 1958 to 1974 he served as an equipment specialist, inventory manager, fuels stock fund specialist and logistics manager. He entered management in 1974 when he became the chief of the Logistics Support Branch. He has also served as chief of the Logistics Management Branch, chief of the Requirements Branch within the Directorate of Materiel Management, and director of the Technology and Industrial Support Directorate, Sacramento Air Logistics Center, McClellan Air Force Base, Calif.

In 1985, Mr. Riojas became the deputy chief of the International Logistics Division and deputy chief of the Resources Management Division in 1987. He became deputy director, Directorate of Energy Management, in January 1988. In August 1988 he became deputy director, Directorate of Materiel Management, Sacramento Air Logistics Center and was appointed to the Senior Executive Service. He assumed his present duties in June 1992.

Mr. Riojas has completed numerous executive-level education courses to include Security Assistance Management for Executives from the Defense Institute of Security Assistance Management; Executive Leadership Update at the University of Texas at San Antonio; Defense Resource Management Course at the

U. S. Naval Post Graduate School; Project Management at the Battle Institute; Senior Executive Association Development League Conference in Washington, D.C.; Personnel Management for Executives at the University of Texas at Austin; Emerging Trends in Management Technology from the Army Management Engineering Training Activity; Management Development Seminar at the University of California at Berkeley; and, seminar on National Energy Policy and Programs at Oakridge.

Mr. Riojas is married to the former Aurora Arredondo of San Antonio. They have one son, Richard, and two daughters, Sharon and Cristina.

*KELLY AIR FORCE BASE
AND SAN ANTONIO, TEXAS*

A TEAM

*DEDICATED TO THE
NATION'S DEFENSE*



KELLY AIR FORCE BASE

SAN ANTONIO AIR LOGISTICS CENTER

- *More than a Maintenance Depot*
- *Heart of Nation's Airlift Capability*
- *Capabilities Unmatched in the
Department of Defense*
- *Kelly and San Antonio - A Team*

KELLY AIR FORCE BASE

INTEGRATED MISSION

"More than a Maintenance Depot"

- ***INTEGRATED WEAPON SYSTEM MANAGEMENT (IWSM)***
- ***SYSTEM/PROGRAM MANAGEMENT AND ENGINEERING SUPPORT***
- ***COMMODITY/ITEM MANAGEMENT***
- ***OVERHAUL AND REPAIR***
- ***TENANT UNITS***

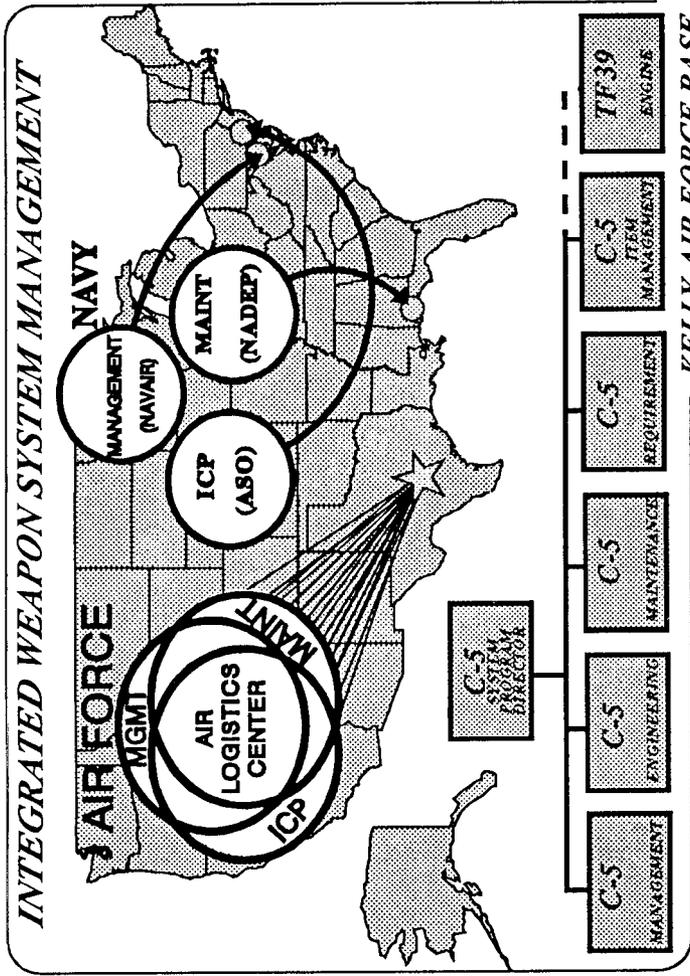
KELLY AIR FORCE BASE

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KELLY AIR FORCE BASE



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KELLY AIR FORCE BASE

SYSTEM/PROGRAM MANAGEMENT AND ENGINEERING SUPPORT

- ***C-5 AIRCRAFT***
- ***T-37 & T-38 TRAINERS***
- ***ALLIED AIRCRAFT (FOREIGN MILITARY SALES)***
- ***SINGLE AIR FORCE ENGINE EXECUTIVE***
 - ***F100 ENGINE SERIES (F-15/F-16 AIRCRAFT)***
 - ***TF39 ENGINE (C-5 AIRCRAFT)***
 - ***TF34 ENGINE (A-10 AIRCRAFT)***
 - ***T56 ENGINE (C-130 AIRCRAFT)***
 - ***J85 ENGINE (T-38 AIRCRAFT)***
- ***NUCLEAR WEAPONS***

KELLY AIR FORCE BASE

INTEGRATED MISSION

"More than a Maintenance Depot"

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KELLY AIR FORCE BASE

COMMODITY/ITEM MANAGEMENT

- ***GAS TURBINE ENGINES***
 - ***AUTOMATED TEST SYSTEMS***
 - ***GROUND SUPPORT EQUIPMENT***
 - ***AIRCRAFT AND ENGINE ACCESSORIES (ACTUATORS/INSTRUMENTS/FUEL PUMPS)***
 - ***AIRCRAFT AND MISSILE FUELS***
- ***TOTAL NUMBER OF ITEMS MANAGED: 300,000*** -

KELLY AIR FORCE BASE

INTEGRATED MISSION

"More than a Maintenance Depot"

- ***INTEGRATED WEAPON SYSTEM MANAGEMENT (IWSM)***
- ***SYSTEM/PROGRAM MANAGEMENT AND ENGINEERING SUPPORT***
- ***COMMODITY/ITEM MANAGEMENT***
- ***OVERHAUL AND REPAIR***
- ***TENANT UNITS***

KELLY AIR FORCE BASE

OVERHAUL AND REPAIR

- ***C-5 AIRCRAFT***
- ***T-38 AIRCRAFT***
- ***F100 ENGINE (F-15 & F-16 AIRCRAFT)***
- ***TF39 ENGINE (C-5 AIRCRAFT)***
- ***T56 ENGINE (C-130 AIRCRAFT)***
- ***COMPONENTS & ACCESSORIES***
- ***TWO LEVEL MAINTENANCE***

KELLY AIR FORCE BASE

INTEGRATED MISSION

"More than a Maintenance Depot"

- *INTEGRATED WEAPON SYSTEM MANAGEMENT (IWSM)*
 - *SYSTEM/PROGRAM MANAGEMENT AND ENGINEERING SUPPORT*
 - *COMMODITY/ITEM MANAGEMENT*
 - *OVERHAUL AND REPAIR*
- *TENANT UNITS*

KELLY AIR FORCE BASE

TENANT UNITS

- *AIR INTELLIGENCE AGENCY*
- *DEFENSE INFORMATION SERVICES ORGANIZATION*
 - *REGIONAL MEGACENTER*
- *DEFENSE LOGISTICS AGENCY*
 - *SUPPLY & DISTRIBUTION CENTER*
- *433rd AIRLIFT WING*
 - *C-5 AIRCRAFT & TF39 ENGINE*
- *149th FIGHTER GROUP*
 - *F-16 AIRCRAFT & F100 ENGINE*
- *INTER-AMERICAN AIR FORCES ACADEMY*

- NUMBER OF TENANT UNITS: 41 -

KELLY AIR FORCE BASE

INTEGRATED MISSION

"More than a Maintenance Depot"

- INTEGRATED WEAPON SYSTEM MANAGEMENT (IWSM)
- • SYSTEM/PROGRAM MANAGEMENT AND ENGINEERING SUPPORT
- • COMMODITY/ITEM MANAGEMENT
- • OVERHAUL AND REPAIR
- TENANT UNITS

KELLY AIR FORCE BASE

KELLY AFB POPULATION

DEPOT MAINTENANCE	AIRCRAFT	1920
	NONAIRCRAFT	4791
	TOTAL	6711

WEAPON SYSTEM / COMMODITY MGMT - - - - - 2796

BASE SUPPORT - - - - - 3207



ALC TOTAL 12,714

DEF DISTRIBUTION DEPOT (DLA) - - - - - 1230

DEF INFORMATION SERVICES ORG - - - - - 210

OTHER TENANTS/ORGANIZATIONS - - - - - 6669

RESERVISTS (PART-TIME) - - - - - 4443

KELLY TOTAL - - - - - 25,266

KELLY AIR FORCE BASE

AIRLIFT FOCUS

"Heart of Nation's Strategic Airlift Capability"

- ***GLOBAL REACH - GLOBAL POWER***
- ***AIRLIFT SYSTEM MANAGEMENT AND REPAIR***
- ***CONVENTIONAL MUNITIONS STORAGE AND SHIPPING POINT***
- ***AIRLIFT OPERATIONS AND MOBILITY***

KELLY AIR FORCE BASE

AIRLIFT FOCUS

"Heart of Nation's Strategic Airlift Capability"

- **GLOBAL REACH - GLOBAL POWER**
- **AIRLIFT SYSTEM MANAGEMENT AND REPAIR**
- **CONVENTIONAL MUNITIONS STORAGE AND SHIPPING POINT**
- **AIRLIFT OPERATIONS AND MOBILITY**

KELLY AIR FORCE BASE

GLOBAL REACH - GLOBAL POWER

- **STRATEGIC DETERRENCE** → **AIRLIFT MOBILITY**
- **REGIONAL DANGERS / HUMANITARIAN AIRLIFT**
- **"TWO WAR"**
- **AIRLIFT MOBILITY KEY TO NEW DEFENSE STRATEGIES**
- **AIRLIFT MOBILITY FUNDING TOP PRIORITY**

KELLY AIR FORCE BASE

AIRLIFT FOCUS

"Heart of Nation's Strategic Airlift Capability"

- ***GLOBAL REACH - GLOBAL POWER***
- ***AIRLIFT SYSTEM MANAGEMENT AND REPAIR***
- ***CONVENTIONAL MUNITIONS STORAGE AND SHIPPING POINT***
- ***AIRLIFT OPERATIONS AND MOBILITY***

KELLY AIR FORCE BASE

***AIRLIFT SYSTEM MANAGEMENT
AND REPAIR***

- ***C-5 AIRCRAFT / TF39 ENGINE***
- ***C-17 AIRCRAFT / F117 ENGINE***
- ***C-130 AIRCRAFT COMMODITIES / T56 ENGINE***
- ***TWO LEVELS OF MAINTENANCE***

KELLY AIR FORCE BASE

AIRLIFT FOCUS

"Heart of Nation's Strategic Airlift Capability"

- ***GLOBAL REACH - GLOBAL POWER***
- ***AIRLIFT SYSTEM MANAGEMENT AND REPAIR***
- ***CONVENTIONAL MUNITIONS STORAGE AND SHIPPING POINT***
- ***AIRLIFT OPERATIONS AND MOBILITY***

KELLY AIR FORCE BASE

CONVENTIONAL MUNITIONS STORAGE AND SHIPPING POINT

- ***LARGEST CONUS LOCATION (ONE OF TWO SITES IN CONTINENTAL U.S.)***
 - ***MANAGE ALL STAMP/STRAPP MISSIONS***
- ***DESERT STORM***
 - ***17 MILLION LBS SHIPPED***
 - ***59 C-5 AIRCRAFT (309 C-141 AIRCRAFT)***
- ***WORLD WIDE RAPID RESPONSE***

KELLY AIR FORCE BASE

AIRLIFT FOCUS

"Heart of Nation's Strategic Airlift Capability"

- ***GLOBAL REACH - GLOBAL POWER***
- ***AIRLIFT SYSTEM MANAGEMENT AND REPAIR***
- ***CONVENTIONAL MUNITIONS STORAGE AND SHIPPING POINT***
- ***AIRLIFT OPERATIONS AND MOBILITY***

KELLY AIR FORCE BASE

AIRLIFT OPERATIONS AND MOBILITY

- ***OPERATIONS - 433rd AIRLIFT WING***
 - ***LARGEST C-5 EQUIPPED RESERVE WING***
 - ***FIRST TO DEPLOY IN DESERT SHIELD***
- ***MEDIVAC CENTER***
 - ***32nd AEROMEDICAL EVACUATION GROUP***
 - ***WILFORD HALL & BROOKE ARMY MEDICAL CENTER***
- ***PRIMARY SUPPLY AND FOCAL POINT FOR CENTRAL AND SOUTH AMERICA***

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

*"Kelly Capabilities Unmatched in the
Department of Defense"*

- **PRODUCTIVITY**
- **PRODUCT QUALITY**
- **UNIQUE CAPABILITIES**
- **UNIQUE WORKFORCE**
- **VALUE FOR U.S. TAXPAYER**
- **ENVIRONMENTAL EXCELLENCE**

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

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- **VALUE FOR U.S. TAXPAYER**
- **ENVIRONMENTAL EXCELLENCE**

KELLY AIR FORCE BASE

PRODUCTIVITY

- **PRODUCTIVITY BENEFITS - HIGHEST IN AIR FORCE**
- **AVERAGE TOTAL ANNUAL BENEFITS -
\$131.2 MILLION**
- **MACHINING IMPROVEMENT FOR F100
ENGINE NOZZLES - ONE TIME \$3.1 MILLION**
- **NEW CORROSION CONTROL FACILITIES -
\$4.8 MILLION ANNUALLY**
- **\$25 MILLION IN SUGGESTION PROGRAM SAVINGS
IN FY93**

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

*"Kelly Capabilities Unmatched in the
Department of Defense"*

- *PRODUCTIVITY*
- *PRODUCT QUALITY*
- *UNIQUE CAPABILITIES*
- *UNIQUE WORKFORCE*
- *VALUE FOR U.S. TAXPAYER*
- *ENVIRONMENTAL EXCELLENCE*

KELLY AIR FORCE BASE

PRODUCT QUALITY

- *99+% PRODUCT QUALITY (DEFECT FREE)*
- *AIR FORCE PRODUCT WARRANTY*
- *AIR FORCE LOGISTICS COMMAND QUALITY
IMPROVEMENT AWARD FOR LARGE ORGANIZATIONS*
- *CUSTOMER SATISFACTION*

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

***"Kelly Capabilities Unmatched in the
Department of Defense"***

- ***PRODUCTIVITY***
- ***PRODUCT QUALITY***
- ***UNIQUE CAPABILITIES***
- ***UNIQUE WORKFORCE***
- ***VALUE FOR U.S. TAXPAYER***
- ***ENVIRONMENTAL EXCELLENCE***

KELLY AIR FORCE BASE

UNIQUE CAPABILITIES

- ***LARGE AIRCRAFT REPAIR FACILITY***
- ***CORROSION CONTROL CAPABILITIES***
- ***JET ENGINE OVERHAUL FACILITY/CAPABILITY***
 - ***AUTOMATED JET ENGINE TEST CELL FACILITY***
 - ***F100 UNIFIED FUEL CONTROL FACILITY***
 - ***ADVANCED FUEL ACCESSORIES TEST
SYSTEMS FACILITY***
 - ***CRYOGENIC SPIN TEST FACILITY***
- ***CONVENTIONAL MUNITIONS STORAGE AND SHIPMENT***

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

*"Kelly Capabilities Unmatched in the
Department of Defense"*

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- **PRODUCT QUALITY**
- **UNIQUE CAPABILITIES**
- **UNIQUE WORKFORCE**
- **VALUE FOR U.S. TAXPAYER**
- **ENVIRONMENTAL EXCELLENCE**

KELLY AIR FORCE BASE

UNIQUE CAPABILITIES (CONT)

- **GAS TURBINE ENGINE FACILITY**
- **NUCLEAR WEAPONS COMPONENT REPAIR FACILITY**
- **INTEGRATED REVERSE ENGINEERING &
REMANUFACTURING CAPABILITY**
- **COMPUTERIZED INDUSTRIAL TOMOGRAPHIC
ANALYZER (CITA)**
- **STEREOLITHOGRAPHY**
- **DEPOT MACHINE SHOP**
- **FOUNDRY**
- **RUBBER SHOP**
- **LARGEST ELECTROPLATING FACILITY IN AIR FORCE**

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

***"Kelly Capabilities Unmatched in the
Department of Defense"***

- ***PRODUCTIVITY***
- ***PRODUCT QUALITY***
- ***UNIQUE CAPABILITIES***
- ***UNIQUE WORKFORCE***
- ***VALUE FOR U.S. TAXPAYER***
- ***ENVIRONMENTAL EXCELLENCE***

KELLY AIR FORCE BASE

UNIQUE WORKFORCE

- ***HIGHEST ETHNIC DIVERSITY***
 - ***68% MINORITIES***
 - ***50% OF ALL HISPANICS IN AIR FORCE***
 - ***15% OF ALL HISPANICS IN DOD***
- ***HIGHLY EDUCATED DEPOT WORKFORCE***
 - ***5,372 HAVE 1+ YEARS COLLEGE***
 - ***CIVILIANS: 12 PhD /487 MASTERS /
1,786 BACHELORS/675 ASSOCIATE DEGREES***

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

*"Kelly Capabilities Unmatched in the
Department of Defense"*

- **PRODUCTIVITY**
- **PRODUCT QUALITY**
- **UNIQUE CAPABILITIES**
- **UNIQUE WORKFORCE**
- **VALUE FOR U.S. TAXPAYER**
- **ENVIRONMENTAL EXCELLENCE**

KELLY AIR FORCE BASE

**UNIQUE WORKFORCE
(CONTINUED)**

- **INTENSE COMMUNITY INVOLVEMENT**
 - **MENTORING - 574 MENTORS**
 - **SCHOLARSHIPS - 84 TOTAL IN 1993**
 - **HIGHEST DEPOT CONTRIBUTOR TO UNITED WAY -
COMBINED FEDERAL CAMPAIGN \$1.938 M**
- **HIGHLY SKILLED**
 - **70+ SPECIALIZED INDUSTRIAL SKILLS**
 - **29% OF WORKFORCE IN CRITICAL SKILLS**
 - **851 ENGINEERS / ENGINEERING TECHNICIANS**
 - **2,563 CRAFTSMEN IN CRITICAL SKILLS**

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

*"Kelly Capabilities Unmatched in the
Department of Defense"*

- **PRODUCTIVITY**
- **PRODUCT QUALITY**
- **UNIQUE CAPABILITIES**
- **UNIQUE WORKFORCE**
- **VALUE FOR U.S. TAXPAYER**
- **ENVIRONMENTAL EXCELLENCE**

KELLY AIR FORCE BASE

VALUE FOR U.S. TAXPAYER

- **TOTAL COST PER LABOR HOUR (FY93 DATA) - \$101.41**
- **MATERIAL COST DRIVEN BY ENGINE WORKLOAD**
- **SA-ALC BEST VALUE FOR TAXPAYER WHEN EXCLUDING MATERIAL**
- **COST BREAKOUT**

LABOR	\$43.92
MATERIAL	45.83
OTHER	11.66
	101.41
- **EXCLUDING MATERIAL COST**

	- 45.83
	\$55.58

KELLY AIR FORCE BASE

DISCUSSION ITEMS

- *INTERSERVICING*
- *CAPACITY UTILIZATION*

KELLY AIR FORCE BASE

DEPOT TO DEPOT COMPARISON

"IN DOLLARS" (Direct Labor + Overhead)

1988	1989	1990	1991	1992
41.64 SA	43.44 SA	43.41 SA	46.01 SA	50.10 SA
42.13 NOR	45.67 AF	47.39 AF	49.66 AF	52.66 AF
44.24 AF	50.54 NIS	48.75 NOR	53.02 NOR	55.88 JAX
50.14 NIS	54.09 NOR	51.95 PEN	58.08 JAX	56.98 CHE
52.50 PEN	55.98 PEN	56.25 JAX	59.95 CHE	58.13 NOR
52.68 CHE	57.28 CHE	57.17 NIS	60.84 PEN	63.39 PEN
52.80 ALA	60.48 ALA	62.47 CHE	61.26 NIS	63.48 ALA
54.10 JAX	74.60 JAX	68.51 ALA	64.19 ALA	69.30 NIS
NA 49.67	58.26	57.49	59.75	61.19
△ 5.43	12.59	10.10	10.11	8.53

SA-San Antonio AF-Air Force Average
 NOR-Norfolk NIS-North Island CHE-Cherry Point
 ALA-Alameda JAX-Jacksonville NA-Navy Average

SOURCE: DOD 7220.9-M & 7220.29-H DATA

KELLY AIR FORCE BASE

WORLD CLASS DEPOT

**"Kelly Capabilities Unmatched in the
Department of Defense"**

- **PRODUCTIVITY**
- **PRODUCT QUALITY**
- **UNIQUE CAPABILITIES**
- **UNIQUE WORKFORCE**
- **VALUE FOR U.S. TAXPAYER**
- **ENVIRONMENTAL EXCELLENCE**

KELLY AIR FORCE BASE

ENVIRONMENTAL EXCELLENCE

- **ONLY ALC NOT ON THE EPA SUPER FUND LIST**
- **ONLY FEDERAL FACILITY ON "TEXAS INDUSTRY 2000"
INDUSTRIAL HONOR ROLL**
- **PIONEERING NEW REMEDIATION TECHNOLOGIES**
- **BIO**
- **MICROWAVE**
- **1992 AFMC ENVIRONMENTAL RESTORATION AWARD**
- **1993 EPA STRATOSPHERIC OZONE PROTECTION AWARD**

KELLY AIR FORCE BASE

COMMUNITY COMMITMENT
"Kelly and San Antonio - a Team"

- ***AIRSPACE ENCROACHMENT***
- ***INFRASTRUCTURE SUPPORT***
- ***WORKFORCE SUPPORT***
- ***REGULATION***

KELLY AIR FORCE BASE

COMMUNITY COMMITMENT
"Kelly and San Antonio - a Team"

- ***AIRSPACE ENCROACHMENT***
- ***INFRASTRUCTURE SUPPORT***
- ***WORKFORCE SUPPORT***
- ***REGULATION***

KELLY AIR FORCE BASE

AIRSPACE ENCROACHMENT

- ***CITY ORDINANCE PREVENTS AIRFIELD ENCROACHMENT***
- ***BASE COMPREHENSIVE LAND USE PLAN IN PLACE SINCE 1975 - UPDATED 1992***
- ***COMPREHENSIVE CITY ZONING ORDINANCE CONTROLS DEVELOPMENT NEAR BASE***

KELLY AIR FORCE BASE

COMMUNITY COMMITMENT
"Kelly and San Antonio - a Team"

- AIRSPACE ENCROACHMENT
- INFRASTRUCTURE SUPPORT
- WORKFORCE SUPPORT
- REGULATION

KELLY AIR FORCE BASE

INFRASTRUCTURE SUPPORT

- ROAD ACCESS, POWER, SEWAGE, ETC.
- CITY EXTREMELY RESPONSIBLE & SUPPORTIVE
 - EAST KELLY ACCESS
 - HUDNELL UNDERPASS STORM WATER
 - POWER SUBSTATION
- REDUCED UTILITY RATES NEGOTIATED
- PROJECTED ANNUAL SAVINGS - \$1.8 M

KELLY AIR FORCE BASE

COMMUNITY COMMITMENT
"Kelly and San Antonio - a Team"

- AIRSPACE ENCROACHMENT
- INFRASTRUCTURE SUPPORT
- WORKFORCE SUPPORT
- REGULATION

KELLY AIR FORCE BASE

WORKFORCE SUPPORT

- EDUCATION INITIATIVES
 - STATE FUNDS FOR INDUSTRIAL TRAINING
 - SKILL TRAINING OF EMPLOYMENT BASE (GOAL 2000)
- "MILITARY CITY USA"
- GOOD TIMES AND BAD TIMES
- LARGEST MILITARY AFFAIRS COUNCIL
- ARMED FORCES WEEK

KELLY AIR FORCE BASE

COMMUNITY COMMITMENT
"Kelly and San Antonio - a Team"

- AIRSPACE ENCROACHMENT
- INFRASTRUCTURE SUPPORT
- WORKFORCE SUPPORT
- REGULATION

KELLY AIR FORCE BASE

REGULATION

- STRICT, BUT FAIR, NOT PUNITIVE
- EXCELLENT ENVIRONMENTAL RELATIONSHIP
- CITY & STATE REGULATORS STRIVE TO HELP US DO THE RIGHT THINGS

KELLY AIR FORCE BASE

SAN ANTONIO AIR LOGISTICS CENTER

"MORE THAN A MAINTENANCE DEPOT"

"HEART OF NATION'S AIRLIFT CAPABILITY"

***"CAPABILITIES UNMATCHED IN THE
DEPARTMENT OF DEFENSE"***

"KELLY AND SAN ANTONIO - A TEAM"

_____ ***KELLY AIR FORCE BASE***

***KELLY AIR FORCE BASE
AND SAN ANTONIO***

A TEAM

***DEDICATED TO THE
NATION'S DEFENSE***

_____ ***KELLY AIR FORCE BASE***

POINT PAPER
ON
AIR FORCE DEPOT DIRECT COMPETITION FOR
INTERNATIONAL WORKLOADS

ISSUE:

- US Government establishments would like to directly compete for international workloads.
 - Submit firm-fixed prices and firm delivery program bids.

DISCUSSION:

- OC-ALC had interest in competing on the United Kingdom's E-3 fleet depot level maintenance proposal.
 - Desired to compete through current Foreign Military Sales Price and Availability Letter of Offer and Acceptance.
 - Would submit a competitive bid if required.
 - Requested HQ AFMC/LG advise OC-ALC of competition Policy.
- Subsequent letter from HQ USAF/LG to HQ AFMC/LG stated that the Deputy Under Secretary of Defense for LG (DUSD (L)) will not support services participation in direct international competition.
 - Based on DOD's current focus to downsize the depot infrastructure and to achieve an organic / contractor depot maintenance workload mix more closely aligned to the congressional 60% / 40% split.
- Letter from Defense Security Assistance Agency to the Deputy Director of Procurement for the UK on US government policy on direct competition stated that the US government policy is to:
 - Attempt to avoid direct competition.
 - US DOD components do not engage in FMS and commercial comparisons by international customers.
 - Exceptions may be made on a case-by-case basis.
 - DOD agencies engaged in such competition must abide by Arms Export Control Act.
 - Means that any contractual actions would be undertaken IAW FMS rules and regulations.

----- FMS system severely restricts firm-fixed price bidding and cannot guarantee firm delivery dates.

----- No exception to conformance with FMS system unless new legislation passed to permit direct competition.

- Effect on the current FMS workloads at SA-ALC if FMS workloads were prohibited
 - Royal Saudi Air Force F100 engine upgrade program - 147.7 PEs worth of workload would be displaced from SA-ALC.
 - Portugal Air Force F100 engine upgrade program - 30 PEs worth of workload would be displaced from SA-ALC.

RECOMMENDATION:

- Recommend the development of a formal DOD policy addressing future FMS international workload competitions.

Prepared by: Terri Cicitello/SA-ALC/FMPB/DSN 945-0214/dg/10 Dec 93

TALKING PAPER
ON
INTEGRATED MISSION

Purpose

To highlight information on the integrated mission of San Antonio Air Logistics Center.

Discussion:

- The Integrated Weapon System Management (IWSM) approach to mission accomplishment brings synergies not enjoyed by other service logistics activities. IWSM brings together all aspects of the logistics function, management, engineering, requirements planning, item management, and maintenance under one boss. The following functions are performed at Kelly.
- System Program Management and Engineering Support for:
 - C-5 Airlifter
 - T-37 and T-38 Trainers
 - Allied Aircraft (Foreign Military Sales)
- Single Air Force Engine Executive has management and programming responsibility for:
 - F100 Engine (F-15/F-16 Aircraft) - 3,475 (without modules)
 - TF39 Engine (C-5 Aircraft) - 665
 - TF34 Engine (A-10 Aircraft) - 1,469
 - T56 Engine (C-130 Aircraft) - 3,896
 - J85 Engine (T-38 Aircraft) - 2,256
- Nuclear Weapons is the only organization providing worldwide logistics support to the Air Force Nuclear Weapons Program. Provide logistics support including, but not limited to:
 - nuclear bombs
 - nuclear warheads
 - air-launched missiles

- air crew practice bombs
- transport trailers
- re-entry systems and test sets
- Commodities Management - 300,000 items managed
- Type of commodities include:
 - Gas turbine engines (including the US Army Patriot missile system) - only depot working this class of equipment
 - Automated Test Systems manage, procure, repair and manufacture support & test equipment used by virtually every Air Force Weapon System
 - Ground Support Equipment - the integrated production process includes overhaul, repair, rework, and refurbishment of ground support equipment such as, but not limited to, jacks, engine trailers, aircraft de-icers, and air conditioners.
 - Aircraft Accessories - manage, maintain, repair, and overhaul various aircraft accessories such as, but not limited to, secondary power systems, jet fuel starters, actuators, starters and aircraft fuel accessories.
 - Aircraft and missile fuels - single manager for liquid missile propellants, special fuels, chemicals and gases used by the Air Force, NASA, the Department of Energy and other agencies.
- Technology Repair Center for:
 - C-5 Airlifter
 - T-38 Trainer
 - F100 Engine
 - TF39 Engine
 - T56 Engine
- Tenant Units - 41 total
- Major Tenants
 - 433rd Airlift Wing - C-5 aircraft and TF39 Engine
 - 149th Fighter Group - F-16 aircraft and F100 Engine
 - Air Intelligence Agency - Intelligence Operations
 - Defense Logistics Agency - Supply and Distribution Center

- Defense Information Support Organization - Regional Megacenter
- Inter-American Air Forces Academy - provides training for maintenance of various aircraft to Air Forces of Central/South American countries
- Air Force News Agency - Provides internal information support for all Air Force organizations.
- Defense Commissary Agency (Midwest Region) - Operational control of Air Force Commissaries throughout the region.

UPDATED: SA-ALC/FMPB/8 Dec 93/

TALKING PAPER

ON

AIRLIFT FOCUS

Purpose

To highlight airlift capability available at SA-ALC

Discussion:

- With the demise of the Soviet nuclear threat and the rise of regional dangers, US. military strategy has shifted to strategic mobility. Airlift is the vital ingredient in the nation's ability to carry out this new strategy. San Antonio ALC is literally the heart of our nation's strategic airlift capability as a result, airlift mobility funding will receive top priority in the future
 - In either current two war planning scenario or proposed win-hold-win strategic concept, airlift is crucial.
 - Airlift is also crucial to the Nations humanitarian relief efforts such as Bosnia or Somalia.
- A major share of Kelly's mission is devoted to supporting airlift.
 - Management and repair of C-5 and C-17 Aircraft
 - T56 engine and C-130 commodities managed and repaired at San Antonio
 - Two Levels of Maintenance approved for airlift engines, avionics and commodities
- One of only two conventional munitions storage and shipping point in Continental United States
 - Worldwide rapid response
- 93 munitions igloos adjacent to air strip

- 17 million pounds shipped during Desert Storm, equivalent to 59 C-5 flights
- 100% movement by airlift
- Collocated with 433rd Airlift Wing
 - Largest C-5 equipped Reserve Wing
 - First Wing to deploy in Desert Shield
 - SA-ALC provides unique engine test cell for wings TF39 engines
- Its a major Medivac Center
- Point of debarkation for patients for some of DOD's largest medical facilities:

Wilford Hall, Brooke Army, South Texas Medical Centers

 - Was a major treatment center for personnel injured in Desert Storm
 - 32nd Aeromedical Evacuation Group deploys from Kelly
- Kelly is a major support base for Central and South American exercises and operations
 - Exercise Puertes Caminos shipped over 5,000 personnel and 35 tons of cargo from Kelly

UPDATED: Bea Ramirez/FMPB/10 Dec 93

TALKING PAPER
ON
WORLD CLASS DEPOT

Purpose:

To highlight key Kelly capabilities and attributes which are unmatched anywhere within the Department of Defense.

Discussion:

Kelly is a "World Class Depot" with a unique workforce, leading in product quality with the lowest and best competitive labor rates. Kelly's unique capabilities, high productivity, and leadership in environmental compliance makes Kelly an unmatched depot in DOD.

- Productivity
 - Highest productivity benefits in AF - \$131 million annual average savings over last five years.
 - Recent infrastructure investments have resulted in new and more efficient facilities, processes and procedures.
 - Productivity Improvement Programs
 - Kelly has pioneered the Air Force's only organic Warranty Program. The program covers all items manufactured or repaired at the center.
- Unique Capabilities are covered in detail in separate Talking Papers
 - New Gas Turbine Engine Repair Facility (1991)
 - Nuclear Weapons component repair facility
 - Integrated reverse engineering and remanufacturing capability
 - Computerized Industrial Tomographic Analyzer, Stereolithography, Depot Machine Shop, Foundry, and Rubber Shop

- Unique Workforce
 - Kelly's 20,823 person workforce is the most diverse in DOD with 68% minority representation. This diversity brings tremendous vitality to both the work place and surrounding community.
 - 50% of all Hispanics employed by Air Force.
 - 15% of all the Hispanics employed by DOD.
 - One of the best educated depot workforces in DOD provides Kelly with technical and scientific capabilities not enjoyed by other depots.
 - 48% of civilian workforce has at least one year of college with degrees as noted.
 - 675 Associates, 1,786 Bachelors, 487 Masters, and 12 PhD degrees.
 - Intense community involvement by Kelly personnel has made the difference in the lives of thousands of community children and young people.
 - 574+ mentors to local school children
 - 84+ scholarships granted annually to local students
 - Kelly's \$1.938 million contribution to the Combined Federal Campaign is the highest amount contributed by any DOD depot.
 - Highly skilled workforce is comprised of workers in over 70 specialized industrial skills.
 - 29% of workforce in critical industrial skills
- Lowest cost fixed wing Aviation Depot in DOD provides the best value to American taxpayers.
 - Direct labor/overhead cost - \$55.58
 - Lowest average salary - \$28,609

- Leader in Environmental Excellence
 - Only AF depot not on EPA Super Fund List.
 - Leader in applying new Bio and Microwave remediation technologies.
 - Only federal facility on "Texas Industry 2000" Industrial Honor

Roll.

- 1992 AFMC Environmental Restoration Award Winner.
- 1993 EPA Stratospheric Ozone Protection Award.

UPDATED: SA-ALC/FMPB/9 Dec 93

TALKING PAPER

ON

COMMUNITY COMMITMENT AND SUPPORT

Purpose:

To highlight the active involvement and commitment of the San Antonio community to the Kelly mission.

Discussion:

- Encroachment
 - Encroachment is not an issue. The city of San Antonio has taken an active role on the Air Installation Compatible Use Zone (AICUZ) encroachment issue, a posture which predates recent Kelly inclusion on closure list. The city passed a zoning ordinance protecting flight operations in 1986 and has vigorously defended and upheld the ordinance to present and will continue to do so.
 - Compliance agreements are found in the Unified Development Code (City Ordinance 66513) and the Comprehensive Zoning Ordinance (City Ordinance 64225)
 - Military airport overlay zones encompassing the Kelly AFB flightline protect the base from impairment of the military airfields and restricts public investment in these areas.
 - The Comprehensive Zoning ordinance clearly defines military and city property boundaries and restrictions therein.
 - Kelly AFB strictly adheres to the AICUZ requirements which promote the public health, safety, comfort, and general welfare.
 - Base Comprehensive Land Use Plan has been in place since 1975. New plans reflecting new conditions and Air Force priorities were published in 1983, 1986, 1992.

- Base Community Team

- San Antonio is often referred to as "Military City USA" due to its long association with the growth of military aviation at Kelly field.
- San Antonio has a standing Military Affairs Council that actively responds to the needs of Kelly AFB and its personnel.
- Greater San Antonio Chamber of Commerce sponsors several continuing recognition programs for Kelly AFB employees.
 - "Salute to the Military" during Armed Forces Week.
 - Recognition of the outstanding officer, NCO and employee at the SA-ALC.
 - Sponsors receptions for visiting military officials from DOD and foreign air forces.
- Recently renegotiated utility rates --saves \$1.8 million/yr.

- Education and Training Partnership

- The San Antonio metroplex is rich in higher education opportunities.
 - Six major universities and three junior colleges are located in San Antonio.
 - Two major universities are located within commuting distance of Kelly AFB.
 - Nine colleges/universities offer degree programs on Kelly AFB.
 - Four colleges/universities offer extension courses at Kelly AFB.
- San Antonio City Council recognized the unique depot work environment required special technical skills training.

- Training and education committee dedicated one full year of their committee program time and effort to work with Kelly AFB to improve employee technical training skills.
- City involvement with technical skills training led to state legislation.
- House Bill 553 overwhelmingly passed by the state to provide funds for industrial training. Kelly AFB benefited from H.B. 553 with state funded training in critical technical skills areas.
 - Key factor leading to passage of H.B. 553 was the "Target 90" city involvement with Kelly AFB.
 - Over four hundred depot employees trained during the first four years after implementation of H.B. 553.
 - Primary training subject areas are electronics, machine tool operations, blueprint reading, mathematics and computer training.
- Success of H.B. 553 industrial funded training resulted in passage of H.B. 360 which raised the state funding level for industrial training from \$89,000 to \$3 million.
- Goal 2000 - Educate America
- Kelly AFB and the San Antonio City Council are working in partnership on many training issues in support of their new program "Goal 2000 - Educate America."
- Strong community support for education and training plus the technically unique work environment at Kelly AFB provides for one of the most experienced, well-trained and productive work forces in the Air Force.

UPDATED: SA-ALC/FMPB(MM)/8 Dec 93/DJH

TALKING PAPER
ON
INFRASTRUCTURE

Purpose:

To highlight current infrastructure assets of SA-ALC

Discussion:

With a closure cost of \$1.3 billion and projected annual savings of \$63 million, it would take over 100 years to amortize the closure of Kelly.

San Antonio Air Logistics Center data:

- Land Area: 3,996 Acres
- Buildings: 598
- Total Square Footage: 16,181,295
- Total Estimated Replacement Cost: \$2,587,178,000
- Military Family Housing Units: 429 Units
- Airfield pavements: 3.12 million square yards or 377 acres
- Paved Roads: 121 Miles
- Railroads: 13.4 Miles
- The 4,822,272 square feet of current industrial facilities have a replacement value of approximately \$587,365,00.00. New facility construction and renovation of current facilities to enhance industrial operations and provide for integration of new technology has exceeded \$67.0 million since FY86.
- The Industrial Capital Equipment Consists of over 2,563 pieces of equipment with a replacement value of \$670,000,000.00.
- Construction and renovation of facilities supporting base operations exceeded \$60.0 million since FY86.

- Construction and renovation of facilities supporting tenant organizations since FY86 has exceeded \$10.0 million. The Inter American Air Force Academy (relocated from Homestead Air Force Base) has new facilities under construction.

Impact:

- Current industrial facilities would be cost prohibitive to construct at another location.
- Relocation costs of capital equipment would be exorbitant.

UPDATED: SA-ALC/FMPB/9 Dec 93

TALKING PAPER

ON

LARGE AIRCRAFT REPAIR FACILITY

Purpose:

To describe the special characteristics of the largest freestanding hangar in the DOD.

Discussion:

- Largest freestanding aircraft hanger in the Department of Defense
 - Unique large-body aircraft maintenance capability
 - Covers 1.1 million square foot area, five stories tall
 - Giant hangar doors weigh 672 tons each
 - Built in 1956 at cost of \$14 million, 2 1/2 years to erect.
- Complete repair, overhaul, and modification of C-5 aircraft
- Can accommodate multiple mixes of C5, T38, B52's aircraft that can include up to six C-5 aircraft, or forty T-38 aircraft or fourteen B52 aircraft
- Includes a component walk-in-booth 14' by 34' by 14'
 - Utilizes Bicarbonate of Soda Blast Process to clean parts, such as degreasing fairing and Carbon removal from engine components
 - Allows ability to clean Jet Engine parts and components with sensitive substrates
- Over 20 backshops support the non programmed depot maintenance and Management of Items Subject to Repair (MISTR) exchangeables activities
 - Bonding and plastic shop with three autoclaves, portable bonders, and anodize line

- 50 foot autoclave capability for large body airframe components
- Welding and heat treating shop with drop bottom furnace, accutherm furnaces, refurbished older models with added state-of-the-art electronic temperature controllers for better reliability and uniformity, and resistance welders.
- Sheet metal repair and assembly shop with numerically controlled router, power brake machine, shearing machine, hydroform, and extrusion stretch press
- Computer Assisted Design/Computer Assisted Manufacturing (CAD/CAM) capability with Computervision system and waterjet cutter
- Machine shop capability for immediate aircraft maintenance line support
- Tubing and wiring back shops supporting aircraft hydraulics and electrical systems

Impact:

- Major disruption in C-5 airlift if facility is relocate
- Estimated replacement cost in excess of \$88.0 million plus the cost of equipment relocation
- Five years lead time to construct a similar facility in another location

UPDATED: SA-ALC/TIEL/9 Dec 93/

TALKING PAPER

ON

SA-ALC CORROSION CONTROL CAPABILITIES

Purpose:

To describe the unique capabilities of the aircraft corrosion control facilities.

Discussion:

- Corrosion Control Facilities (Buildings 379 and 365) provide the only capability within DOD to accommodate large bodied aircraft in conjunction with depot maintenance
 - New 76,500 square foot aircraft depainting facility in Building 379, completed in 1992 at a cost of \$16.5 million
- Utilizes Plastic Media Blasting, an environmentally "clean" process, to remove airframe coatings from the C-5A/B aircraft and smaller aircraft
 - Eliminates carcinogenic chemical paint strippers
 - Reduces hazardous chemical waste by 72,000 gallons per year
- Contributes to annual cost savings by reducing manpower requirements, improving flow times, and reducing material acquisition and disposal costs
 - Eight C-5s have been depainted in this facility with savings of 16,000 manhours
- State-of-the-art articulation provides excellent accessibility for any aircraft
 - "Stacker" crane platforms transverse laterally and longitudinally on truss work rails
 - Platform can rotate around the bottom of a telescoping mast

- Paint Facility (Bldg 365) currently under renovation to upgrade lighting, temperature and humidity control, breathing air system, and overhead platforms

Impact:

- Relocating Corrosion Control Facilities will degrade support readiness of the C-5 fleet and severely impact airlift mission of Air Mobility Command, Air National Guard, and Air Force Reserves
- Cost to reconstruct both facilities : \$40.0 million
- Reconstruction lead time is five years

UPDATED: SA-ALC/FMPB/10 Dec 93

TALKING PAPER

ON

JET ENGINE OVERHAUL COMPLEX

Purpose:

To highlight the Unique Capabilities of the Jet Engine Overhaul Complex

Discussion:

- Complete overhaul and test complex for the following engines:
 - F100 Fighter Engines (5 models), TF39 Cargo Engine (largest DOD Engine), T56 Cargo Engines (3 models)
 - More than 350 engines, 5,000 modules, and 72,000 components produced annually
 - 1.2 million sq ft environmentally controlled facilities
- Unique state-of-the-art capabilities
 - Only DOD Unified Fuel Control Repair and Test Facility
 - Unique facility with a Class I, Division II, Group D, Hazardous Testing Area
 - Only AFMC facility with integration of equipment and facilities for Advanced Fuel Accessories
 - Only Air Force Facility capable of testing F100-PW -100/220/229 Engine Fuel Accessories
 - Expanded capability to include Testing of F117 and F119 Engine Fuel Accessories
 - Only DOD Cryogenic Spin Test Facility
 - Only DOD Jet Engine Test Cell configured to test the largest DOD engine (TF39)

IMPACT:

- Estimated cost to reconstruct similar complex \$560.0 million
- Additional costs to train and certify workforce are unknown but must be considered
- Readiness of the F-15, F-16, C-5A/B, and C-130 fleets will be degraded

UPDATED: SA-ALC/FMPB/10 Dec 93

TALKING PAPER
ON
CONVENTIONAL MUNITIONS STORAGE
AND SHIPMENT

Purpose:

To highlight unique feature of the Standard Air Munitions Package (STAMP), and Standard Tanks, Rack, Adapters and Pylon Package (STRAPP).

Discussion:

- Management of receipt, storage, maintenance and deployment of assigned munitions, adapters, tanks, racks, and pylons in support of tactical forces worldwide
- Largest Air Force conventional munitions stockpile in US (\$700.0 million)
 - 17 million pounds shipped during Desert Shield/Storm
- Contingency Program
 - Worldwide rapid response within hours -- requires significant air freight support
 - 100 percent movement by airlift (not standard resupply)
 - Provides explosive safety support
 - Policy changes
- Unique facilities
 - 93 munitions igloos 7 miles near Kelly runway (\$46.0 million)
 - Dedicated munitions maintenance facilities

Impact:

- STAMP/STRAPP is a critical mission and growing

- STAMP/STRAPP cannot be cost effectively relocated
- SA-ALC manages all Air Force STAMP/STRAPP at two locations.

UPDATED: SA-ALC/FMPW/8 Dec 93/

TALKING PAPER

ON

GAS TURBINE ENGINE (GTE) FACILITY

Purpose:

To highlight the unique features of the SA-ALC Gas Turbine Engine Facility

Discussion:

- Consolidates turbine engine start systems repair, overhaul, assembly, and test functions into an integrated process for automated and semi-automated test systems
- Repair 52 percent of DOD small GTE workload
- Facility used to house the assembly and testing of GTEs, Allison Engine (to support the Army's Patriot Missile Launcher), F-15 and B-1B Secondary Power Systems, F-16 Engine Starter System and Air Turbine Starters/Cartridge Pneumatic Starters (ATS/CPS)
 - Integrated DOD capability and support
 - Currently only Air Force Depot for small GTEs, ATS/CPS
- Meets all environmental requirements ensuring quality products are produced
 - Maximum of 300,000 particles of 0.5 micron or larger per cubic foot of air
 - Between 50 degrees F and 80 degrees F with a maximum relative humidity of 65 percent
- Reduced retests and flowtime with increased unit production of quality products

Impact:

- No single DOD or private facility has capability to absorb current GTE workload

- Replacement costs in excess of \$17.2 million and require at least two years to reconstruct
- Deterioration of our quality products impacting mission readiness for ground-based and airborne power systems

UPDATED: SA-ALC/FMPB/10 Dec 93

TALKING PAPER
ON
NUCLEAR WEAPONS

Purpose:

To describe the unique Nuclear Weapons repair facility, Bldg 1420, capabilities for Nuclear Weapons and weapon systems Components.

Discussion:

- Provides worldwide logistics management of all nuclear ordnance commodities and associated delivery systems components to support the Air Force nuclear weapons program.
- Single point of contact between the Air Force and Field Command Defense Nuclear Agency (FCDNA), and the Department of Energy (DOE)
- Only Air Force facility performing depot analysis, repair, and test of Intercontinental Ballistic Missile (ICBM) Reentry Vehicle (RV) components.
- Only Air Force facility with complete Nuclear Ordnance environmental testing and Environmental Stress Screening (ESS) capability.
- 10,183 square feet of Electrostatic Discharge (ESD) floor space with ESD workstations conforming to Technical Order 00-25-203, Section VII requirements.
- 1,736 square feet ESD clean room, 100,000 particle count class with .5 microns and larger per cubic foot of air maximum. Conforms to T.O. 00-25-203, Section III requirements.
- Capability to repair and braid cable to meet nuclear hardness standards
- Shielded Microwave Anechoic Antenna Test Chamber (36' X 15' X 12' high) to verify antenna pattern integrity and conformance to design specifications.

Impact:

- The estimated cost of relocating all related equipment and services is \$10.0 million.
- High costs and increased risks to mission performance associated with interruption of worldwide logistics support.
- High costs related to relocation, retraining, and security certification for 332 personnel would be detrimental to mission effectiveness.

UPDATED: SA-ALC/FMPB/8 Dec 93/

TALKING PAPER
ON
INTEGRATED REVERSE ENGINEERING AND
REMANUFACTURING CAPABILITIES

Purpose:

SA-ALC has a unique and integrated infrastructure to accomplish reverse engineering and remanufacturing using in-place facilities, equipment, skilled craftsmen, and highly educated professionals.

Discussion:

SA-ALC's Depot Maintenance Machine Shop, Stereolithography, Computerized Industrial Tomographic Analyzer, Foundry, Rubber Products Manufacturing Shop and Science and Engineering Industrial Laboratory are the basis for a one-of-a-kind, integrated infrastructure that enables rapid response to AF and DOD requirements which can only be met through reverse engineering and remanufacturing. This infrastructure is postured to accomplish this critical industrial mission both effectively and with cost efficiency.

- Depot Maintenance Machine Shop
 - State-of-the-art facility opened in January 1989
 - Facility Cost - \$9 M; Equipment Cost - \$55M
 - Only DOD facility that is totally environmentally controlled
 - Controlled environment maintains critical tolerance control and repeatability
 - 142,000 square feet of floor space
 - 400 individual machining equipment/tools
 - 49 Computer Numerically Controlled (CNC) machines
 - Provides economical and efficient repeatable remanufacturing capability of critical items
 - Cost to relocate

- Replicate facility - \$12 million
- Equipment transfer and installation - \$1 million
- Machine operators are qualified and certified on individual equipment
- Relocating capability would require extensive operator training
- Stereolithography (SLA) capability
 - One of a kind in the AF and the largest in DOD
 - Initial software and equipment cost approximately \$1 million
 - SLA is a revolutionary new computerized process that uses laser technology to produce prototypes, patterns, molds, and castings
 - Produces three dimensional models in a matter of hours regardless of complexity
 - SLA enables reverse engineering and remanufacture of small and large numbers of parts needed for aircraft, engine and commodity maintenance/overhaul workloads
 - Dramatically reduces the time needed to prototype parts for depot workloads
 - Cost to relocate
 - Relocating SLA would result in a six month loss of capability
 - Cost to transfer and reinstall equipment - \$35,000
 - Training requires two to three years of extensive training to develop skilled operators
- Computerized Industrial Tomographic Analyzer (CITA)
 - Only DOD CITA nondestructive evaluation tool for specialized radiographic inspection of engine and airframe components
 - Inspection table envelope approximately six feet in height and five feet in diameter
 - Allows for determination of internal and external dimensions and associated tolerances

- When remanufacturing data is not available, CITA allows for rapid reverse engineering capability
 - Transfers data into Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) files for stereolithography and machine shop applications
- Cost to relocate
 - Facility transfer unfeasible
 - Cost to replicate - \$1.6 million
 - Specialized manpower and training requirements require approximately two years minimum
- Foundry
 - Only foundry in the AF capable of producing x-ray quality aluminum sand castings for engine and aircraft components
 - 20,000 square feet with state-of-the-art induction furnaces and two sand casting systems
 - \$2.0 million of equipment
 - Capable of producing parts weighing ounces to 400 pounds
 - Capable of producing drop hammer dies, using the latest in plastic technology, in forming aircraft skin panels
 - Improves production efficiency while eliminating environmental impacts caused by fabricating dies from traditional materials
 - Casting and dies produce remanufactured and reverse engineered parts used in aircraft and engine maintenance/overhaul workloads
 - Cost to relocate
 - Cost to replicate facility in excess of \$1.5 million
 - Cost to transfer and reinstall equipment - \$0.5 million
 - Foundry requires highly skilled pattern makers
 - Pattern making more of an art than a skill

- Extensive training required, five to ten years to become effective and efficient

- Rubber Products Manufacturing Shop

- Provides capability to manufacture a wide variety of rubber seals and components used in engine and aircraft workloads

- Supports AF and DOD rubber components not readily available from commercial sources

- Capability not duplicated at any other Air Logistics Center

- Example of capability involves injection of rubber into F100 engine cases to form air seals

- Without such capability F100 engines could not be overhauled

- Cost to relocate

- Cost to relocate capability \$.8 million

- Would require approximate one year to relocate

- Severely impact AF ability to produce F100 engines in support of F-15 and F-16 aircraft

- Science and Engineering Industrial Laboratory

- Largest industrial testing laboratory in AF

- Provides support to AF, DOD, DLA, Forest Service, and Department of Energy

- Provides unique capabilities

- \$8 million worth of sophisticated state-of-the-art laboratory test equipment

- Only AF industrial laboratory capable of providing textile testing support

- Involved in industrial research concerning surface technology

- Unique one-of-a-kind surface analyzer (LHS-12)

- Only DOD CITA nondestructive evaluation tool for specialized radiographic inspection of engine and airframe components

-- \$.5 million cost to relocate equipment

Impacts:

- SA-ALC provides a unique infrastructure to support the reverse engineering and remanufacturing mission
- Relocation will impact both the AF mission and cost effectiveness
 - Customer support will be adversely impacted
 - Replication of these six capabilities elsewhere would cost approximately \$18 million
 - Extensive and costly training required if capabilities are relocated

UPDATED: SA-ALC/FMPB/10 Dec 93

TALKING PAPER
ON
ELECTROPLATING FACILITY

Purpose:

To provide unique information on the Electroplating Facility.

Discussion:

- Unique capability to accommodate large aircraft components
- Provides metal surface treatment and finishing support on engine and aircraft parts for SA-ALC and surrounding military bases
- Includes 270 each plating tanks
- 50 different plating processes
- Plates approximately 25,000 items a month
- Approximate cost to rebuild: \$16.0 million

IMPACT:

- Cost to relocate - \$1.6 million
- High cost involved with moving equipment and environmental clean up. Difficulty in locating another facility capable of accommodating large aircraft components.

UPDATED: SA-ALC/FMPB/10 Dec 93

TALKING PAPER

ON

DEFENSE DISTRIBUTION DEPOT SAN ANTONIO

Purpose

To provide background information on the Defense Distribution Depot, its mission and relationship to Kelly Air Force Base.

Discussion:

- Receive, inspect, store, inventory pack and issue material world wide.
- Inventory valued in excess of 7 billion dollars
- 1225 employees/payroll of 37 million dollars
- 66 million cubic feet of covered storage space; largest of any depot in the western region of Defense Logistics Agency
- 75 acres of improved outside storage space
- Our automated and intermediate bulk warehouse is the largest single-story storage facility in the Department of Defense
- Our cantilever rack warehouse, which is the largest of its kind in the world, allows us to store outsize cargo.
- 250 pieces of material handling equipment
- Largest shipper of Foreign Military Sales for the Air Force
- Collocation with C-5 Reserve Wing offers excellent opportunities to reduce second destination transportation costs
- Saved 2 million dollars in FY92 through aggressive reclamation efforts

Impacts:

- Relocation of depot assets and equipment will be expensive (over \$100 million)
- Loss of unique capability - largest cantilevered rack storage facility in the world.
- Loss of use of C-5 reserve wing would increase cost of transportation

UPDATED: DLA/DDST/10 Dec 93

TALKING PAPER

ON

REGIONAL PROCESSING CENTER KELLY AFB TEXAS

DEFENSE INFORMATION SERVICES ORGANIZATION

INFORMATION PROCESSING CENTER

Purpose:

To provide information on the Regional Processing Center at Kelly AFB.

Discussion:

- One of five Air Force Regional Processing Centers in the nation
 - Selected by the Air Force to provide base level computer support under Defense Management Review Decision 924, which consolidates Air Force base level computer support with a total savings of over 500 manpower positions and reduction of computer systems by over 280.
 - Servicing the base level computing requirements for 17 Air Force bases for Air Combat Command, Air Mobility Command, Air Education and Training Command, and Air Force Materiel Command; plus the Air Force Reserve units and Air National Guard units in the southwestern United States; also workload from base closure activities.
 - 75 percent of equipment already installed at Kelly AFB; includes impressive computer technology hardware and software.
 - Already migrated eight sites with others scheduled to consolidate to Kelly from now through January 95.
 - Manpower and dollar savings that result from this base level consolidation has already been removed from the Air Force budget.
- Logistics systems development and processing

- Processing supports San Antonio Air Logistics Center, Air Intelligence Agency, and Air Force News Agency.
- Development supports the Navy, all Air Force commands, and all Air Logistics Centers.
- Selected as one of fifteen computer megacenters under Defense Management Review Decision 918
 - Ranked number five in the nation by the megacenter team based on facilities, security, operational capability and cost; as one of three Unisys sites, selected to handle over fifty percent of DOD Unisys workload.
 - Shutdown of four other Air Force centers and five Navy west coast centers with workload moving to Kelly AFB; includes a savings of over 500 manpower positions plus equipment maintenance and facilities upkeep.
 - Servicing the western two-thirds of the United States plus the Pacific.
 - No center ranked below Kelly has the existing facility to handle the megacenter workload projected for Kelly.
- Facility
 - New facility completed in 1993
 - Near the top in the nation for computer and communications capacity and for contingency processing
 - Site of DOD network nodes
 - Significant cost to relocate or duplicate facility, communications, and equipment
- Many cost savings initiatives
- Computer equipment valued at over \$65 million with operating budget of \$4.5 million
- Workforce
 - Highly skilled workforce

- 211 civilians, 22 military
- Payroll \$11.0 million
- No other ready market in the San Antonio area to absorb the workers
- Seventy percent of the workforce is minority or women
- Excellent rating in last Operational Readiness Inspection
- Received both a command level and Air Force level organizational award in 1992 for outstanding customer service and productivity

UPDATED: SA-ALC/DISO Senior Site Manager/ 9 Dec 93

TALKING PAPER
ON
HQ AIR INTELLIGENCE AGENCY

HQ Air Intelligence Agency (AIA) manages units worldwide and provides timely services, products and resources to national, strategic and tactical decision makers, operational commanders in the interrelated areas of intelligence, security, electronic combat, foreign technology, and treaty monitoring.

The Air Intelligence Agency occupies an infrastructure consisting of 32 buildings. Twenty-two of these buildings are redesigned to provide unique command operations which are one-of-a-kind, and do not exist as excess space on any DOD facility. This infrastructure includes a 750,000 square foot sensitive compartment information facility (SCIF) complex, the Air Force Cryptologic Support Center (AFCSC), Air Force Information Warfare Center (AFIWC), and various supporting organizations. Portions of AFCSC are slated to go to the Air Force Materiel Command (AFMC) while the remaining AFCSC elements are programmed for disposition within AIA. Collated with HQ AIA is the Joint Electronic Warfare Center (JEWEC). Ten of the buildings consisting of 234,173 square feet, provide dormitory, dining and support facilities. In addition, there are facilities designed to provide backup power and specialized destruction of classified materials.

- There are approximately 3,400 people authorized to the AIA units at Kelly AFB.
 - Kelly provides operations support to all the AIA organizations on Kelly as well as to two AIA organizations (93 IS and 48 IS) located on Media Annex, Lackland AFB.
- Significant costs would be incurred to relocate the AIA complex.
 - Costs to replicate buildings elsewhere
 - 98 thousand square feet of floor space would be required.
 - \$180.4 million would be required for construction, parking, security fencing, back-up power and specialized material destruction
 - \$39 million will be required to relocate personnel and furniture

- A significant cost would be incurred in relocating various electronic equipment and cryptologic material.
- \$3.5 million would be required to de-install and re-install dedicated communications and computer equipment.
- The Air Force Cryptologic Support Center (AFCSC) is the single manager for providing worldwide support for a wide range of cryptologic materials, providing life cycle support for over 17,000 line items of materials and services to more than 3,000 customers. Most of these line items support will transfer to AFMC but still reside in existing facilities.
- The Air Force Information Warfare Center (AFIWC) provides evaluation, analysis, data base development and test and planning support to electronic combat and command control (C2) activities throughout the Air Force (single "in-house consultant" for the Air Force on electronic combat and C2 matters). Support to Air Force tactical units, which depend on the significant computer data bases of the AFIWC, would be severely curtailed during any relocation of the AFIWC.

UPDATED: HQ AIA/XPPB/ 9 Dec 93

TALKING PAPER
ON
433RD AIRLIFT WING

Purpose/Main Thrust:

To provide information about the impact on the 433rd Airlift Wing an Air Force Reserve unit known as the "Alamo Wing"

Discussion:

- Strategic Airlift Capability
 - The 433rd is an integral part of the total Air Force airlift capability and this ALC
 - As such we have 14 C-5 aircraft - 12% of Air Force C-5s, and the capability to expand to 28 C-5s at minimal costs
 - Two Levels of Maintenance (2LM) is being planned for avionics (80 percent manpower reduction) and engines (60 percent manpower reduction)
 - First C-5 unit to mobilize during Desert Shield/Storm flying 2,349 sorties and 13,516 hours
 - Seventy percent of unit personnel volunteered to support Desert Shield/Storm prior to mobilization
- We have 3,500 Reserve personnel; one of the largest reserve units in the Air Force
 - 690 full time technicians and civilian employees
 - Over 3,000 reservist or 85% live within 100 miles
 - Includes 500 aerial port, 1,100 maintenance and over 500 aeromedical personnel
 - Ethnically diverse workforce
 - 28% Hispanic

- 18% female
- 9% black
- 1% other
- Demographics is critical to unit manning in a reserve unit our size
 - This was a major consideration in the decision to assign the C-5 to Kelly
 - Few areas of the U.S. could support a wing our size
 - Critical airlift flying, maintenance, and support skills are available to support the 433rd mission
 - Over 350 433rd personnel work at the SA-ALC
 - We have over 800 highly specialized medical personnel in several units
 - San Antonio is a major medical hub with Wilford Hall Medical Center, Brooke Army Medical Center, the Army Burn Center and the San Antonio Medical Center, which helps make San Antonio the premier medical recruiting area in the country.

UPDATED: SA-ALC/FMPB/9 Dec 93

TALKING PAPER

ON

**IMPACT OF KELLY AFB CLOSURE ON 149TH FIGHTER
GROUP (ANG)**

Purpose:

- The 149th Fighter Group operates F-16A aircraft from Kelly AFB. The facilities needed to support a fighter unit such as munitions storage, fuels storage, bombing ranges and Military Operating Areas are all available at Kelly AFB. The host base provides all airfield, command post, fuels storage, environmental management, and significant support in supply, accounting and finance, security and engineering areas.
- If the base were closed, the unit would be required to move. If moved to another airfield in San Antonio such as Randolph AFB or San Antonio International Airport significant cost would be incurred for the construction of facilities (conservatively \$20-\$30M) and the potential need for personnel to provide the support currently provided by Kelly AFB. If moved elsewhere, additional costs could result from the requirement to build a bombing range, providing the 149th Fighter Group retained its mission.
- The 149th Fighter Group benefits from the synergistic effect of the Engine, Egress Systems and Life Support programs managed at the Air Logistics Center. Currently the 149th Fighter Group operates the most cost effective F-16A unit of like size in the Air National Guard. If the unit was moved elsewhere, costs would increase because of the loss of daily access to engine specialists, Combat Logistics personnel and Life Support managers. Additionally, research and test programs at Brooks AFB that take advantage as we provide frequent access to equipment and pilots for various equipment and procedural research and test programs.
- In conclusion, one of the primary reasons the 149th Fighter Group delivers so much "bang for the buck" is its location at Kelly AFB. Closing either the Logistics Center or the base would be a traumatic and costly decision that would impact the unit for years into the future.

UPDATED: Col Walston/CC/9 Dec 93



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, US ARMY AVIATION AND TROOP COMMAND
4300 GOODFELLOW BOULEVARD, ST. LOUIS, MO 63120-1798



AMSAT-I-SB

MAY 28 1993

MEMORANDUM FOR SAN ANTONIO AIR LOGISTICS CENTER, ATTN: FMP,
KELLY AIR FORCE BASE, TX 78241-5000

SUBJECT: Letter of Appreciation

1. During the calendar year 1990 the Defense Depot Maintenance Council designated your facility as the source of repair for the Gas Turbine Engine used in the PATRIOT Missile system. This engine is the power driver for the 150KW/400HZ Generator Set which, in turn, is the prime power source for the Engagement Control System and Radar Set portion of the PATRIOT Missile System. This Missile System is managed by the Army as a Go-To-War system with the highest readiness requirements. The generator set and engine is one of the most intensively managed packages at this command.
2. This engine is a sole source design, unique to the PATRIOT Missile System and has a very low end item density, all of which make problem solving and spare parts shortages difficult, if not impossible to overcome at times. In addition, 20+ of the first engine overhaul candidates provided to you were in extremely poor condition (catastrophic failures/turbine burst). In spite of these very difficult challenges, your personnel demonstrated a high degree of professionalism, initiative and technical proficiency by continually developing short term work around procedures while the long term solutions were being put in place.
3. As a direct result of your many technical abilities and the professionalism of your staff, the initial prototype effort and actual production was started ahead of schedule. You have since identified numerous required corrections/changes to the Army technical manuals, physically fabricated spare parts, refurbished several parts and are developing new procedures to expand the number of parts being fabricated or refurbished. All of your efforts to include the application of two depot level Material Changes to the engine which you began applying in 1993 will mean improved reliability, maintainability and supportability. All of this equates to reduced Operating and Support (O&S) costs and improved readiness of the 150KW/400HZ PATRIOT generator set.

AMSAT-I-SB

SUBJECT: Letter of Appreciation

4. It is with a great deal of appreciation that I pass along our words of thanks and I look forward to our continued success for future programs.

A handwritten signature in cursive script, appearing to read "John E. McClure".

JOHN E. MCCLURE
Chief, Depot Production Division



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 552d AIR CONTROL WING (ACC)
TINKER AIR FORCE BASE, OKLAHOMA

15 APR 1993

552 ACW/CC
7481 Sentry Blvd, Ste 102
Tinker Air Force Base, OK 73145-9012

Major General Lewis E. Curtis III
100 Moorman Street
Kelly Air Force Base, TX 78241-5808

Dear General Curtis

I want you to know how much I appreciate your support of the E-3 aircraft test equipment which helps us perform our mission worldwide.

Your Chief of the Automatic Test Systems Program Management Division, Col William Deegan, has formed a super team to help us improve our test capabilities for the E-3. Under his leadership, Lt Col James T. Putnam, Chief of the Tactical Program Management Branch, and Mr Harvey Ford, E-3 Test Equipment Program Manager, have built a team that has earned our respect. Many of our testers are older and would be unsupportable without the exceptional efforts of Col Deegan's people. Mr Ford has worked hard to build a team feeling between your people and my maintainers. It has worked. Our people enjoy the professional relationship they share with your people.

Lt Col Jim Hass, 552d Maintenance Squadron Commander, recently briefed the totally successful story of the Benchtop Reconfigurable Automatic Tester (BRAT) your people helped us with. It worked right the first time and greatly increased our capability. I know that doesn't happen by chance. It took a lot of hard work from your people and they were up to the challenge. Many thanks to you and the SA-ALC E-3 team.

Very Respectfully

A handwritten signature in cursive script that reads "David Oakes".

DAVID OAKES, Brig Gen, USAF
Commander

Global Power for America



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS DIVISION (AFSC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-6503

30 MAR 1992

REPLY TO
ATTN OF:

YZ

SUBJECT:

Appreciation

TO:

SA-ALC/LP
Attn: Mr Maurice LeBlanc
Kelly AFB TX 78241-5000

1. We have just completed what I consider to be the most successful executive Engine Advisory Group (EAG) meeting ever. Your support in hosting this meeting contributed directly to the successful interchange and dialogue of current propulsion issues.
2. I would like to express my sincere appreciation for the truly outstanding support you provided for the executive EAG meeting on 11-12 Mar 92. The structure of the meeting and accommodations were conducive to a very productive and informative EAG.
3. Please express my thanks and appreciation to your staff, in particular, Mr Robert Whelan, Mr Mike Mullen and Ms Belinda Strickland, for all of their efforts in arranging, planning and coordinating for all of the various EAG members and activities. Their efforts were complicated by the continual addition of propulsion groups desiring to attend the EAG, but they were able to overcome all of these challenges. The danish, coffee, fruit and other amenities added an extra special and professional touch to the overall meeting.
4. Also, Denny Portz deserves special recognition for his choice of restaurant. The dinner and atmosphere were absolutely superb!
5. Again, I thank you and all of your staff for making this EAG an outstanding success.


FRANK O. TUCK, SES
Program Director
Propulsion SPO

1st Ind/LP

08 APR 1992

TO: LPE

Please pass along my personal thanks to Bob Whelan, Mike Mullen and Belinda Strickland for their "mission first" attitude. Successfully planning and executing a meeting with organizations as diverse as those represented on the EAG is a challenge. Thanks for a job well done!


MAURICE LeBLANC
Director of Propulsion



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

FROM: ASC/SMKB Bldg 46
1859 Fifth St.
Wright-Patterson AFB, OH 45433-7200

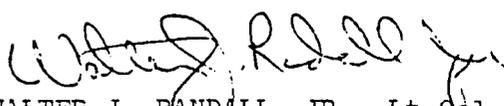
SUBJ: Contract F33657-88-C-0134, F100-PW-229 Engine Program,

TO: SA-ALC/LDT

1. In August of 1992 we initiated an energetic program to complete formal publication of all the -229 engine controls and accessories technical manuals. The program included not only the verification stage of the manual process but included a good portion of the initial development efforts as well. Validations, prepublication reviews, in-process reviews and verifications are all part of the program to make SA-ALC Depot Active by December of 1993.

2. The organization of a program of this magnitude, must by necessity, include the knowledge, expertise, and cooperation of the user, i.e. SA-ALC personnel. During the ensuing months many obstacles have been encountered and resolved in the very best interests of the Air Force. This in large part due to the cooperation of the people from SA-ALC. (See attachment #1) They have participated in all of the processes mentioned above and are to be commended for their enthusiastic support which has, on more than one occasion, demanded after hours support to resolve some rather demanding issues. They, without exception, offered their help and time to insure that only the best technical data would be received and paid for by the Air Force.

3. Although we still have a long way to go I feel it imperative to take this time, as Program Manager of the 229 Engine Program, to extend my personal thanks for the contributions of these men and women of SA-ALC who have given so much to benefit us all. Thank you!


WALTER J. RANDALL, JR., Lt Col, USAF
Chief, F100 Engine Branch
Fighter Engines Division
Subsystems SPO

1 Atch
List of Recipients



Certificate of Appreciation for Superior Performance



Presented To:

Manuel Garcia

*Your contributions to the F110-PW-229 Depot
Controls and Accessories Verification Program have
contributed significantly towards our goal of
Depot Activation by December, 1993.*

On behalf of the 229 Program Office,

Thanks for a Job Well Done !

Walter A. Randall Jr.

**WALTER RANDALL, LT COL
229 ENGINE PROGRAM MANAGER
SUBSYSTEMS SPO**

AIRTACS
CORPORATION

GRAND STREET AND WISE AVENUE
PO. BOX 349
RED LION, PA 17356
(717) 246-2641

A SUBSIDIARY OF **ATACS**
CORPORATION

April 13, 1993

Mr. William W. Smith
Section Chief LDKSH
Directorate of Aerospace Equipment
Kelly Air Force Base, TX 78241-5000

Re: Contract F41608-88-D-3060

Dear Mr. Smith:

I wanted to let you know that we appreciate the effort involved in arriving at the equitable solution for the above contract. I called Mr. Rodney Steese on the day before he retired to thank him for his effort. I also want to take this opportunity to recognize the effort expended by Mr. Jeffrey Knowlton, who was our contracting officer from early in the contract until he was hospitalized last fall, and to express our thanks for his effort. The actions of these two gentlemen have permitted our small company to continue to operate and thus enable us to provide employment for more than a 100 people in Pennsylvania. It can be said that their work has made a difference in people's lives. This reflects positively on the leadership they have received.

Again, thanks.

Sincerely,


Gus Stamatios
President

cc: J. Marcinko
R. V. Ritchie
Contract File



PRODUCTION AND
LOGISTICS

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-8000

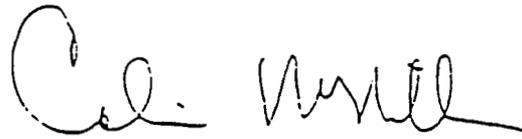
March 11, 1991

MEMORANDUM FOR UNDER SECRETARY OF THE ARMY

SUBJECT: Joint Service Business Plan for Depot Maintenance

I have reviewed the Joint Service Business Plan for Depot Maintenance that you submitted on February 28, 1991. It is obvious that a lot of work went into this effort. The plan reflects the cooperation and teamwork of the four Services as we progress toward our goal of saving \$3.9 billion in depot maintenance resources by 1995.

Please extend my sincere thanks to all the men and women involved in this very important undertaking. I appreciate all of the hard work in completing 18 separate commodity studies, integrating them into the Joint Service Business Plan, and getting it submitted on time. The cooperation of the individuals and Services was truly remarkable. The spirit of cooperation that was developed in the planning stage should be invaluable as we begin implementation.



Colin McMillan

DEPARTMENT OF THE ARMY
HEADQUARTERS, U. S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333-0001



AMCSM

10 June 1991

MEMORANDUM THRU BRIGADIER GENERAL RICHARD SMITH, COMMANDER, SAN ANTONIO AIR
LOGISTICS CENTER, KELLY AIR FORCE BASE, TX 78241

FOR MR. KEVIN SCHNITZER, SAN ANTONIO AIR LOGISTICS CENTER, KELLY AIR FORCE
BASE, TX 78241

SUBJECT: Memorandum of Commendation

1. In July 1990, I accepted a challenge from the Deputy Secretary of Defense to examine depot maintenance capabilities. The purpose of this effort was to identify opportunities to reduce costs of depot operations through improving capacity utilization of depot maintenance facilities, increasing competition of depot repair activities, and targeting opportunities for maintenance support between the U.S. Army and our sister services.
2. The Defense Depot Maintenance Council has accepted in full the recommendations of the Gas Turbine Engines and Compressors Depot Maintenance Study. The Assistant Secretary of Defense for Production and Logistics expresses his thanks for a job well done as reflected by the enclosed memorandum.
3. You have been identified as a key member of this successful joint service study. Your support and expertise contributed to the study's timeliness, conclusions, and final recommendations. I commend you for your dedication and offer my sincere gratitude for your efforts.

Encl

William G. T. Tuttle, Jr.
WILLIAM G. T. TUTTLE, JR.
General, USA
Commanding



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SAN ANTONIO AIR LOGISTICS CENTER (AFLC)
KELLY AIR FORCE BASE, TEXAS 78241-5000

17 January 1992

REPLY TO
ATTN OF: CC

SUBJECT: Letter of Commendation

TO: LD (Colonel Marvin Davis)

1. It is my pleasure to forward the attached letter from General William G. T. Tuttle, Jr, Commander, U.S. Army Materiel Command, and Mr Colin McMillan, Assistant Secretary of Defense, commending Mr Keven Schnitzer and Mr Jerry Klar for their support on the Gas Turbine Engines and Compressors Depot Maintenance Study. Their efforts in the success of this study have distinguished them as an exemplary employees of this Center.

2. Please extend my thanks to Mr Schnitzer and Mr Klar for their outstanding performance which earned them this recognition. Super job!


RICHARD D. SMITH
Major General, USAF
Commander

1 Atch
AMCSM-MMD Ltr, 10 Jun 91 w/Atch



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS DIVISION (AFSC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-6503

23 JAN 1991

REPLY TO: YZ
ATTN OF:

SUBJECT: Appreciation

TO: SA-ALC/CC

1. The Directorate of Tactical Engines Program Office, Aeronautical Systems Division, Air Force Systems Command, wishes to express its thanks and sincere appreciation for superior performance to the San Antonio Air Logistics Center team members who participated in the verification of the F100-PW-229 engine technical orders. All team members are listed on Atch 1 to this letter.
2. These people demonstrated enthusiasm and professionalism far beyond that which could be termed acceptable levels of performance. They possessed a clear vision of what must be accomplished in the best interest of the United States Air Force. As a direct result of their efforts, the technical data verified is the highest quality produced to date in the F100 engine series. The results of their efforts have truly created a target which others who follow will find extremely difficult to emulate.
3. An important spin-off of this verification project is an enhanced appreciation of the quality of work performed by San Antonio, and further, includes the improvement of collateral F100-PW-220 engine technical data. The verification, overall, will have significant and lasting effects on the quality of maintenance throughout the engine life cycle. Again, my personal thanks for a job well done.

James A. Mintz
JAMES A. MINTZ, Col, USAF
Program Director for
Expendable SPO

1 Atch
List of Verification Team
Members (SA-ALC)

F100-PW-229 TECHNICAL ORDER VERIFICATION TEAM MEMBERS

The following personnel from San Antonio Air Logistics Center supported the verification:

Tom Tucker	Engineer	LPPEF
Norm Therrien	VTM	LPFEC
Edward Calderon	VTM	LPPEF
Jack Johnson	Technician	LPPEF
Gerald Kneuper	Technician	LPPEH
Roger Gonzales	Planner (Engine)	LPPEF
Archie Brown	Planner (Engine)	LPPEF
Denny Johnson	Planner (Gbx)	LPPEF
Juan Jimenez	Planner (FDT)	LPPEF
Ted Moreno	Planner (Engine)	LPFEC
Mike Seto	Planner (Fan)	LPPEF
Bill Dixon	Planner (Fan)	LPPEF
Linda Devora	Planner (Aug)	LPPEC
Raul Mancha	Planner (Aug)	LPPEC
Sam Hernandez	Planner (Test)	LPPET
Chuck Walsh	Planner (Core)	LPPEH
Joe Espinoza	Planner (Core)	LPPEH
Manuel Lemus	Planner (Core)	LPPEH
Rueben Colon	Mechanic (Engine)	LPPPF
Ramon Gonzales	Mechanic (Engine)	LPPPF
Willie Siller	Mechanic (Engine)	LPPPF
Benito Serrateo	Mechanic (Engine)	LPPPF
Mary McDaniel	Mechanic (Gbx)	LPPPF
Rick Gonzales	Mechanic (FDT)	LPPPF
Rose Garcia	Mechanic (FDT)	LPPPF
Santiago Deleon	Mechanic (Fan)	LPPPF
Joe Vasquez	Mechanic (Fan)	LPPPF
Delbert Polly	Mechanic (Aug)	LPPPC
Sonia Rocha	Mechanic (Aug)	LPPPC
Guadalupe Dominguez	Mechanic (Aug)	LPPPC
John Ramos	Mechanic (Core)	LPPPH
Ralph Martinez	Engine Technician	LPFCA
Raul Alanis	Engine Technician	LPFCA
Rick Taylor	Mechanic (Core)	LPPPH
Rueben Torres	Mechanic (Core)	LPPPH
Raul Flores	Mechanic (Test)	LPPPT
John Duckett	Mechanic (Test)	LPPPT
Phillip Deleon	Machinist	LPPPG
Repolito Briones	Machinist	LPPPG
Estaben Deleon	Inspector	LPPPN
Michael Faglie	Inspector	LPPPN
Daniel Saldana	Inspector	LPPPN
Sylvia Lambaria	Tech Pubs	TIRIR
Rosie Torres	Planner (C&A)	LDTEC
Eddie Dominguez	Planner (C&A)	LDTEC
Joe Ward	Planner (C&A)	LDTEC
Rudy Buentello	Planner (C&A)	LDTEA
Muhammad Al-Duhan	Planner (C&A)	LDTEA

F100-PW-229 TECHNICAL ORDER VERIFICATION TEAM MEMBERS (Cont'd)

Ray Skrzycki	Planner (C&A)	LDSRT
Andy Zertuche	(C&A)	LDTPA
John Sanchez	(C&A)	LDTPA
Rueben Leandro	(C&A)	LDTPA
Mark Ramirez	(C&A)	LDTPH
William Markowski	(C&A)	LDTPE
Clinton Blumberg	(C&A)	LDSTA
Kelly Herbert	(C&A)	LDSTA
Nora Garcia	Clerk	LPPPC
Ben Serrato	Engine Mechanic	LPPPF



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SAN ANTONIO AIR LOGISTICS CENTER (AFLC)
KELLY AIR FORCE BASE, TEXAS 78241-5000

18 March 1991

REPLY TO
ATTN OF: CC

SUBJECT: Letter of Appreciation (HQ ASD/YZ Ltr, 23 Jan 91)

TO: LD (Col Davis)

When I received the attached letter from Colonel Hintz, Program Director for the Tactical Engines Program Office at ASD, I was both pleased and overwhelmed. Fifty-eight members of the San Antonio Air Logistics Center formed a team that provided the epitome of quality support. Thirteen of those members are from your Directorate. Please thank each and every member for their role in this excellent example of Kelly teamwork. Well done!

A handwritten signature in black ink, appearing to read "R. D. Smith", is written over the typed name.

RICHARD D. SMITH
Major General, USAF
Commander

1 Atch
HQ ASD/YZ Ltr, 23 Jan 91



COMBAT STRENGTH THROUGH LOGISTICS

DEPARTMENT OF THE AIR FORCE
AIR FORCE INTELLIGENCE COMMAND

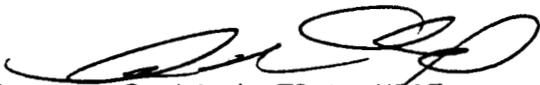
FROM: 693IW/MR
248 Kirknewton Street
San Antonio, TX 78243-7150

20 May 93

SUBJ: Letter of Appreciation

TO: SA/ALC TI

1. Recently the Commander 693 Intelligence Wing released a message thanking all those units who made the recent Green Flag exercise such a success. Unfortunately many units outside of Kelly AFB have stated they have not received this message.
2. Attached is a copy of that message for your information.
3. POC is TSgt Lind, 693IW/MR, DSN 969-3059/3063.


Gregory R. Lind, TSgt, USAF
Mobility Readiness Directorate

***** UNCLAS E F T O *****

Printed by request

BOTH ACTIVE, RESERVE, AND NATIONAL GUARD, AND ARMY SERVICE. YOUR INNOVATIVE APPROACHES TO THIS CHALLENGE MADE A DIFFERENCE IN THE FINAL OUTCOME. I THANK YOU AGAIN AND LOOK FORWARD TO YOUR SUPPORT DURING FUTURE OPERATIONS.

***** UNCLAS E F T O *****



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE LOGISTICS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-5001

10 MAR 1992

REPLY TO
ATTN OF:

CC

SUBJECT:

AFLC National Defense Transportation Association (NDTA) Award

TO:

SA-ALC/CC

1. Although the NDTA did not conduct an actual awards process this year, we asked for award nominations so that we could properly recognize the outstanding achievements made by our field units during this tumultuous year in history. A thorough review of all submissions made it clear that each nominee made significant accomplishments toward the logistics mission; however, four activities stood out as performing at an exceptional level.
2. AFLC contributed much to the success of Operation DESERT SHIELD/STORM, and the efforts of the Transportation Operations Division were key factors that led to the outstanding part we played in the war.
3. The Transportation Operations Division is to be congratulated for receiving this well-deserved award. My staff and I thank you for your perseverance throughout the year and for participating in the NDTA awards program. Please present the enclosed certificate and plaque at an appropriate ceremony to commemorate this honor.

CHARLES C. McDONALD
General, USAF
Commander

2 Atch
1. Certificate
2. Plaque



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SAN ANTONIO AIR LOGISTICS CENTER (AFMC)
KELLY AIR FORCE BASE, TEXAS

FROM: SA-ALC/CC

24 FEB 1993

SUBJ: AFLC National Defense Transportation Association (NDTA)
Award (HQ AFLC/CC Ltr, 10 Mar 92)

TO: 651 SPTGP/CC (Colonel Raymond Holmes)

Please extend my congratulations to the staff of the Transportation Operations Division for selection of the AFLC NDTA Award. Their outstanding efforts during Operation Desert Shield/Desert Storm are recognized and well appreciated. My personal thanks for a job well done!

A handwritten signature in black ink, appearing to read "LEWIS E. CURTIS III", is written over the typed name.

LEWIS E. CURTIS III
Major General, USAF
Commander

1 Atch
HQ AFLC/CC Ltr, 10 Mar 92

11007



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SAN ANTONIO AIR LOGISTICS CENTER (AFMC)
KELLY AIR FORCE BASE, TEXAS

FROM: TI
SUBJECT: Letter of Appreciation
TO: TID

20 MAY 1993

1. Congratulations for the outstanding endeavors of the employees in the Transportation Branch. As indicated from the letter signed by AFLC Commander, General Charles C. McDonald, Transportation's award submission included significant accomplishments made toward the logistics mission. This was obvious from your extraordinary support of Operation DESERT SHIELD/STORM which ultimately led to the favorable outcome of this national conflict.

2. It gives me great pleasure to forward Gen McDonald's letter as well as Maj Gen Lewis Curtis'. Congratulations, once again, and continue to make all of us proud.

Signed

HANS J. LANGE, Deputy Director
Technology & Industrial Support

1 Atch
CC Ltr, 24 Feb 93, w/atc

TICDP4 [Signature]
TICP [Signature]
TIC [Signature]
TI



AEROSPACE
ENGINEERING AND
SUPPORT, INC.

1307 WEST 2550 SOUTH • OGDEN, UTAH 84401-3239 • (801) 394-9565 • FAX (801) 394-9022

February 17, 1992
AES 91-1153

Department of the Air Force
Headquarters SA-ALC/TIR
San Antonio Air Logistics Center
Keily Air Force Base, TX 78241-5000

Subject: USAF Contract F41608-91-D-1472, letter of appreciation Ms. Sylvia Lambaria, Ms. Judith Pena TIRTR.

Dear Sir:

1. During the period of Oct 91 thru Oct 92 personnel of TIRTR have supported Aerospace Engineering & Support, Inc. (AES) by furnishing guidance in the accomplishment of Changes/Update to Engine Manuals (2J-J85 and 2J-TF34).
2. We would like to extend our appreciation and thanks to Ms. Sylvia Lambaria and Ms. Judith Pena for their assistance. Others from TIRTR were helpful but the conduct of the above individuals was most exemplar and deserving of special note. We appreciate having these persons assigned to this project and want you to know that they took extra steps to insure that changes/updates were accomplished as directed. Would you please extend to them our gratitude for their outstanding support during this period.

Respectfully,

Aerospace Engineering & Support, Inc.

A handwritten signature in cursive script that reads "Stan Florence". The signature is written in black ink and is positioned above a horizontal line.

STAN FLORENCE
PRESIDENT

SF/nr



JOINT UNITED STATES MILITARY ASSISTANCE GROUP
TO THE REPUBLIC OF THE PHILIPPINES

APO SAN FRANCISCO 96528

JPAF-C

July 5, 1990

Subject: Letter of Appreciation

SA-ALC/MM/MA
Kelly AFB, Texas 78241

1. Please convey our appreciation for exceptional support to the below listed individuals. The Philippine Air Force (PAF) F-5A/B fleet was recently grounded for cracked horizontal interconnect bracket housings. Replacement housings were unavailable and had to be locally manufactured by SA-ALC. The timeliness of this process and the expedited delivery of the housings to the PAF is credited to the diligence and hard work of these professionals and other manufacturing personnel.

Ms. Roxeana Kimmel	MMVDA
Mr. Carl Heacker	MMVDA
Mr. Don Rivers	MATEN
Mr. Ben De Leon	MAWWW
Mr. Hector Vaca	MATEN
Mr. Jesse Barrera	MATEN

2. Our deepest thanks for a job well done in getting the PAF fleet back in the air.
FOR THE CHIEF:

BRENT W. BALAZS
COL, USAF
Chief, Air Force Division



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS DIVISION (AFSC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-6503

10 MAR 1989

REPLY TO
ATTN OF: SDB

SUBJECT: Appreciation

TO: SA-ALC/SW

1. As you know, the Electromagnetic Compatibility (EMC) test for the Common Strategic Rotary Launcher (CSRL) was recently completed at Kelly AFB. This test was a complicated effort involving various contractor and military personnel to verify the electromagnetic compatibility between the CSRL, its various weapon loads; and the B-52 aircraft subsystems. Completion of the test six weeks early marked another major CSRL milestone.

2. Many factors contributed to the successful outcome of the EMC test. One was the tremendous support we received from the various organizations involved. Another was the number of truly outstanding people who assisted the test effort. They deserve recognition for their work. Thanks to Captain Marion McClain, Mr Barry Hiddema, and Mr Randy Davidson for their superb work. They are to be commended and are obviously some of your best people. They were on the forefront of the outstanding support the test team received from Kelly AFB and their efforts contributed directly to the highly successful completion of the CSRL EMC tests.

3. Again, I would like to express my sincere thanks and appreciation for the tireless efforts of the individuals and the overall assistance provided by SA-ALC and the fine people at Kelly AFB.

Robert A. Lancaster

ROBERT A. LANCASTER, Colonel, USAF
Director of Bomber Programs
Systems Program Office



NATIONAL SECURITY AGENCY
FORT GEORGE G. MEADE, MARYLAND 20755-6000

24 April 1991



Colonel Charles B. Stutts Jr.
Director, Special Weapons Management
Air Force Logistics Command
Kelly AFB, San Antonio, TX. 78241-5000

Dear Colonel Stutts,

On behalf of the Weapons Systems Office of the National Security Agency, I would like to express my sincere appreciation to Ms. Bonnie Warnke of your Special Weapons Research and Development Division for significant contributions she made in support of recent testing at Kelly AFB. These tests were being conducted in support of Verifiable Control Procedures, a program directed by the Office of the Secretary of Defense designed to enhance the security of Nuclear Command and Control equipment.

Ms. Warnke provided the critical liaison between NSA and AFLC that was required to make our visit a successful one. She obtained a listing of all Permissive Action Link coding equipment held by San Antonio Air Logistics Center and arranged for the delivery of this gear to hangar space made available for testing. The results obtained provided the specific information that we needed to continue work towards enhancing the security of United States nuclear forces. Without the support we received this project could not have been completed.

Ms. Warnke's can do attitude, her knowledge of the equipment on hand at San Antonio and her very professional assistance directly resulted in the successful completion of this mission. My most sincere thanks to her and the rest of the AFLC team.

Sincerely

A handwritten signature in cursive script that reads "William O. Marks".

William O. Marks
Chief
Weapons Systems Office

SOUTHWEST INDEPENDENT SCHOOL DISTRICT

11914 Dragon Lane • San Antonio, Texas 78252-2647
512 - 622-3488

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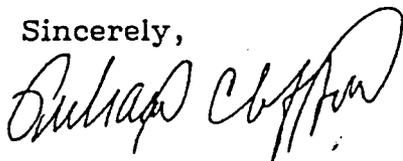
July 6, 1992

Dear Kelly Mentor:

You've done it again! You have given confidence to the insecure, faith to the doubtful, trust to the distrustful and have inspired many people to do the same. People from around the country are looking closely at the positive outcomes our program has produced. The Kelly AFB/Southwest I.S.D Mentor Program is recognized as one of the most successful of its kind and a model community-based mentor program for the country and it is my belief that the Kelly AFB/Southwest I.S.D. Mentor Program will continue to prosper and achieve its goals.

On behalf of the Southwest I.S.D., I would like to thank you for your devotion and dedication in making the Kelly AFB/Southwest I.S.D. Mentor Program a great success. You are having a most profound effect in improving the quality of education for our disadvantaged students. Again, thank you for your time and efforts. You are making a difference!

Sincerely,



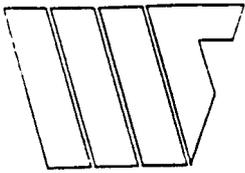
Mr. Richard Clifford
Superintendent of Schools

Southwest High School
McNair Middle School
McAuliffe Middle School
Southwest Enrichment Center

Southwest Elementary School
Sun Valley Elementary School
Indian Creek Elementary School

An Equal Opportunity Employer

Bob Hope Elementary School
Sky Harbour Elementary School
Hidden Cove Elementary School
Big Country Elementary School



THE WASHINGTON TEAM

316 Pennsylvania Avenue, S.E., Suite 202
Washington, D.C. 20003
Phone 202-547-9501 FAX 202-544-6240

February 5, 1993

Col. R. Rasmussen
San Antonio ALC/TI
Kelly Air Force Base
San Antonio, Texas 78241

Dear Col. Rasmussen:

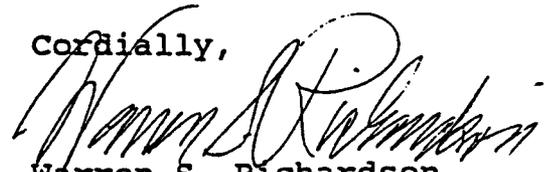
Approximately one month ago our company was working on a problem for a client which involved finding some specific information about a certain Milspec. We started at the Pentagon with calls to get the data we needed. It took us 20 separate phone calls, both here in Washington and other parts of the country, until we had the good fortune to come upon Ms. Dixie Honish, who was number 21.

This letter is written to inform you that Ms. Honish is an outstanding example of how one person can create good will for her organization. We would be pleased if you would add this letter of commendation to her personnel file.

At the beginning of the conversation she demonstrated an interest in helping us. But she went above and beyond the call of duty. The information we wanted is not in her area. When Ms. Honish learned that she was number 21 in the chain, she offered to go to another part of her building and find the answer for us. She did this on her own time. We called her back the next day and received the desired information. To say the least, this action on her part is a refreshing contrast to the normal reaction we get from so many people.

In closing, we believe you are lucky to have such a fine person on your staff.

Cordially,



Warren S. Richardson



DEPARTMENT OF THE AIR FORCE -
HEADQUARTERS AIR FORCE LOGISTICS COMMAND
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-5001

10 MAR 1992

REPLY TO
ATTN OF:

CC

SUBJECT:

Air Force Special Transportation Activity-of-the-Year Award

TO:

SA-ALC/CC

1. The Operations Branch, Transportation Operations Division, Directorate of Distribution, San Antonio Air Logistics Center, Kelly Air Force Base, Texas, has been selected as our 1991 AFLC winner of subject award.
2. The following achievements qualified them for this distinction:

The Operations Branch personnel were directly responsible for the successful deployment of troops and equipment in support of Operation DESERT SHIELD/STORM. They assisted in the deployment/redeployment of 8,214 troops on 507 aircraft, carrying in excess of 23 million pounds of equipment, including 17 million pounds of munitions. They worked diligently despite adverse weather conditions to load 10 C-5 aircraft transporting 25 UH-1 helicopters, 107 pallets of equipment, and 57 pieces of rolling stock for the deployment of the 507th Medical Battalion. This Branch manages, maintains, and controls administrative support for an organization of over 700 employees. Twenty-seven major studies within the Division streamlined the flow of material, saving vital funds and man-hours. The Vehicle Control Office manages a fleet of over 400 vehicles and continues to be rated "Best" in the Command.

3. Please present the enclosed certificate and plaque to the members of the Operations Branch and extend my personal congratulations to them for a superior effort. Their outstanding accomplishments not only reflect credit upon themselves, but upon the entire Command.

CHARLES C. McDONALD
General, USAF
Commander

2 Atch
1. Certificate
2. Plaque



COMBAT STRENGTH THROUGH LOGISTICS



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS OGDEN AIR LOGISTICS CENTER (AFLC)
HILL AIR FORCE BASE, UTAH 84056-5609

REPLY TO
ATTN OF: OO-ALC/LAI

SUBJECT: Letter of Appreciation

5 OCT 1990

TO: SA-ALC/MMGM (Sue May)

1. It has been our pleasure to work with a person of your high caliber in the Peace Crown Program. Through your individual efforts in working logistics issues, the Peace Crown team has provided vital support which ensured successful Bahrain Air Force participation in the current Mid-East situation (Desert Shield).
2. Thank you for a job well done.


PAUL T. WELCH, COL, USAF
Chief, International Division
Aircraft Directorate



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS OGDEN AIR LOGISTICS CENTER (AFLC)
HILL AIR FORCE BASE, UTAH 84056-5609

REPLY TO
ATTN OF: MMA

22 FEB 1990

SUBJECT: Letter of Appreciation

TO: SA-ALC/MMG
SA-ALC/MMGM
Ms Sue May
IN TURN

*Sue May - it's people like you that help our customers
Image too much. Thanks for your pro-active work &
dedication! Steve Donnelly*

1. The Royal Netherlands Air Force (RNLAf) is activating another base 1 April 1990 and some of the required support equipment has still not been delivered. In order to review the status of these items OO-ALC/MMAI requested a Support Equipment Working Group be hosted by MMGM, 23-27 January 1990. Ms May was assigned as OPR for this meeting and worked closely with the OO-ALC/MMA Support Equipment manager to assure that we could concentrate on the items most critically required.

2. When the meeting convened, Ms May had obtained status from the Inventory Managers, and if support would not be available by the need date, had checked to see if drawings were available so the 4950th ABG Wright Patterson AFB, Ohio could determine whether they could manufacture. Ms May also arranged for selected Inventory Managers to attend the meeting, to provide us with the latest status of the items, and advise us of actions that could be taken to obtain the material.

3. This Support Equipment meeting was the most productive we have held on the RNLAf Activation, and this was due to Ms May. She was very organized and knowledgeable. We also appreciated her cheerful attitude. We want to express our appreciation and extend a special thank you to Ms May for her effort.

DAVID K. WRIGHT, Col, USAF
Ch, F-16 System Program Mgt Div
Directorate of Materiel Management



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS OKLAHOMA CITY AIR LOGISTICS CENTER (AFMC)
TINKER AIR FORCE BASE, OKLAHOMA

FROM: OC-ALC/TIL

8 Feb 93

SUBJ: Letter of Appreciation - Ms Deanna Wong

TO: SA-ALC/LDE
Bldg 1562
485 Quentin Roosevelt Rd
Kelly AFB TX 78241-6421

1. There are times when an employee from another ALC provides invaluable assistance to our provisioning branch and because of such action we feel recognition of the extra effort is warranted. We wish to have our appreciation for a job well done conveyed to such an employee in your organization, Ms Deanna Wong of LDEP.
2. Ms Wong has greatly assisted this office in the implementation of the Initial Requirements Determination (IRD) System by insuring Programming Checklists for which she has responsibility are properly established in the system, as well as assisting to get program information established in the system for other support equipment managed at SA-ALC. Ms Wong's responses to our requests for information/assistance have always been made quickly and courteously.
3. Please relay our appreciation to Ms Wong for exceptional performance.


LYNN D. SHACKELFORD
Chief, Logistics Support Division
Technology & Industrial Support



HEADQUARTERS 127TH TACTICAL FIGHTER WING (TAC)
MICHIGAN AIR NATIONAL GUARD
SELFRIDGE ANG BASE, MICHIGAN 48045-5029

REPLY TO 127th CAM SQ/MAFP
ATTN OF SELFRIDGE ANG BASE, MI 48045

2 NOV 91

SUBJECT: Letter of Appreciation

TO: SA-ALC/LDEPM
DEANNA WONG

Please convey our most sincere thanks and appreciation from the 127th Propulsion Section to Deanna Wong for her outstanding support. This past year Deanna contributed immense time and efforts to our conversion from the A-7D/K Aircraft to the F-16 community.

All through the year Deanna Wong played an instrumental part in procuring F-100 Engine tooling for the 127th Propulsion Section at Selfridge ANG Base MI. Deanna always went one step further in leading us to the reparable equipment when there weren't any serviceables on the shelf or when procurement contracts had long lead times. On one particular occasion, Deanna went to one of the warehouses with SMS Becker to inspect and issue a reparable asset to ensure that we were put in contact with the proper personnel and procedures for future reparable issues.

Deanna Wong's professional attitude, working skills, and outgoing nature are on track with the current TQM era. You folks at SA-ALC should be proud to have an employee of this magnitude working at your depot.

LARRY O. BECKER, SMS, MI ANG
Propulsion Section Supervisor

1st Ind, DCM

3 NOV 91

TO: Deanna Wong

Special thanks from the 127th TFW/DCM complex for your effort during our F-16 conversion. Your expertise was highly needed and appreciated.

RUDOLPH VENTRESCA, Col, MI ANG
Deputy Commander for Maintenance



1st A: N

DEPARTMENT OF THE AIR FORCE

57TH COMPONENT REPAIR SQUADRON (TAC)

NELLIS AIR FORCE BASE NV 89101-5000

REPLY TO
ATTN OF: 57 CRS/MACP/Propulsion Branch

14 Sept 90

SUBJECT: Letter Of Appreciation

TO: SA-ALC/MMGTDA (Deanna Wong)

Ms Wong, this letter conveys my sincere appreciation for the outstanding job that you have done in expediting the release and shipment of PWA 51148 puller, NSN 5120-00-108-4352 in support of the 57 CRS, Propulsion Branch. Your positive attitude, expertise and sincere desire to aid in any possible way prevented a work stoppage. You should be proud of the professional spirit and "Can Do" attitude you display. Such enthusiasm speaks highly of San Antonio ALC. I thank you for your support.


Bernard A. Reidel, MSgt, USAF
NCOIC Shop Support Section

Readiness is our Profession



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 147TH FIGHTER INTERCEPTOR GROUP
TEXAS AIR NATIONAL GUARD
ELLINGTON ANGB, TEXAS 77034-3586

REPLY TO
ATTN OF: 147 RMS/LGS

11 May 1990

SUBJECT: SA-ALC Item Manager Visit

TO: Deanna Wong

Please accept this small token of our appreciation for the outstanding job you do for us. We in the field are at a stand still without your dedicated service to our combat readiness. We at the 147 Fighter Interceptor Group are at the forefront of our nation's Air Defense. Our readiness enables us to maintain the combat preparedness for this nation's Air Defense at two locations twenty-four hours a day. The jets you support through this Air Logistics Center are capable of performing their mission.

This visit is to get acquainted with you the Item Manager and to get the real hard facts about these "bad actors". With the information garnered from this visit, we at the 147th hope to better understand your situation, collate our options and discuss with our MAJCOM the avenues to complete our requirements.

Again, thank you for sharing this time with us.


RONALD R. COLUNGA, Maj, TxANG
Chief of Supply



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE RESERVE

ROBINS AIR FORCE BASE, GEORGIA 31096-5001

6 MAR 1992

REPLY TO

ATTN OF LGS

SUBJECT Letter of Appreciation

TO

SA-ALC/LD

1. We wish to express our sincere appreciation for the support the Inventory Managers (IMs) provided during the AFRES F-16 Support Equipment Assessment Group (SEAG) Meeting, 24 - 28 Feb 92 (especially Ms Sue May and Mr David Miller). The professionalism and dedication they provided at the meeting were commendable. It is a pleasure to do business with people who have a "can-do" attitude.

2. Please pass on our thanks to all individuals involved.

FOR THE COMMANDER

William E. McKeever

WILLIAM E. MCKEEVER, Col, USAF
Director of Supply



DEPARTMENT OF THE NAVY
NAVAL AVIATION DEPOT
BUILDING 52
NAVAL AIR STATION
PENSACOLA, FLORIDA 32508-5300

IN REPLY REFER TO

4355/3124/bph
Code 94000

11 May 1993

From: COMMANDING OFFICER, ATTN CODE 94600 BLDG 3220, NAVAVNDEPOT 222 EAST AVE
PENSACOLA FL 32508-5108
To: SA-ALC/LDEB, 303 Wilson Blvd, San Antonio, TX
Via: Calibration Division, Code 94600
Calibration, Code 94606

Subj: LETTER OF APPRECIATION, SYDNEY P. ALMARAZ, GS-09

1. I would like to commend Sydney for her outstanding cooperation over the past several years as my primary Air Force contact with the TTU-205D/F program.
2. We have spent quite a few hours in telephone conversations in resolving logistical and technical problems with this interservice workload performed at the Naval Aviation Depot in Pensacola.
3. Her positive attitude and determination in assisting this Naval Laboratory in performing its mission has been greatly appreciated and she should be highly commended for this effort.

B. B. Fogue
B. B. FOGUE
By direction



HEADQUARTERS 127TH TACTICAL FIGHTER WING (TAC)
MICHIGAN AIR NATIONAL GUARD
SELFRIDGE ANG BASE, MICHIGAN 48045-5029

REPLY TO 127th CAM SQ/MAFP
ATTN OFF SELFRIDGE ANG BASE, MI 48045

2 NOV 91

SUBJECT: Letter of Appreciation

TO: SA-ALC/LDEPM
SUE MAY

Please convey our most sincere thanks and appreciation from the 127th Propulsion Section to Sue May for her outstanding support. This past year Sue contributed immense time and efforts to our conversion from the A-7D/K Aircraft to the F-16 community.

All through the year Sue May played an instrumental part in procuring F-100 Engine tooling for the 127th Propulsion Section at Selfridge ANG Base MI. Sue always went one step further in leading us to the reparable equipment when there weren't any serviceables on the shelf or when procurement contracts had long lead times.

Sue May's professional attitude, working skills, and outgoing nature are on track with the current TQM era. You folks at SA-ALC should be proud to have an employee of this magnitude working at your depot.

LARRY O. BECKER, SMS, MI ANG
Propulsion Section Supervisor

1st Ind, DCM

3 NOV 91

TO: Sue May

Special thanks from the 127th TFW/DCM complex for your effort during our F-16 conversion. Your expertise was highly needed and appreciated.

RUDOLPH VENTRESCA, Col, MI ANG
Deputy Commander for Maintenance



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS OKLAHOMA CITY AIR LOGISTICS CENTER (AFMC)
TINKER AIR FORCE BASE, OKLAHOMA

FROM: OC-ALC/LPAS
TINKER AFB OK 73145

3 DEC 1992

SUBJECT: Letter of appreciation, Mr Mike Mullin

TO: SA-ALC/LPE
KELLY AFB TX 78241-5000

1. OC-ALC/LPAS would like to personally commend Mr Mike Mullin for his superior performance in getting the Engine Trending and Diagnostics (ET&D) program heading in the right direction.
2. We have seen tremendous amount of improvement in the program organization since his assignment in Aug 92. His efforts are also beginning to show in improved customer credibility toward the overall ET&D program.
3. Again, we wish to express our appreciation for his professionalism and his continued outstanding support toward our OC-ALC depot ET&D program.

Leslie Courtney
LESLIE R. COURTNEY, CHIEF
Logistics Support Branch
Propulsion Management Div/D/LP

cc: HQ AFMC/XRCA

31 DEC 1992

1st Ind, LPE

TO: LPEB

Great start. Mike's efforts are beginning to show results. Please add my appreciation to those expressed by OC-ALC/LPAS.

Edward L. Garcia
EDWARD L. GARCIA, Col, USAF
Ch, Airlift/Tactical/Trainer
Propulsion Division
Directorate of Propulsion



REPLY TO: Flight Safety Investigation Board
ATTN OF:

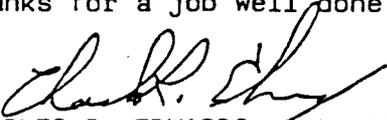
7 Oct 86

SUBJECT: Letter of Appreciation

TO: SA-ALC/MMS (Colonel ^{Dave} Scheiding)
Kelly AFB TX 78241-5000

1. We would like to express our thanks to Mr. Timothy Lawless for the help he provided to our investigation of the T-37 mishap at Williams AFB. Please extend our warmest regards and sincerest thanks. A SUPER JOB!

2. Again, the professionalism shown by Mr. Lawless was "above and beyond." My thanks for a job well done.


CHARLES R. EDWARDS, Col, USAF
President, Flight Safety Investigation Board

*Tim,
Thanks for your support
- keep out of the sun*



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS SACRAMENTO AIR LOGISTICS CENTER (AFLC)
McCLELLAN AIR FORCE BASE, CALIFORNIA 95652

MAY 11 1992

REPLY TO
ATTN OF LAS

SUBJECT: Participation in the A-10 Product Improvement Working Group
(PIWG) Meeting, 5-7 May 92.

TO: SA-ALC/LPE

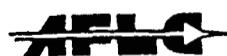
1. Please convey my appreciation to Mr Tim Lawless for a job well done. I realize personnel and budgetary cutbacks are making the task of providing customer support ever more difficult. Despite this, A-10 weapon system users continue to enjoy superior technical logistics support. This is true only because of the dedication and professionalism of the people who make up the AFLC A-10 support community - people like Mr Lawless of your organization.

2. Mr Tim Lawless' participation in our most recent A-10 PIWG was key to the meeting's success. He demonstrated a clear understanding of both the technical and logistics issues regarding the A-10s' TF-34 engines. He was able to address tough questions knowledgeably, openly, and with diplomacy. From Mr Lawless' presentation, it was obvious to all attendees that your organization has been working hard to provide the best possible support to the A-10.

3. The A-10 community looks forward to your continued high quality support.

FOR THE COMMANDER

CHRISTOPHER F. RUSSO, Col, USAF
A-10/A-7/ JPATS System Program Manager
Aircraft Management Directorate



COMBAT STRENGTH THROUGH LOGISTICS



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 355TH WING (ACC)
DAVIS-MONTHAN AIR FORCE BASE, ARIZONA

355/CV
5275 E. Granite
Davis-Monthan AFB AZ 85707

9 February 1993

Mr Bob Christophel
SA-ALC/LTEBE
Kelly AFB, TX 78241

Dear Mr Christophel

Please express my appreciation to Mr Tim Lawless for the totally outstanding work that he performed assisting the mishap investigation board which investigated the crash on 12 November 1992 of an OA-10 assigned to the 111th Fighter Group at Willow Grove ARS, Pennsylvania. His knowledge, insight, and analytical skills were absolutely critical in determining the cause of the crash.

Tim, along with Mr Roger Spoerry, discovered the crucial evidence from which we developed our findings. I was particularly impressed with the rigorous scrutiny with which Tim analyzed each hypothesis of the potential cause. In addition, he worked tirelessly with a positive attitude despite long hours and difficult working conditions.

Again, it was a pleasure working with Tim. Please pass to him my thanks for a job exceptionally well done.

Sincerely

Ernest M. Skinner

ERNEST M. SKINNER, Col, USAF
Vice Commander, 355th Wing
Board President

Global Power for America



DEPARTMENT OF THE AIR FORCE

COMBAT SUPPORT SQUADRON PROVISIONAL, 4401ST (TAC)
SHAW AIR FORCE BASE SC 29152-6002

REPLY TO
ATTN OF:

CC

3 May 93

SUBJECT: Letter of Appreciation

TO: SA ALC/CC
Kelly AFB TX 78241-5000

1. Please extend my appreciation to TSgt Cindi L. Barney who served as the Supervisor, Remote Processing Section, Supply Division, 4401st Combat Support Squadron (Provisional) from 26 Sep 92 to 20 Mar 93. Serving at an austere, classified location in direct support of a critical United States Central Command mission, Sergeant Barney consistently demonstrated her superior skills, dedication to our mission and resourceful initiative.

2. Some of Sergeant Barney's many outstanding accomplishments during this temporary duty included:

a. Coupled her technical expertise with quality communicative skills which aided tremendously in dealing with other communication/computer sites around the world, thus providing the most responsive system possible under all contingencies.

b. Used effective workarounds at critical times when the computer system would otherwise have been inoperative. This allowed the continuous processing of site requirements, which ensured uninterrupted support to the squadron's mission.

c. Provided comprehensive data programs for the immense task of reconstituting and inventorying Harvest Falcon War Reserve Materiel returning from Operation DESERT STORM. These actions resulted in this site being months ahead of USCENTAF reconstitution goals and further resulted in reduced funding expenditures.

d. Assisted in aggressively inventorying and assembling equipment and supplies required to support Operation Restore Hope. This helped ensure that badly needed assets would arrive at predetermined locations on time.

3. Again, please convey to Sergeant Barney my appreciation for her dedication and exemplary duty performance while assigned to the 4401st Combat Support Squadron (Provisional).


ROBERT J. SCULLY, Lt Col, USAF
Commander

Readiness is our Profession



DEPARTMENT OF THE AIR FORCE
AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS

FROM: AFOSI Det 110/SAC
Los Angeles AFB, CA 90009-2960

5 Apr 93

SUBJ: Letter of Appreciation

TO: Col Robert K. Rasnussen
Director
SA-AFMC-TI
Bldg 178, 404 Greig St
Kelly AFB, TX 78241-5944

Dear Col Rasnussen:

Please pass on my sincere appreciation to Mr. Charles Douglas, technician, SA-AFMC-TISAP, for his contribution to the successful resolution of a major investigation resulting in a \$2,150,000 recovery from Teledyne Controls.

The Office of Special Investigations and five other federal investigative agencies investigated allegations that Teledyne Controls committed fraud against the US Government. During the course of that investigation, it became necessary to conduct an examination of parts contained within the Events History Recorder (EHR). This device is mounted on the Pratt and Whitney F-100 engine which in turn is installed on F-15 and F-16 aircraft. The allegations indicated that some or all of the parts contained within the EHR's were substituted, and thus could contribute to the failure of the EHR.

The US Government recovered \$2,150,000 from Teledyne Controls through an out of court settlement negotiated between the Department of Justice, Civil Litigation Branch, and Attorneys for Teledyne Controls, as a result of the federal criminal investigation.

Mr. Douglas was invaluable in his participation of the parts audit of four EHR's. The results of the parts audits were used in the negotiations with Teledyne Controls which eventually led to the \$2,150,000 settlement. Mr. Douglas' professional attitude in his relations with OSI and in his support to thwart fraud against the Government is very much appreciated. Again, please extend the gratitude of myself and SA David T. Harper to Mr. Douglas for his assistance.


RICHARD C. SMITH, GM-15, DAFC
Special Agent-in-Charge
AFOSI Detachment 110

Kelly work force gets high praise

By RITA MONTELLRA

Directorate of Financial Management

Even before the Feb. 27 announcement of a cease fire in the Middle East war, San Antonio Air Logistics Center was receiving praise from various quarters for its outstanding support of Operation Desert Storm.

One official delivered his message personally.

Maj. Gen. John Nowak, commander of logistics and engineering for the Military Airlift Command, recently came to Kelly AFB to personally thank senior officials and workers for helping MAC sustain the massive air operation that moved millions of pounds of equipment and thousands of troops to the Persian Gulf over the past seven months.

General Nowak said that, as of Jan. 30, MAC had moved 433,000 troops and 413,125 tons of equipment to the war zone.

"We wouldn't have been able to accomplish this huge task without the excellent support from Kelly AFB workers," the general said.

According to officials, General Nowak was particularly impressed with logistics support efforts focused on the C-5, noting that prior to the war, Galaxies flew an average of two hours per day. In August, that average climbed to 10 hours per day.

Despite this vast increase, over 70

percent of the C-5 fleet remained mission capable, a record directly attributable to the workmanship demonstrated by Kelly workers, the general pointed out.

Nearer to home, Col. Michael Quarnaccio, 433rd Military Airlift Wing commander, sent a letter across the Kelly flight line thanking Maj. Gen. Richard Smith, San Antonio ALC commander, for his support during recent call-ups of reservists, many of whom are center civilian employees.

The colonel noted such a mobilization often causes hardship for employers and expressed his appreciation for the center's "sacrifice and cooperation."

"As commander of the 433rd Military Airlift Wing ... I rely absolutely on having our reservists available to support our global airlift mission, sometimes on a moment's notice," Colonel Quarnaccio wrote. "We simply could not support this nation's airlift requirements in times of crisis without the reservists you employ."

Even though the curtain seems to be drawing down on this latest world crisis, center officials note that current level of logistics support activities won't begin to lessen until troops and equipment return from the Mideast theater.

COMMUNITY

Goodwill honors Kelly program

By PAT DARNELL

Observer staff writer

Kelly AFB was recently honored by Goodwill Industries for its Command Reach program which provides employment opportunities to severely disabled persons — an effort which improves personal lives while saving dollars.

Jim Brown, President of Goodwill Industries, presented the 1990 Contractor of the Year Award and told Brig. Gen. William Worthington, San Antonio Logistics Center vice commander, that the Kelly contract has enabled participants to live full, independent lives.

While a number of local organizations participate in the base program, perhaps the most visible proof of its success are 18 Goodwill Industries Work Center employees in the Aircraft Management Directorate.

The workers sort small aircraft parts of varying sizes and distribute them to aircraft mechanics.

"The parts sorting project is saving Kelly thousands of dollars," said Jerry Neufeld, Kelly's Command Reach program director. "Previously the parts were being co-mingled and thus became unusable," he added.

"The Command Reach program



Photo by Lee Swain

PARTS SPECIALISTS -- Goodwill employees Joe Valdez (left) and Thaddeus Miller sort aircraft parts for use by mechanics in the Aircraft Production Division.

benefits everyone," he said. "Kelly gets a good product on time from a good source, the taxpayer benefits

because the workers are taken off the welfare rolls and social security, and the people take pride in accom-

plishing a good job," he explained.

Edward Garcia, Aircraft Production Division deputy chief, said the work center employees are the best thing that has happened to the Directorate.

"They do all the routine tasks, thus freeing up our regular employees to do the more complex work," he said.

Work Center employees have exceeded all expectations, said Lupe Young, Goodwill Industries community relations director.

"Richard (Ricky) Walton is a great example," she said.

Mr. Walton was in a sheltered workshop for many years, his development at a virtual standstill.

"When he began working at Kelly we were absolutely amazed at what he was able to accomplish," said Ms. Young. "We discovered he has a fantastic ability to remember stock numbers. Almost a photographic memory, she said, adding "He is a real success story."

Both Mr. Neufeld and Mr. Garcia commented on the total integration of the Work Center employees into the Kelly workforce. "They're part of the family here, we don't know what we'd do without them," they said.

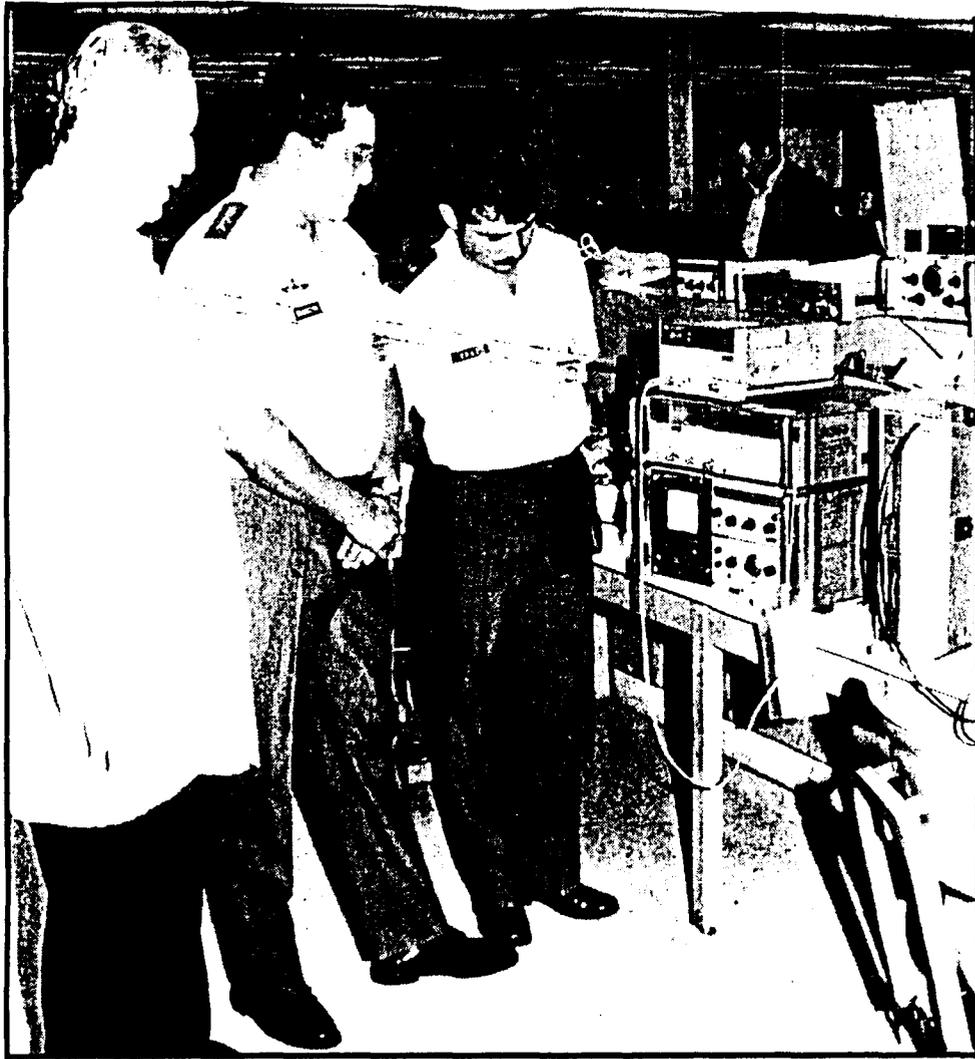


Photo by Greg Ripps

Overview — Jose Rosales, left, electronic measurement equipment mechanic, conducts Col. Manuel Salvatierra-Rivera, center, Nicaraguan air force chief of staff, and 1st Lt. Felix Cruz-Centeno, Nicaraguan air force maintenance officer, on a tour of the Precision Measurement Equipment Laboratory. Salvatierra, by virtue of his position, is an honorary director of the Inter-American Air Force Academy. Representatives from 16 Latin American nations visited Kelly earlier this week on the occasion of the academy's 50th anniversary.

Building projects will benefit Inter-American AF Academy

By GREG RIPPS

Observer staff writer

The Inter-American Air Forces Academy celebrates its 50th anniversary with announcement of construction of new facilities at Kelly AFB.

The academy, which conducts technical training in aviation occupational specialties in Spanish to officers and NCOs from Latin America, moved to Lackland after Hurricane Andrew demolished its facilities at Homestead AFB, Fla.

Although headquartered at Lackland, the academy has been using Bldgs. 1427 and 1428, at the north end of the flight line. These two aircraft maintenance nose docks formerly housed Detachment 40 and the Aero Club, which have moved to other locations.

"These two buildings will soon undergo upgrading, modifications and additions," said Col. David Rigsbee, Plans and Logistics Programs Division chief. "The project will include construction of classroom and administrative areas attached to the old nose docks."

Two new permanent structures will also be built: a flight training

facility and an additional hangar.

"The new flightline facility will be built in what is now the grassy area between the nose docks and the fence line," said Bernie Heer, chief of design and construction for the 651st Civil Engineering Squadron, which is handling the project.

"Also, the interior of Bldg. 1416, on the other side of Special Weapons, will be totally renovated," Heer added. "The present interior will be replaced by a classroom, paint spray booth and restrooms for IAAFA."

Temporary buildings for classroom and administrative space will be moved into the area and will be ready for use in May, with changes to the nose docks slated for completion in June.

The new frontline training facility, the major construction effort, is scheduled for completion by the end of December 1993. Heer said this building will cost an estimated \$1.5 million by itself. IAAFA will pay the construction costs.

IAAFA provides training in 57 different courses. Classes began at Lackland in January, and the first class of six students graduated from the academy's Pilot Instrument Procedures Course Monday.

Right the first time

Team plugs leaks

By **CARLOS COLLAZO**

Directorate of Aircraft Management

Aircraft management directorate's B-52 Fuel Maintenance Unit recently achieved a significant quality accomplishment — an initial 100 percent leak-free aircraft.

While this may sound like it should be the norm, it is not quite that simple. The B-52 bomber is 30 years old and carries more than 51,000 gallons of fuel throughout its body and entire wing structure.

Historically, the B-52 has always been plagued with fuel leaks. This can be attributed to its large 185-foot wing span, mission assignments from high altitude to low level flights, and to major modifications altering the aircraft's operational capabilities over the years to meet changing defense needs.

According to directorate officials, the old method of doing a four-hour incoming leak check with fuel loaded in the tanks was changed.

Leak detection is now accomplished by using air to pressurize the tanks, and applying a soapy solution to the exterior surface to detect leak locations.

"This method is faster, safer, and more accurate," said Ed Garcia, Aircraft Production Division deputy chief.

Another change in procedures was made to include a team concept, Mr. Garcia said. Each aircraft undergoing programmed depot maintenance (PDM) is now assigned to a fuel team. The team's objective is to pro-

duce an aircraft with the best fuel system possible.

During the five-month PDM cycle, the testing, locating, and repairing of all incoming leaks is critical and requires special attention.

"This is where total quality management (TQM) techniques were used with overwhelming success. We essentially went back to basics," said Mr. Garcia. "With the priorities being safety, quality, schedule and cost, we focused our attention on training and procedures."

All fuel system mechanics received more than 100 hours of classroom training in addition to on-the-job training during the past year. The training included integration of fuel systems, emergency egress and core safety training courses.

In addition, all foremen and workleaders attended a five-week fuel training detachment course at Chanute AFB. According to Mr. Garcia, the goal is for all fuel system mechanics to attend this course.

Along with training came a complete review of procedures and methodology. A cooperative effort between Production and Engineering/Planning in the Aircraft Division yielded a better way of doing business. "We normally had 10 to 15 leaks that we would have to go back and repair," said Brian Hall, the first "team leader" to produce a leak-free aircraft. "The morale is high, and coupled with the training we were provided, it was only a matter of time before the results started to show up," he added.

Army praises Kelly engine support

By LIZ MARTINEZ

Aerospace Equipment Directorate

Aerospace Equipment Management's Commodity Production Division recently completed prototype and initial production of gas turbine engines which supply electrical power for the Patriot missile target and launch system.

The Patriot is the anti-missile system employed successfully during the Persian Gulf War against Iraqi Scud missiles. It is still on alert in this festering trouble spot.

"The work comes to San Antonio Air Logistics Center as a result of a Department of Defense cost-saving study which called for transfer of four Army GTE workloads from the Tooele Army Depot. The Commodity Production Division is the largest supplier of non-airborne gas turbine engines in DOD," said Steve Doneghy, division chief.

Doneghy added that development of the Patriot GTE workload posed several challenges for his division. The Patriot engine is larger and heavier than any previous GTE pro-

duced, and overhaul of these engines required creation of a specialized shop in Bldg. 328.

"We sincerely appreciate the work being done here on our engines," said John McClure.

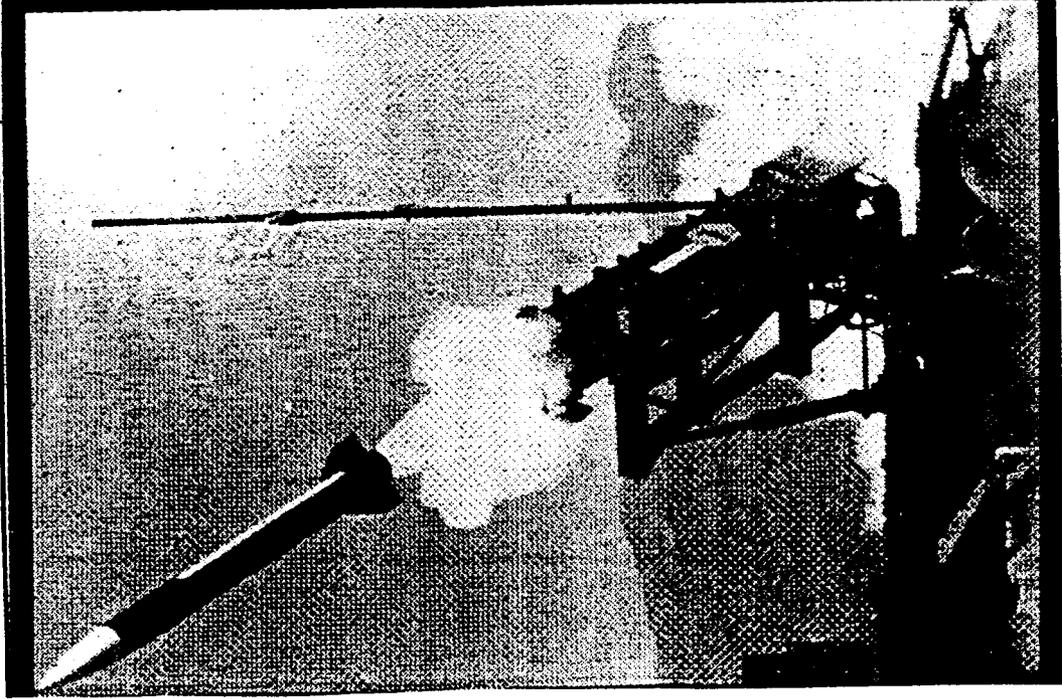
McClure was a member of a team from the U.S. Army Aviation and Troop Command's Directorate of Materiel Management, Depot Production Division in St. Louis that visited Kelly facilities Tuesday and Wednesday.

"It is especially gratifying that the people here at Kelly were able to

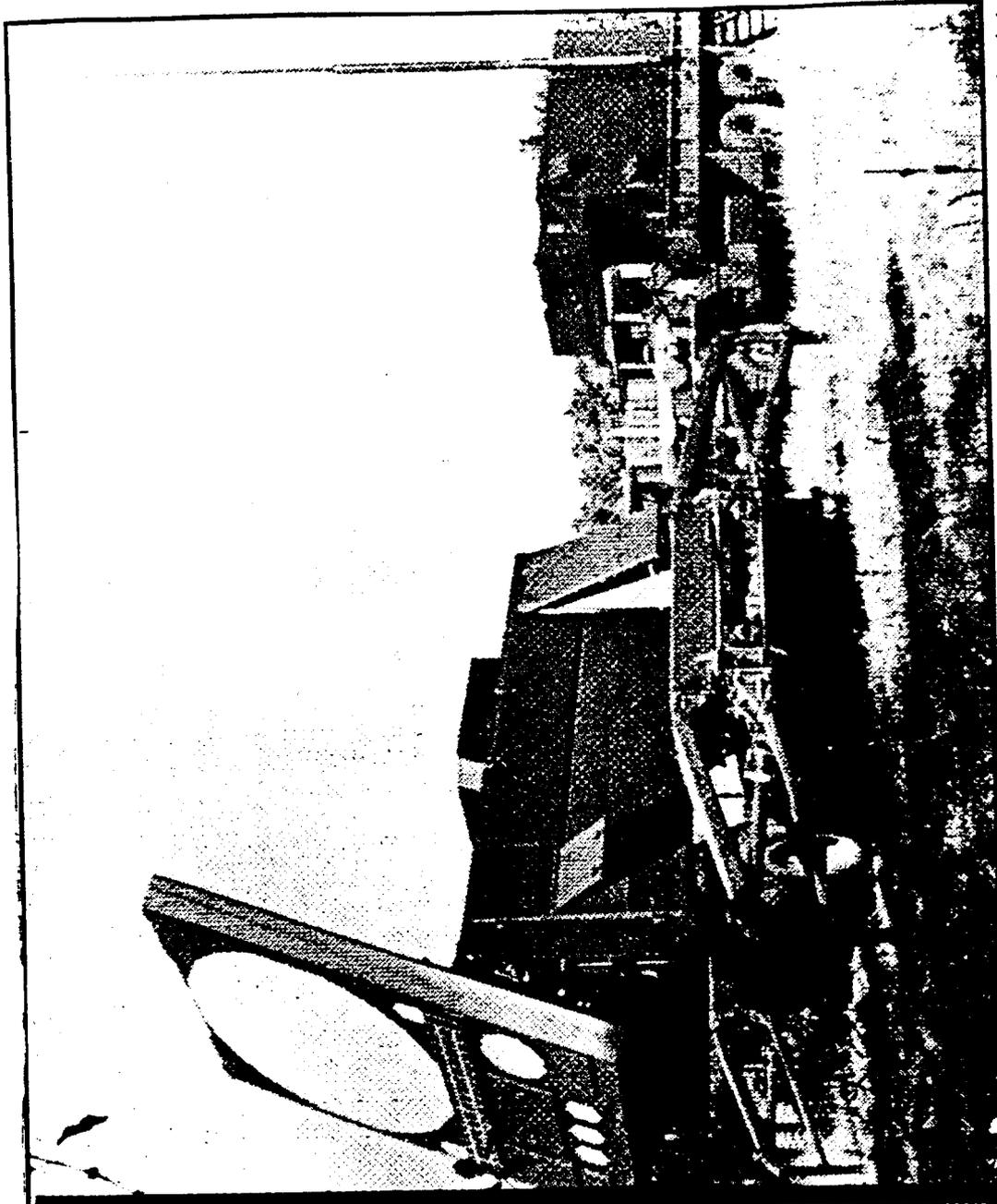
manufacture parts for our GTEs that we were unable to find anywhere else," he added.

In addition, a test capability also had to be established using the center's existing test hardware.

"Certification and prototyping of these engines was a real 'Team Kelly' effort," said Ray Rios, program manager for the project. "It called for long hours and cooperation between a number of directorates to meet the schedule. I'm very proud of the team's accomplishments."



Patriot power — Power for the Patriot missile targeting and launch systems will be provided by gas turbine engines overhauled here by the Aerospace Equipment Management directorate's Commodity Production Division.



American Forces Information Service photo

DESERT STORM

Logistics effort proves vital

Preparation helps Air Force deliver massive first strike

By **GIL DOMINGUEZ**

Observer staff writer

A question often asked of the armed services as the U.N.-mandated deadline neared for Saddam Hussein to withdraw from Kuwait was, "Are you ready? Are you ready to drive the Iraqis out by military force?"

For the U.S. Air Force, the thunderous reply came on Jan. 16, the beginning of Operation Desert Storm, when it and other air forces launched what is considered the largest single air attack in the history of modern warfare.

Air Force combat units were ready to fly and fight, officials said, because the logistics pipeline established during Operation Desert Shield had flowed so well and so steadily.

"We had the equipment repositioned and we also had the munitions we needed to go to work the first day the planes were on the ground," Lt. Gen. Charles A. Horner, U.S. Central Air Forces commander, said in a recent interview.

The general's remarks, coupled with the successful air strikes against Iraqi forces, were good news for Air Force Logistics Command.

"We in AFLC worked hard to make sure our combat forces had everything they needed to carry out their missions," said Col. Philip Williams, the command's director of operations and contingency plans.

The five air logistics centers have been working around the clock since

August, he said, managing the flow of people, supplies, spare parts and munitions to the operational units in the Middle East. And the centers continue to provide "the bulk of AFLC's support for Operation Desert Storm," Colonel Williams said.

Throughout AFLC, depot maintenance has been accelerated on nearly

50 aircraft, allowing them to re-to service sooner and giving the Force fleet more than 400 added of flying service, command officials said.

Officials here said that like other ALCs, San Antonio Logistics Center has been c
(See "Logistics," page 16)

Team provides defense

The 13 members of the 2851st Security Police Squadron now assigned to the Middle East are the "best of the best," according to CMSgt. James Tabor, the unit's operations superintendent.

"The contingent we sent over there is the pick of the litter, you might say," the chief said.

The security policemen left in September and joined other groups assigned to the 35th Tactical Fighter Wing in Saudi Arabia. The Kelly personnel are doing air base defense and resource security, according to Chief Tabor.

"They are a highly motivated group on top of everything else," he said. "Before they left for the area they underwent special desert training in Nevada, so they knew what to expect, what kind of conditions they would be facing."

The chief added that five members of the group took part in last year's Peacekeeper Challenge, the

annual security police competition.

"We're in regular contact with the men and that they are all doing well and are in good spirits," Chief Tabor said. "One of them, SSgt. Kenneth Devries was named National commissioned Officer of the Quarter. Another member, SrA. B. by Harris, was selected to escort Army Gen. Norman Schwarzkopf, chief of U.S. Central Command, when the general visited the base."

While the 13 security policemen are overseas, squadron members here are looking after the families of their deployed comrades and have started an informal support group, according to the chief.

Other members of the deployed contingent include: TSgt. Anthony Sweet, SSgts. Anthony Greaves, James Purtell, Dennis Guerrero and Steven Guerrero; Sgts. Timothy Martella, Richard Collins, Barry Eldridge and James Dorsey; Sgts. Keith James and A1C Kyle Bogard.

“The contingent we sent over there is the pick of the litter, you might say.”

— CMSgt. James Tabor

Logistics

(Continued from page 1)

wartime posture since the beginning of Operation Desert Shield. The center's Aircraft Management Directorate has accelerated maintenance on C-5 transports, which form a vital link in the pipeline to the Persian Gulf.

"Military Airlift Command needs all the airlift it can get to provide the spare parts and equipment needed by our troops," said Col. David Zorich, aircraft management director. "Our Aircraft Production Division has delivered two of the five C-5s that we've been asked to accelerate.

"Programmed depot maintenance normally takes about four and a half months to complete on one C-5, but

we've reduced that time by an average of two weeks."

The work has been completed, the colonel stressed, with no short-cuts in safety procedures or in the quality of work.

"Our employees and managers wouldn't settle for anything less than a quality product," he said.

Instead, the division has gone into a wartime mode, with some areas operating 24-hours a day, seven days a week.

The same relentless pace is being kept up in the B-52 bomber area. "Strategic Air Command would like to have additional flying time and we're working hard to deliver the aircraft," Colonel Zorich said.

The directorate's other area of concern is spare parts. Colonel Zorich said 24 items are receiving special attention. Altogether, the five cen-

ters have accelerated more than 43,000 high-priority parts since August, according to command officials.

Repairs of aircraft engines have also speeded up over at the Propulsion Management Directorate. Directorate officials said that of the 30,000 overtime hours worked so far this month, 23,000 have been devoted to Operation Desert Storm.

"Basically, we've working our tails off," said Col. Denny Portz, deputy director. "We're surging engine modules, particularly for the F100 engines used in the F-15 and F-16 fighters, and the TF39 for MAC's C-5s.

"Our mission is to keep providing the items most needed in the theater of operations — and we're doing that very well. We're keeping our engines in the 'green,' which means they are enjoying a very good support posture," Colonel Portz said.

Earlier concerns about sand wreaking havoc on the engines have been eased, he said. Many of the

power plants, including the TF34 used in the tank-killing A-10 Thunderbolt II, have performed well in the desert, Colonel Portz noted.

As evidence of his organization's effectiveness, the deputy director added that, "Not a single (Operation Desert Storm) sortie has been aborted because of lack of engine support."

"The unique thing about this directorate is that in one way or another we support every weapon system used in Saudi Arabia," said Col. Marvin Davis, director of aerospace equipment. "Our support is massive: from light bulbs to jet fuel starters."

The director said that his organization was "in good shape," primarily because it had been surging items since August, storing up the materiel that would be needed in case the U.S. and its allies went to war.

Now that hostilities have started, Colonel Davis said his directorate would do everything possible to make sure that the Air Force air campaign in the Middle East "is the most successful in history."

30-DAY WARRANTY A-OK

If work from San Antonio ALC fails,
simple tag system guarantees
commitment to quality and improvement

The 30-day warranty, long a standby in private industry retail sales, is being offered work done by San Antonio Air Logistics Center.

Center officials at Kelly AFB, Texas, expect the move to increase customer satisfaction and improve competitiveness for shrinking defense dollars.

According to officials, any item overhauled, repaired or manufactured at San Antonio ALC will carry an unconditional 30-day warranty. The warranty begins after installation or initial operational use.

Program managers said warranties began being applied Oct. 1, 1992.

"Should any item fail within the warranty period, the customer may return it to supply and receive immediate credit for the item," said Mike Rigsbee, plans and logistics programs chief in the Financial Management directorate. "When the item arrives back here, it will be repaired at no charge to the customer."

The program is offered to all Air Force, Air Force Reserve and Air National Guard components. Current items repaired or manufactured by contractors, other air logistics centers or Department of Defense components are not covered under this program.



A T-38 Talon, the newest work load at San Antonio ALC, undergoes a safety check before being towed into a Kelly AFB, Texas, hangar for major modifications.

Also public law currently prohibits extending the program to Foreign Military Sales, European Participating Governments or Security Assistance programs, officials explained.

"Previous attempts at formal organic warranties have resulted in failure due to the administrative burden such programs place both on the warrantor and the customer," said Rigsbee.

The key to success for the new San Antonio ALC Organic Warranty Program is its simplicity, the colonel explained.

"When an item is sold to supply after repair, overhaul or manufacture, it will have a simple warranty tag attached," Rigsbee said. "This tag contains information filled out during final inspection and will accompany the item into the supply system."

When the item is installed in an aircraft or end item at a base maintenance facility, the tag is removed and retained for 30 days. If no failure occurs within that period, the tag is discarded.

"Prior to this program, failed organic items were not always returned to us so that we could investigate why they failed," Rigsbee said. "This limited our product and process improvement effort and gave customers cause to question our commitment to provide a quality

product."

Now in such cases the warranty tag is reattached, the item returned to Kelly and a full investigation conducted to determine cause of failure. This allows corrective actions to prevent similar failures.

A prototype of these procedures was tested in September 1992 with Air Training Command at Randolph AFB, Texas, officials said. After a favorable outcome, other major commands were notified that the program had become a reality.

This warranty program is setting the standard in the Air Force, said Rigsbee. He noted that numerous calls have been coming in from the other logistics centers wanting information.

"In today's competitive environment, it is important to compete not only on price, but quality as well," said Maj. Gen. Lewis E. Curtis III, San Antonio ALC commander. "I'm confident we at Kelly put out a quality product."

"This new warranty program is one way we can demonstrate to our customers that we stand behind our products," he added. "We're going to monitor the program closely, and if it goes well, we may extend the warranty period to 60 days."

by David Bubenheim • San Antonio ALC financial management

Mechanic and inspection work leader Fred Perez of the Propulsion Directorate attaches a warranty tag to an item being shipped from Kelly AFB, Texas, to an Air Force customer. If the item fails within 30 days, the customer can send it back to San Antonio ALC and get it repaired free. (Photo by Lee Swain)



Air Training Command's premier jet training aircraft has become the latest work load for the Directorate of Aircraft Management at San Antonio Air Logistics Center, Kelly AFB, Texas.

The T-38 Talon will undergo two major modifications involving complete rewiring and replacement of the right and left longerons, which are major support beams that run down the sides of the aircraft and strengthen its fuselage.

Forty-eight T-38s are scheduled for fiscal 1993, with two already in official production input status. Approximate production time for each aircraft is 4,700 hours, according to directorate officials.

The work load will phase in craftsmen from the B-52 work load, which is being transferred to Tinker AFB, Okla. Work on the first two T-38s will certify the craftsmen and help establish a viable work schedule.

"We are trying to network all the work

processes," said Martin Mauricio, the division's T-38 project officer. "Using a computer program, we have sequentially ordered each task to be accomplished in the completion of the modifications. This determines what needs to be done, which worker needs to do it and when he does it."

A new computer program, the Control and Analysis Tool, has been engaged for the project.

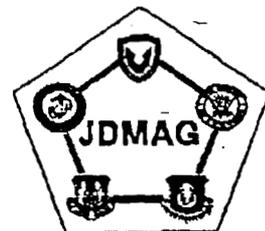
"The new program can tell us when a task is missed," Mauricio said. "Not only does it identify the task, it estimates how long it will take and what tasks can continue simultaneously."

"Our goal is to improve our work manhours by identifying and correcting any problem," Mauricio said. "We are using the total quality management philosophy."

by Gloria Gonzales • San Antonio ALC aircraft production

T-38

Kelly AFB
phases in its
B-52 craftsmen
to perform major
modifications on
ATC's jet trainer



SA-ALC uses nonhazardous, nontoxic cleaner on aircraft

Citrikleen + AF, Navy C-130 components = environmental compliance at WR-ALC.

Maintenance workers in San Antonio Air Logistics Center's (SA-ALC) aircraft painting facility at Kelly AFB, Texas, must make sure the aluminum surface of each airplane is surgically clean before repainting so the primer and paint don't peel off. To keep the aircraft clean, the workers usually have to use chemicals, such as methylene chloride, that create large amounts of sludge and are costly to handle and dispose of.

Recently, however, Technology and Industrial Support Directorate materials engineers developed a process that uses an orange-based, biodegradable cleaner called Citrikleen.

In addition, the Propeller Shop at Warner Robins Air Logistics Center, Robins AFB, Ga., is using Citrikleen to make sure the process of removing carbon from propeller housings on C-130 aircraft continually complies with ever changing environmental standards.

"We haven't found a limit for it yet."

During routine repairs or scheduled depot-level maintenance, for example, the Air Force and the Navy send pump and valve housings for propellers from their C-130 fleets to the Propeller Shop to be disassembled, cleaned, and inspected.

The nonhazardous, nontoxic cleaner consists of corrosion inhibitors in an organic enzyme mixture that breaks down into harmless components.

Using Citrikleen has a couple of advantages. First, it reduces hazardous waste created during the carbon removal process by 30 percent. And second, Citrikleen costs only 25 cents a pound versus \$1.50 a pound for methylene chloride.

"The process proved to be very effective when used on two F-16 aircraft from the 149th Tactical Fighter Group during preliminary testing," said Laura Maxwell, SA-ALC's corrosion program manager. "The traditional steps of scuff-sanding and using a solvent wipe were eliminated, resulting in 30 percent savings in manhour costs." The enzyme cleaner works as well on a C-5.

"We performed wet tape tests to verify paint adhesion and all tests were successful," said Tom Alvarado, aircraft support section chief.

Ms. Maxwell added that the cleaner is safe enough to be used on many other types of equipment. "We haven't found a limit for it yet," she said. "It can even be used on missiles, and Strategic Air Command is very interested in it."

Other ALCs also have shown an interest in the cleaning process. Some of them already have tried and others are planning to test it shortly, Ms. Maxwell said.

Materials engineering personnel and the Aerospace Fuels Management Directorate are writing a specification that will make the new cleaning process available to all Department of Defense installations.

For information, call Ms. Maxwell, SA-ALC Specialized Engineering Branch, (512) 925-8745/DSN 945-8745; or Brian Kulik, materials engineering, WR-ALC, (912) 926-0558/DSN 468-0558.



Photo by Lee Swain

Paint shop preparation — Esteban Saucedo applies masking tape to T-38 aircraft supports before the items are painted in the Aerospace Equipment Management directorate paint shop. A new computer program there is helping

Computer program boosts paint shop productivity

By **TIM MORRISON**

Aerospace Equipment

A new computer program in the Aerospace Equipment Management directorate's paint shop in Bldg. 329 is helping increase productivity by keeping track of the parts that come in for painting.

Directorate officials said the program can identify, track, locate and store information on items as they make way through the shop process, making for a more effective operation.

The program's concept was developed by a paint shop continuous improvement team and implemented by Carol Hiltbold, a directorate computer scientist, officials said.

They noted that work in the shop stopped for two days recently so that a complete inventory of the shop could be taken and the new program installed.

Paint shop supervisor Mike Garza said that before the computer program was developed his personnel depended on a log book to track incoming parts.

"When you are in a shop you need an accurate inventory," he said.

"That was one of our biggest problems."

Garza said that it took several hours to get an accurate count when an organization wanted to know how many units of a particular item were on hand. The computer can now provide that information in a very short time, he said.

The program has also helped the shop's work scheduling. Items used to be painted as the staff got go them. Processing is now based on the date the item came in or how fast an organization needs the item back, officials said.

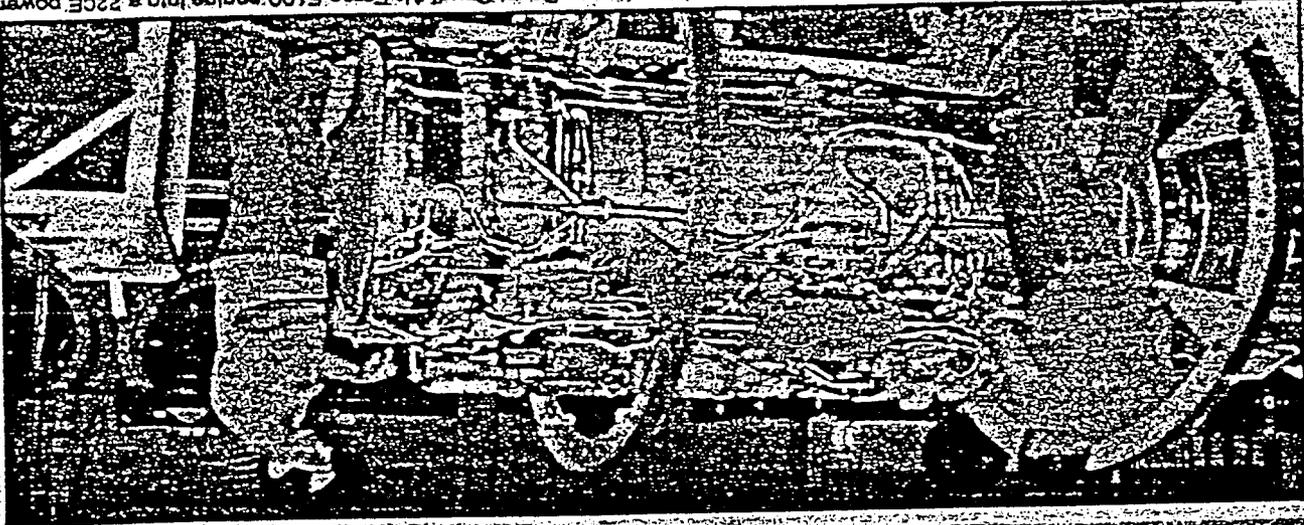
Members of the continuous improvement team said paint shop employees are making an effort to learn the new program, which requires some computer knowledge. Overall, they add, the system has improved communications in the facility.

"We're still trying to get everyone in the shop involved in total quality management," said team member Felix Cavazos. "We have people here who are still holding back their good ideas. If they would give their input, things could really work very well."

Kelly AFB Paper Reports on Saudi Engines



San Antonio, Texas
 Thursday, March 12, 1982, Vol. 27, No. 10



Foreign assistance - Engine Division technicians work to transform a Royal Saudi Air Force F-100 engine into a 220E power plant for the replacement of F-15 jet fighters.

Center gains new workload

Contract calls for upgrade of Saudi engines

BY MARGIE ESCOBEDO

One of the largest foreign military sales programs ever undertaken by Air Force Logistics Command has been assigned to Kelly's Directorate of San Antonio Air Logistics Center. The Directorate's Engine Division has begun upgrading F-100 engines belonging to the Royal Saudi Air Force's F-15 jet fighter fleet. This is one of the largest foreign military sales class-4 modifications.

over processed by AFLO headquarters," said Paul Mancha, engineering technician. "This workload will modify the Saudi F-100 engines to the latest 220R configuration. A class-4 modification involves improving engine performance without physically changing the basic engine level. The 220E is a modified version of the F-15 engine, F-100 and the F-16 Fighting Falcon's F200 engines. Unlike the old configuration, the 220E can be used in both aircraft and is considered a more reliable and maintainable power plant," Mancha said. The upgrade, which was initiated in May 1980 for U.S. aircraft, adds about 20 years to the life of each engine, according to Minerva O. Garcia, upgrade industrial planner. She explained that the project will involve making a number of improvements to the F-100. These include replacing the existing engine control with a new component and installing

a monitoring system that makes automatic adjustments and ensures peak engine performance. The engine will also get an anti-ice system, an improved governor system and a fan drive turbine that withstands greater temperature extremes, Garcia said. Production on the 220E continues within the HSAF's fleet of over 200 engines and 121 models," said Col. L. B. Blackwell, Engine Division chief. The program is projected to be a six-year plan. This new work load equates to additional man-hours for approximately 175 personnel. Four engines and one module are expected to be completed per month, Mancha added that the HSAF program's planning phase had been in progress for the past two years. With approximately \$60 million of F-100 spare parts and modifications kits transferred to Kelly AFB from two contractor facilities.

Saudi Project Gets Local Media Coverage

Kelly awarded \$60 million Saudi contract

By LISA SUN-HEX PARK



Kelly Air Force Base has received a \$60 million jet engine modification program from the Saudi Arabian government, making it one of the largest foreign jobs ever undertaken by the San Antonio Air Force Logistics Center.

A ceremony formally announcing the contract was scheduled for soon today by representatives of Kelly and the Royal Saudi Air Force.

Work already has begun on the first engine, which arrived in late February. Twenty full-time and 155 part-time workers have been assigned to the Saudi workload for the duration of the six-year program.

"This is a definite plus for us," said Maj. Donna Pastor, a Kelly spokeswoman.

Although the program to upgrade the F-100 engine for the Saudi F-15 fighters will not involve hiring of new employees, Pastor said, it will create a new workload for about 175 people already employed at Kelly.

"We have a very active foreign military sales program," she said. "But normally, in the past the workload for foreign militaries have involved parts and assistance. This is the first time at the San Antonio Air Logistic Center that we've done modifications on engines for a foreign government."

The modification is designed to add 20 years of service to the life of each engine.

San Antonio Light... March 13, 1992

Kelly to upgrade Saudi jets

The Air Force Logistics Command at Kelly AFB soon will upgrade the Royal Saudi Air Force's F-15 fighters, which will be one of the largest foreign military programs undertaken at the base, officials said.

Assigned to the base's Directorate of Propulsion Management, the F100 engine upgrade program begins Friday with the induction of the first of more than 200 engines and 131 engine modules, a Kelly public affairs spokesman said.

The new workload translates to additional man-hours for about 175 Kelly workers, said Col. L.B. Blackwell, Engine Division chief.

Twenty workers are assigned full time to the Saudi jets for the life of the program, while 155 will spend a portion of their shift supporting the upgrade project, he said.

The upgrade, which began in 1990 on U.S. Air Force F-16 engines, adds 20 years to the life of each engine, said Minerva Garcia, upgrade industrial planner at the directorate.

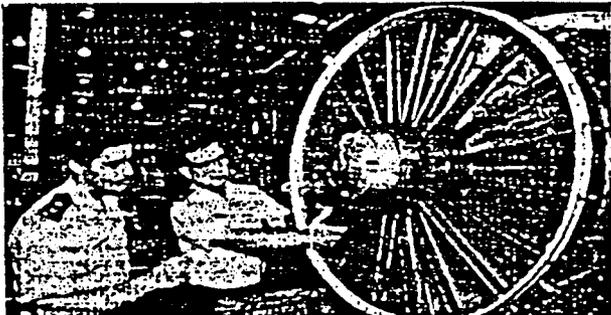
The Saudi upgrade is projected to be a six-year program, after a two-year planning phase. Approximately \$60 million in F100 spare parts and modification kits have been transferred to Kelly.

San Antonio Express News... March 13, 1992

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METRO/TEXAS

Engine work in Kelly's future



San Antonio Express News... March 13, 1992

First Lt. Mohammed Al-Ghamdi of the Royal Saudi Air Force, left, and Col. Jack Blackwell of Kelly Air Force Base inspect one of the F-100 jet airplane engines, which will be upgraded at Kelly. The program will provide work for employees at the Air Force Logistics Center for six years, modifying 200 engines and 131 engine modules.

Bond Room Transfer



Ken Holt, Peace Sun VIII Program Mgr. and Jaime Alcocer, Saudi Bondroom Mgr. Inspect 220-E Kits as the kits arrive in San Antonio.



John Thompson, Saudi Supply Technician assists with the offloading of Delivery Trucks.

Logistics center wins bid to upgrade Saudi engines

By Doug Gillert
Times staff writer

KELLY AFB, Texas — Competitive bidding for commercial contracts has resulted in a first for the San Antonio Air Logistics Center here.

The center competed for and won a \$355 million contract to overhaul and upgrade F100 engines belonging to the Royal Saudi Air Force.

Kelly will overhaul and upgrade 204 engines and 123 spare modules. The engines, which power Saudi F-15 Eagle air superiority fighters, will be upgraded to the more reliable 220E configuration, a project manager said.

The contract marks the first time an Air Force logistics center has competed for business against civilian contractors.

"Projects like this bring in supplemental work that traditionally has been Pratt & Whitney's domain," said Maj. Gen. Lewis Curtis, the center's commander. "But because we can do it cheaper, the workload came to us."

Bringing such contracts to Kelly helps stabilize the work force during a time when Kelly civilians have fretted about possible cutbacks. The center employs 14,158 civilians.

In August 1990, the center announced that 1,222 slots would be considered for a reduction in force. In April 1991, 336 civilian employees were rified, but 246 of them were placed in a call-up status for six months, then dropped from the payroll after the call-up program was canceled.

"Now, there's a whole different philosophy about competition and advocacy," said Kelly spokeswoman Cynthia Bauer. "Not only within the ALC but within the Air Force Materiel Command, there's been a change of culture that says we no longer have the luxury of standing around and waiting for the work to come in. We have to go be competitive, we have to draw in the work to keep our people employed."

"The Saudis have been after San Antonio ALC to upgrade their engines for several years, and we've been turning them down," said project manager Ken Holt. "We didn't have the capacity to work their engines in to our normal workload."

The work is distributed throughout Kelly's huge engine shop. Overhauling requires completely disassembling the engines and modules. There are five major modules in an engine: inlet fan, core, fan-drive turbine, augmentor and gear box. After the modules are overhauled, Saudi-purchased upgrade kits are applied to the modules.

The Saudis are shipping the engines to Kelly at a rate of four per month. The contract calls for a 90-day turnaround, but Holt said ALC workers were exceeding that.

"We're running just over 60 days," he said.

He said the additional time was built into the contract in case problems are encountered.

The upgrade will increase the life of the core, enabling more sorties by Saudi F-15s between overhauls.

"It goes from 1,800 cycles to 4,000 cycles," the number of peaks and valleys a pilot can throttle his aircraft through, said project co-manager Joanne Beyer. A takeoff and a landing is one cycle, she said, but within that, every

time a pilot activates thrusts, another cycle occurs.

"The Saudis don't fly their aircraft as hard or as often as we do, so 4,000 cycles could last them 15 to 20 years," Beyer said.

The first Saudi engines arrived at Kelly in February.

"We started tearing them down in March, and shipped the first group out on the first of June," Holt said.

But Holt said he started getting ready for the engines more than a year earlier.

"We assembled the depot and personnel, arranged for warehouse space and made sure we'd have people in the shops that would work with us."

"This is the first time the Air Force has entered into a major maintenance contract with a foreign government, so we had to develop all new procedures."

He said the contract increased Kelly's normal engine-repair volume by 25 percent.

"We refund the Depot Maintenance Industrial Fund for the hours Kelly workers spend on the Saudi engines," Beyer said. "Currently, we're maintaining jobs for 181 personnel, and at the peak year, it will go up to more than 240."

The contract calls for the last engines to be shipped to Saudi Arabia by September 1996.

Similar contracts could stabilize the Kelly work force further. Holt said Egypt has contracted for 48 F100 core upgrades. And a contract with Portugal involves upgrading Air Force-owned F100s, then selling the engines to Portugal.

PAGE THREE

Kelly's competitive edge earns engine contracts

By LIZ MARTINEZ

Directorate of Aerospace Equipment Management

New workloads are coming to Kelly as a result of San Antonio Air Logistics Center's superior production facilities, quality work force and an effective entry into the arena of competition.

Aerospace Equipment Management directorate officials recently announced their Commodity Production Division has been assigned contracts to repair a number of new gas turbine engines.

One of these is the Allison engine used to power the Army's Patriot missile launcher system, which played a crucial role in the Persian Gulf War.

Other additions to the division's work load include the Teledyne RGT 3600, and the engine that powers the T110-1 generator set.

"Although work load estimates for all engines have not been finalized, it should be substantial," said Oscar Alvarado, Business and Marketing Branch. "Approximately 1,200

Teledyne engines are scheduled for field deployment."

These new repair assignments are in addition to the 13 different models of gas turbine engines currently overhauled and tested by the division.

Competition for defense workloads is fierce between the various services, civilian contractors, and even between air logistics centers.

Such competition is mandated by Defense Management Review Decision 908, which outlines steps for strengthening depot maintenance with an eye on cost savings to the customer.

"Our future looks promising, but we have to win new workloads by maintaining our extremely high standards," said Steve Doneghy, Commodity Production Division chief. "We have the experience, commitment and drive to continue to set the pace for gas turbine engine repair excellence, but we have to continually prove to our customer that we are the best at what we do."



Photo by Lee Swain

Weld done — Stephen Verette, a metallizer-welder in the Commodity Production Division's welding shop, shows Oscar Alvarado, Business and Marketing Branch, results of a welding procedure on a gas turbine engine core.

Engine Division uses WISDOM in workloading

By **ROBERT ROMAN**

Propulsion directorate

The Engine Division is turning out advanced F100-220E engines for the Saudi air force on time, or in some cases ahead of schedule, thanks in part to a new computer program called WISDOM, Workloading Integrating Scheduling Data Optimization Manager.

"WISDOM acts like a scheduling assistant," said Carmen De La Vega, master scheduler with the Engine Division. "It is based on software created by Waterloo Manufacturing and production data on routing, flow times and parts."

Traditional methods for scheduling monthly production requirements were time-consuming. They typically ended up with most of the work scheduled for the end of the month.

WISDOM, on the other hand, creates unique schedules or dispatch reports for each engine and spare module. Its schedules provide start and finish dates for each disassembly, rework and assem-



Rosa Vargas and Robert Roman of the F100 production engineering section review production data on the F100-200E royal Saudi air force engines.

bly work step.

The new system also identifies engine components that have deviated from schedule by a week or more.

"This has allowed shop supervisors to adjust work for potentially late components weeks before they were actually due," De La Vega explained.

Don Ballman, F100 production engineering chief, said that the Engine Division will soon be able to expand WISDOM to include all F100 engine upgrades.

White Paper on Defense Aviation Depots

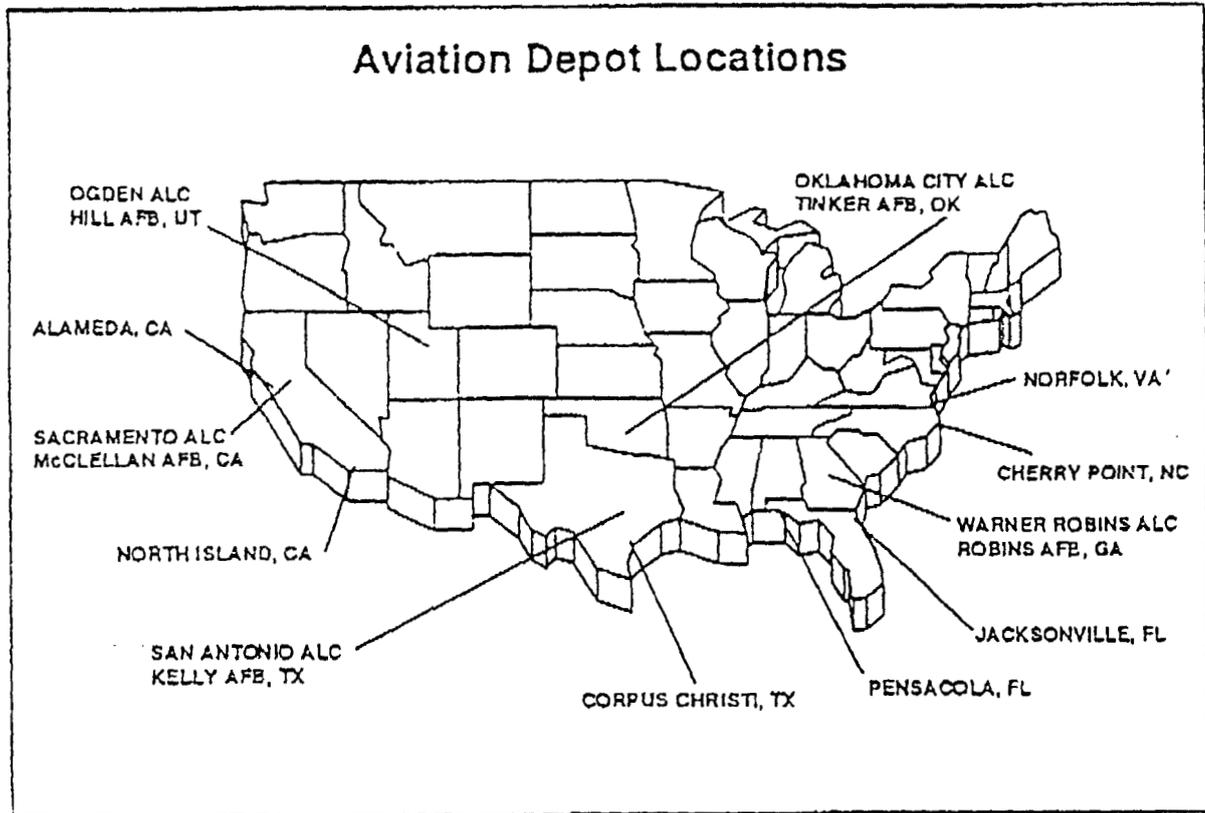
INTRODUCTION: The United States must maintain a healthy and responsive aviation industrial base to assure its defense. That base, a critical element of our country's continued leadership in aviation, consists of a combination of the facilities of private industry and the defense aviation depots. The Department of Defense must maintain some level of organic aviation depots to provide the basic core capabilities to repair air and space weapons so that US military forces can quickly respond to contingencies anywhere in the world -- without the build-up time experienced during our entry into World War II, Korea, and Vietnam. Keeping the right mix of DOD and private industrial facilities active during peacetime allows us to enter a war quickly and maintain ourselves until private industry converts as needed to wartime manufacturing. This paper reviews the DOD's aviation depot's organic capabilities, and offers a means to assess their effectiveness in these changing times.

Aviation Depots: To fulfill its organic industrial base requirement, the DOD maintains twelve aviation depots. These are operated by the US Army (1), US Air Force (5), and US Navy (6). The Marine Corps does not maintain an aviation depot capability and instead has entered into support agreements with the US Navy and private industry. The current DOD structure consists of separate facilities for each service which results in some duplication in capabilities and services.

The DOD aviation depots are:

US Army	Corpus Christi Aviation Depot	Texas
US Air Force	Oklahoma City Air Logistics Center	Oklahoma
	Ogden Air Logistics Center	Utah
	San Antonio Air Logistics Center	Texas
	Sacramento Air Logistics Center	California
	Warner Robins Air Logistics Center	Georgia
US Navy	Naval Aviation Depot, Alameda	California
	Naval Aviation Depot, Cherry Point	North Carolina
	Naval Aviation Depot, Jacksonville	Florida
	Naval Aviation Depot, Norfolk	Virginia
	Naval Aviation Depot, North Island	California
	Naval Aviation Depot, Pensacola	Florida

Aviation Depot Locations



Aviation is divided between rotary wing aircraft, fixed wing aircraft, and space based systems. Responsibilities for the organic repair capability for these systems is shared by the services. The Air Force and the Navy are responsible for fixed wing aircraft, and space based vehicles. The Army is responsible for rotary wing aircraft at its only aviation depot in Corpus Christi, Texas. This paper will concentrate on the overlapping fixed wing and space responsibilities the Air Force and Navy possess at the other eleven organic aviation depots.

Depot Workload: A percentage of the defense aviation depots' work is very specialized with no equivalent support structure in civilian industry. The requirement for DOD organic depots to provide "assured support" for mission critical resources is embedded in law -- Title 10 of the US Code, Section 2484 requires organic depots to: "...maintain a logistics capability to insure a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to mobilization, national defense contingency situations, and other emergency requirements." To be responsive to the military needs of our operational forces this "core" workload must be performed by an organic aviation depot, using government personnel. Beyond this, the remainder of the work can be performed either organically by the DOD aviation depots or by private industry. This latter workload supports and maintains the defense industrial base by "keeping the fires lit in the factories". Both sets of workload -- core and other -- can and should be made open to competition to ensure the best quality at the lowest cost.

~~core and other can and should be made open to competition to ensure the best quality at the lowest cost.~~

COMPETITION: Competition is the vehicle that can best determine the proper makeup of our organic and private industrial base. For "non-core" workload, when organic facilities can do the work for less cost, we cannot afford to contract that work out. Alternatively, when a commercial facility is more cost effective for "non-core" workload, we cannot afford to do the work in our organic facilities. For "core" workload, the organic aviation depot's should compete in a public-to-public forum. The depot that can perform the work most economically, efficiently and effectively should be allotted the work. Such a depot-to-depot competition would permit the core work to be performed at government facilities, by government personnel as required by the Defense authorization act -- at the least cost. Competition is the key to our stewardship of the defense budget. It puts incentives in place to drive the decision process that will result in the most efficient, most responsive combination of all elements of the aviation industrial base. The end result of this competition is that the American public gets the work done by the best source, in the most economical manner.

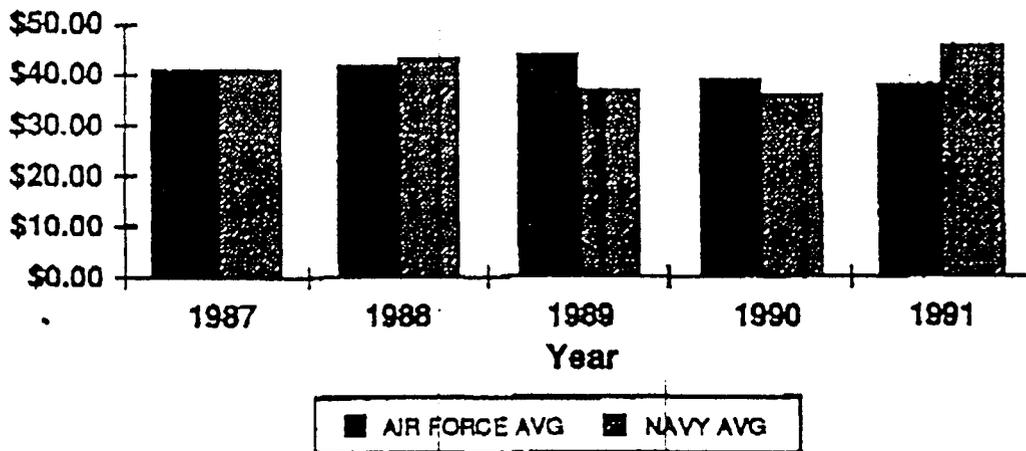
EXAMINATION OF AVIATION DEPOT COSTS The Air Force and Navy perform comparable core work in their aviation depots -- fixed wing and space vehicles, accessories, support equipment, etc. The workforces are universally capable, and the results are outstanding but there is some duplication of effort, expertise, and execution. In the current economic environment, we can no longer afford to maintain redundant organic capabilities. In addition to redundancy in our depots, force drawdowns coupled with reliability and maintainability improvements in our weapon systems have left both services with excess capacity in their organic depots. As we examine organic depots their relationship to the industrial base, ~~the debate over the proper structure that should emerge~~, becomes very complicated. Perhaps the best way to compare the various facilities is to simply look at the bottom line -- the cost to the taxpayer.

To fairly examine depots you must look at their costs of doing business. For the depots these costs are: direct labor costs, material costs, and overhead / General and Administrative (G&A) costs. To assure this fairness in accounting, unbiased, non-service related reports should be used to draw comparisons.

This white paper examines the aviation depots costs as reported in DOD 7220.29-H, "Depot Maintenance and Maintenance Support Cost Accounting and Production Reporting Handbook", and in DOD 7220.9-M, "DOD Accounting Manual, Chapter 76, Special Cost Accounting and Reporting Requirements for Depot Maintenance". The following analysis will address each segment of the depot costs and summarize with a look at total depot costs.

The depot infrastructure is also key to materials costs. The more modern and more efficient the depot, the less the total materials costs. For example, environmental enhancements, such as the hazardous materials pharmacy used at the Air Force's Ogden Air Logistics Center, reduce the amount of materials required to perform required maintenance as well as the cost of inventory control, tracking, and disposal. Similarly, modern production techniques, such as near net shape castings, reduce the amount of scrap material and overall consumption of raw materials.

Material Cost Per Labor Hour



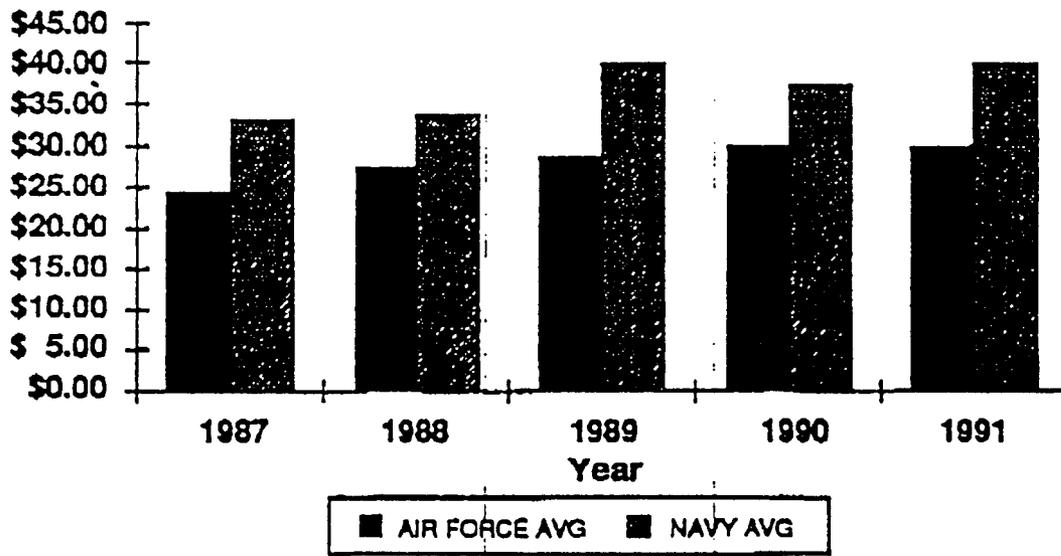
	1987	1988	1989	1990	1991
AIR FORCE AVG	\$40.73	\$41.43	\$44.16	\$39.87	\$38.33
NAVY AVG	\$40.85	\$42.72	\$37.59	\$36.64	\$46.70

The figure above compares Air Force and Navy material costs per labor hour for the past five years.

During this period, material costs have fluctuated considerably. However, the overall Air Force material cost reductions over the past three years can be attributed to a significant investment in technology to increase the efficiency of the industrial plant and a strong environmental program designed to reduce the use of hazardous materials. Additionally, the Air Force infrastructure investments already made will tend to stabilize or reduce costs as compared to the Navy, which in most cases still has to make those investments. The conclusion is that the trends in recent years will continue and the differences between the services will grow larger in coming years.

Overhead Costs: Ideally, overhead costs are inversely proportional to the workload in a depot. The fact that the Air Force does more than twice the work in five Air Logistics Centers than the Navy accomplishes in six Naval Aviation Depots should result in reduced overhead costs. The Air Force has an additional advantage the efficiencies and expertise gained from performing approximately 70% of the organic aviation workload done by the two services (over the past five years the Air Force averaged 37.5 million labor hours; the Navy averaged 17.2 million labor hours). DOD data supports the expected outcome; Air Force overhead costs have been 18-30 percent lower than the Navy's for each of the last five years.

Overhead Cost Per Labor Hour (Indirect Production and G&A)



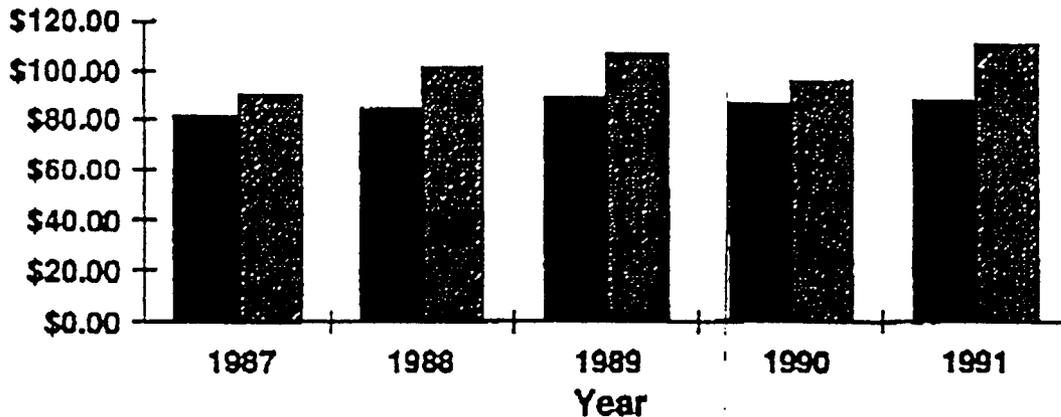
	1987	1988	1989	1990	1991
AIR FORCE AVG	\$24.25	\$27.44	\$28.32	\$29.39	\$30.65
NAVY AVG	\$33.16	\$33.36	\$40.22	\$37.61	\$40.29

This chart shows the average overhead for 1987-1991

Total Cost Comparison: Total costs will differ from depot to depot depending on the type of maintenance performed. However, one would expect total cost per labor hour to be consistent from service to service. Therefore, total cost per labor hour should be comparable for both the Air Force and Navy.

The following graph shows how the services have done over the last five years.

Average Total Depot Production Cost Per Labor Hour



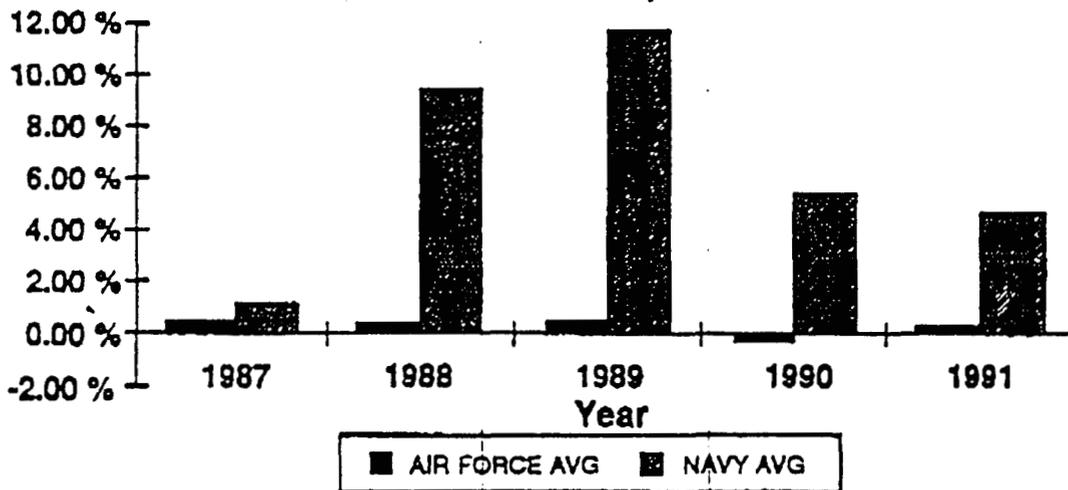
	1987	1988	1989	1990	1991
NAVY AVG	\$90.88	\$102.10	\$108.80	\$98.23	\$111.62
AIR FORCE AVG	\$81.28	\$85.94	\$90.16	\$87.07	\$88.28
Delta	\$9.60	\$16.16	\$18.64	\$11.16	\$23.36

Over the last five years, the average total depot production cost is consistently lower (12%-26%) for the Air Force. The Air Force also had a fairly stable total cost rate during this time period, while the Navy's rate fluctuated considerably.

As a cross check of the DOD database used for this analysis, the costs for direct labor, material, indirect overhead and G&A were summed to check against the total reported costs of each depot. In the case of the Air Force, the sum consistently accounted for over 99.5% of the reported total cost. For the Navy, the component costs accounted for just over 93.2% of the total cost. The

unaccounted for Navy costs (shown by year on the following chart) were not used in preceding labor and material charts and would have only made the comparisons more dramatic (we have no indications from the DOD 7220.34.29H and DOD 7220.9-M as to where the approximate 7% lost Navy costs were expended).

Percentage Difference Between "Total Cost" and the "Sum of Component Costs"



	1987	1988	1989	1990	1991
AIR FORCE	0.41 %	0.32 %	0.37 %	-0.22 %	0.31 %
NAVY	0.98 %	9.52 %	11.91 %	5.43 %	4.63 %

Total: Total Reported Cost from DOD 7220.29H & DOD 7220.9-M
 Sum of Component Costs: Direct Labor + Material + Indirect Labor + G&A

Cost Comparison By Depot: All previous comparisons in this paper reflect aggregate Air Force and Navy costs. We thought it would be beneficial to show one cost comparison by depot. Since material costs vary considerably between depots and are driven largely by type of workload, we extracted the material costs and looked at only direct labor and overhead costs per hour. The table below rank orders all aviation depots, by year, according to their overall efficiency.

**Depot to Depot Comparison
(Direct Labor + Overhead)**

Year	1987	1988	1989	1990	1991
SA	\$38.07	\$41.64	\$43.44	\$43.41	\$46.01
OC	\$38.91	\$42.13	\$45.09	\$46.82	\$50.13
SM	\$41.12	\$42.82	\$46.02	\$47.42	\$50.50
OO	\$41.55	\$45.37	\$46.90	\$48.75	\$50.64
WR	\$42.27	\$45.85	\$47.75	\$49.58	\$52.04
NOR	\$44.66	\$48.84	\$50.54	\$50.36	\$53.02
PEN	\$48.57	\$50.14	\$54.09	\$51.95	\$58.06
NIS	\$48.97	\$52.50	\$55.98	\$56.25	\$59.95
CHE	\$50.45	\$52.68	\$57.28	\$57.17	\$60.84
ALA	\$52.82	\$52.80	\$60.48	\$62.47	\$61.26
JAX	\$53.02	\$54.10	\$74.60	\$68.51	\$64.19
AF	\$40.22	\$44.24	\$45.57	\$47.39	\$49.56
NA	\$49.14	\$49.67	\$58.26	\$57.49	\$59.75
Δ	\$8.92	\$5.43	\$12.59	\$10.10	\$10.11

SA - San Antonio ALC SM - Sacramento ALC OC - Oklahoma City ALC OO - Ogden ALC WR - Warner Robins ALC
 NOR - Norfolk PEN - Pensacola NIS - North Island CHE - Cherry Point ALA - Alameda JAX - Jacksonville

OPTIONS TO CONSIDER: As stated earlier, there is duplication of effort between the Air Force and the Navy in the fixed wing and space based depot support arena. Given the downsizing of the DOD and the Base Realignment and Closure process, aviation depots are proper targets for closure. As we reduce these critical components of our industrial base, however, we must maintain our capability to wage war, and support our warfighters until the private sector of our industrial base attains its wartime posture. Closure alone will not alleviate the duplication of effort. We must consider four options that will do away with the duplication of effort between services and eliminate excess capacity by closing unneeded depots. The goal is to achieve both efficiencies and cost effectiveness.

Defense Maintenance Agency: A Defense Maintenance Agency would certainly solve some of our problems and duplicate efforts. However, the consolidation of all types of maintenance (aircraft, ships, and ground equipment) under one organization would greatly increase the level of complexity in management and leadership required. Such an agency would drive the need for yet more bureaucracy in an era of general downsizing. Moreover, the services have experts in aviation, ships or ground vehicles, not a combination thereof. The director of the Agency would by necessity be an expert in no more than one type of equipment or maintenance. In addition, although there are benefits to be

gained from consolidating like depots (i.e. aviation depots with other aviation depots, or shipyards with other shipyards) there is little or no benefit to consolidating aviation depots with shipyards. The creation of a Defense Maintenance Agency would simply add another management layer on top of the management of the individual services.

Defense Depot Maintenance Council (DDMC): A DDMC with strong OSD oversight appears to be the best option. Since duplication of depot capabilities is found within the basic equipment category lines, it makes sense to focus across the services within like depots. It is evident that existing service management structures will still be required in the future, regardless of any additional restructuring above the service level. The issue is how to most efficiently and effectively achieve the needed cross-service management and what is the best management structure above service lines.

The DDMC was formed in 1990 by OSD (P&L) to address depot efficiency problems. To be effective, however, the OSD must enforce competition on a broad scale between like service depots. The DDMC should be tasked to conduct informal competitions to determine the most efficient and cost effective repair location. The rules and standards governing these competitions must be laid down by OSD and rigidly adhered to.

Given this empowerment, the DDMC can establish groups chaired by lead Services in each major equipment category (i.e. aircraft, ships, ground vehicles). These groups would oversee the process of insuring the services offer major equipment workloads for modified public-to-public competition and thereby gain significant efficiencies in the competition process leading to identification of inefficient depots for closure through the BRAC process.

Executive Lead Service: Another, but less preferable, option is the "Executive Lead Service Concept" which advocates having one service take the lead for a particular type of organic depot support. This approach would solve the problems of duplication and excess capacity. Duplication will be eliminated since one service will do all the logistical support on fixed-wing aircraft. Another service will perform logistical support for ships, and so on. Using this approach, DOD will use the most cost-efficient, modern depots, regardless which service "owns" them. The executive service will operate all depots identified for its responsible organic support activity. Excess capacity will then be employed or eliminated since workload will gravitate to the most cost-efficient and modern depots and the rest identified for closure.

Reduction & Redistribution of Depots: If the designation of an executive lead service is too difficult to implement, then it seems reasonable to simply keep open the best depots in the country -- in fact the American taxpayers would expect us to do just that; i.e. keep the depots where this country has made the most investment in facilities, technology insertion, equipment and the like.

The method that should be employed is simple. We should determine the requirement for organic work, match it against available capacity, determine the depots that can best provide that capability, and close the rest (infrastructure, technology insertion, lifecycle investments, operating costs, environmental compliance and pollution prevention initiatives, etc. are all part of the decision process). Once the decision has been made as to which depots are "best" and the work is transferred to them, they should be redistributed to the services to match their needs.

RECOMMENDATION: The best solution to defense depot duplication and capacity is the DDMC. This concept not only eliminates duplication and utilizes excess capacity, but, allows for closure of our least efficient depots and allows the most experienced and efficient service to perform a particular type of maintenance.

A responsive defense requires a responsive industrial base. The cornerstone of our industrial base is our organic depot maintenance capability. In this time of change and economies bold action is required to properly define the DOD organic industrial base. These difficult decisions must be based on indisputable facts. Our nation requires we step up to these facts, our future defense and our industry depend upon it, and our taxpayers unequivocally expect it.