Plane better: Majors Field contractor celebrates more than 50 years of improving aircraft

[Editor's Note: This series describes the history of Majors Field since it became the site of a defense contractor in 1951, and was originally written to celebrate the first 50 years of progress at the site. It has been updated to reflect changes since 2001. This City of Greenville-owned property which once served as a pilot training base in World War II, has served as the home of TEMCO, LTV, E-Systems, Raytheon and now L-3 Communications Integrated Systems.]

Pre-History
Majors Field prior to 1951

The history of Majors Field in Greenville, Texas, dates back to the years just prior to World War II. In September of 1938, a committee of the Rotary Club of Greenville was appointed to work with a group of Works Progress Administration officials to determine a possible site for the construction of a municipal airport for Greenville. Although nothing resulted from that particular project, it spurred a great interest in establishing an airport.

In 1940, as the threat of war continued to grow, the Greenville Chamber of Commerce appointed an Airport Committee to survey possible sites for an airport. The site selected by the committee and later approved by the Civil Aeronautics Administration (CAA), predecessor to the Federal Aviation Administration, was known as the Dixon Site, the same site currently occupied by Majors Field. On August 23, 1941, the CAA announced that a project for the development of a municipal airport at Greenville had been necessary for national defense and that $410,000 had been allocated for this purpose. The planning and construction of the airport was to be supervised by the District Engineers, U.S. Engineers Office in Denison.

On August 23, 1941, the citizens of Greenville voted to approve bonds in the amount of $60,000 to purchase 714.66 acres of land, remove the existing buildings, drill wells for water and construct a power line to the airport. Construction contracts were let in January 1942, for grading, drainage, a railroad spur, water and sewage systems, general housing, electric systems, runways, streets and roads, a storage tank, and other facilities. The contracts let during the year 1942 totaled $5.57 million with the total construction cost of the airfield estimated in excess of $6 million.

While construction was under way, the Greenville Chamber of Commerce was working toward the acceptance of the airport as an Army/Air Force training school. Since the U.S. government preferred to deal with Hunt County, a lease was executed on Feb. 7, 1942.

According to the Texas Handbook, the field opened on June 26, 1942, and was named in memory of Lt. Truett Majors, the first Greenville area native to die in the war. Majors Field was the home of as many as to 5,000 pilots, support personnel, and civilian employees.

The pilot training school was successful, training thousands of young pilots throughout World War II. Originally, Majors Field was a basic training school using BT-13As. Later, the base would expand as an advanced training center using P-47 Thunderbolts for advanced training. One of the most celebrated groups to get advanced training at Majors Field was the 201st Fighting Squadron of the Mexican Air Force, which was that country's only force of any kind to see action during the war.

Majors Field would eventually be closed as a training base once the war ended and the city would eventually end up with the property. By July 1945, Majors Field was practically deserted, according to the Texas Handbook. In 1946, a company called Executive Transport Company

would lease several hangars at Majors Field to C-47s and C-57s for sale to commercial airlines. The company would not prove to be as enduring as the next aerospace company to eventually come to Majors Field in 1951, the Texas Engineering and Manufacturing Company – TEMCO.

Part 1
The 1950s: Humble beginnings

Airplanes had been landing at Majors Field long before 1951, but until that time, they weren't much better for the stop. As a World War II pilot training base, the aircraft saw use and abuse from the most novice pilots around. Since 1951, airplanes have been leaving Greenville in better condition than they arrived.

The start for what was then TEMCO, or the Texas Engineering and Manufacturing Company, began in Grand Prairie in 1945. That was the year several employees from North American Aviation, maker of such aircraft as the P-51 Mustang and the T-6 Texan training aircraft, left the company to form their own venture in the de-activated North American plant in Grand Prairie. This new company specialized in airframe-oriented efforts such as subcontract manufacturing of aircraft assemblies, general aircraft overhaul, aircraft conversion and other special modifications.

TEMCO enjoyed a rapid expansion with its first contracts that involved producing 400 C-82 subassemblies and 200 F-24 aircraft subassemblies for Fairchild Aircraft Company. With company founders Robert McCulloch and Bert Howard looking for room to grow, they selected the former World War II pilot training base in Greenville to handle overflow work. According to a book (*How E-Systems Came to Be E-Systems*) written by former the Greenville plant's general manager, the late E. Fred Buehring, the site was selected to focus primarily on the company's Air Force business, while the Grand Prairie plant focused primarily on Navy programs. Although TEMCO's original lease with the City of Greenville would be for only 18 months, it would actually mark the beginning of a half-decade of continuous operation at the field.

The first program at TEMCO's new Greenville facility was the overhaul of C-54 aircraft, many which had been used in the Berlin Airlift. It wasn't long before the company changed its name to TEMCO Aircraft Corporation to better reflect its activities. By 1952, TEMCO had built, modified or overhauled more than 3,500 aircraft and Greenville was becoming a big contributor to the company's operations.

The first real signs of expansion would come in 1953 when city officials and TEMCO management participated in a ground breaking ceremony for Hangar 102, which originally consisted of three large bays (the hangar was eventually expanded to 10 bays).

The same year as the groundbreaking, TEMCO was moving ahead with major overhaul programs for the U.S. Air Force and began to diversify. The company had begun converting four-seat, single-engine civilian aircraft to a twin-engined configuration for the Riley Aircraft Sales Corporation. By late in the year, TEMCO purchased the exclusive right to manufacture these aircraft and, during the next four years, converted 138 aircraft until the supply of single-engine Rileys dwindled to the point that they couldn't be converted at a reasonable cost.

In 1954, the Greenville TEMCO operation was at a crossroads. Because at that time the standard military overhaul contract was for a three-year period, the site saw much of its business up for recompetition. None of the programs that the company re-bid that year were won and there weren't a lot of programs to fill the newly completed Hangar 102. However, late in the year, a program to overhaul C-46 aircraft had experienced difficulties in the bidding process and TEMCO, which originally hadn't bid the program, got another chance to bid. The program was won, though by the end of the year, Greenville had fewer than 500 employees and sales less than $5 million.

Buehring was appointed general manager of the Greenville facility in 1954 and during the latter part of the year, he and local management began charting a new course for the operations. This group saw the impending changes that the jet would make on aviation – from different overhaul requirements to the need for longer runways. Neither the city nor TEMCO could afford to lengthen what at the time was a 5,500-foot runway. The Civil Aviation Authority was not interested in the runway and the Air Force

legally couldn't pay for runway extensions. Finally, citing a need for safety, according to Buehring's book, the government agreed to extend the runways and the U.S. Army Corps of Engineers soon began work on extensions that would be completed in 1957.

The invention of the transistor in the late 1940s spawned the growth of electronics throughout the world, and by the mid-50s, TEMCO management in Greenville recognized a growing interest in airborne electronics applications. Because of the decision to pursue work in airborne electronics, the year 1955 would prove to be one of the most important in the Greenville facility's history.

The first special mission aircraft program was secured in 1955. This program involved installation of quick reaction kits onto 35 B-29 Superfortress aircraft. The quick reaction capability at Greenville would become a characteristic that would span to present day. That quick reaction capability was proven in June 1955 when lightning sparked a fire that destroyed the site's machine shop and sheet metal fabrication

The B-29 program led to another special mission program in 1956 that operated under the code name "Haystack" involving B-50 aircraft. Employment had more than tripled to more than 1,700 employees by late 1956 and the facility was growing.

According to Buehring's book, 1957 was the year the Greenville facility was included in the Air Force's Big Safari Program, which was a streamlined management and acquisition concept for specific aircraft and services on limited special programs. Only a limited number of highly specialized contractors that could dedicate top priority to customer requirements were selected to participate in Big Safari Programs, which were conducted entirely as classified projects with no publicity surrounding them.

In April of 1957, the first Big Safari program at Greenville was awarded, known as Sun Valley I. This program involved the installation of special mission electronics on 10 C-130A aircraft. Later that year, the Haystack program would be brought under Big Safari management. The TEMCO-Big Safari relationship has yielded more successes for the United States and for Greenville than could ever be measured.

By 1958, electronics accounted for more than half the program revenues at the Greenville site, though overhaul programs had not been neglected. Quite the contrary, TEMCO was innovating aircraft maintenance by pioneering the progressive aircraft recondition cycle (PARC) maintenance concept. This concept, which involved the progressive maintenance of aircraft based on inspection and maintenance tasks identified by a set of work cards and accomplished at regular intervals of flight time accrued by the aircraft. The PARC approach helped win two new maintenance contracts for C-121 and C-97 aircraft.

The jet age arrived in Greenville in 1959 on a program to install special-purpose electronic equipment on a KC-135. Construction began that year on Building 136 to provide approximately 40,000 square feet of engineering and administration spaces. Employment had reached 1,890 by the end of the decade.

The Greenville facility had worked hard to establish itself during the very critical formative years. Greenville finally, in 1959, made the transition from an overflow facility to full division status within TEMCO. Considering the arrival of jets and the attainment of division status, it was a banner year for Greenville.

Part 2
The 1960s: Expansion, expansion, expansion

With TEMCO's decision in the mid-1950s to shift its focus to airborne electronics, the Greenville division's success had it bursting at the seams. As soon as a new engineering/administration building (Building 136) was complete, the company had already outgrown the space and temporary buildings that had been planned to be razed when the new building open continued to be used.

Another big change for the company came in 1960 when TEMCO merged with Ling-Altec Electronics to form Ling-TEMCO Electronics. The Greenville site was renamed from TEMCO Overhaul and Aerosystems Division to the Ling-TEMCO Electronics Aerosystems Division. While "overhaul" had been dropped from the name, those activities continued to play a strong role in the operations, with continuing programs on KC-97s, C-121s and C-133s, which at the time were one of the world's largest aircraft.

A significant achievement from 1959 at the Greenville division was recognized in 1960 when the U.S. Treasury awarded a Minuteman flag to the company in recognition of 100 percent of its employees participating in the U.S. Savings Bond campaign. The Greenville facility became the first Texas private industry since World War II to earn the right to fly the Minuteman flag. This would become the last Minuteman flag ever awarded because the Treasury discontinued the program that year, though Greenville was allowed to fly the flag as long as it remained above 90 percent. Although Greenville employees maintain excellent participation in the Savings Bond program to this day, the ultimate fate of the Minuteman flag is currently unknown.

Another incredible milestone accomplished by Greenville employees was the recognition by the National Safety Council of more than 1 million man hours without an injury serious enough to prevent an employee from working his or her next shift. The final number of hours was 1,300,977 hours, the equivalent of one person working 40 hours per week for 481 years. Like the Minuteman flag, the fate of the person who sustained the injury that ended the streak is unknown.

A second corporate merger in two years occurred in 1961 as Ling-TEMCO-Electronics merged with Chance-Vought Corp. The new company, called Ling-TEMCO-Vought, or LTV, would become a diverse industrial giant. The Greenville division would continue to diversify itself, with programs that year involving JC-130s, B-47 Stratojets and C-118s.

Perhaps as a signal of the dawning computer age, one company history mentions that 1962 was the year the Greenville site acquired a computer and established its first data processing department. Employment had swelled to 2,500 people.

Programs that year included an especially important program that involved the successful completion and prototype of a special system known as the AN/ASD-1 that was installed on a KC-135. Other special modifications that year included both a B-57 and a C-131.

Overhaul and maintenance programs continued as well in 1962 on a variety of airframes, including C-130s and C-133 aircraft.

A very special program in 1963 was awarded to Greenville that at the time was the most extensive structural modification ever performed on a large aircraft. This program, known by code names Lisa Ann and Rivet Amber, involved the installation of a large radar in a C-135B to, according to E. Fred Buehring's book, *How E-Systems Came to Be E-Systems*, "fly reconnaissance missions against certain foreign re-entry/anti-ballistic missile range operations. The 37-month, $35 million program could track an object the size of a soccer ball from a range of 300 nautical miles, according to Buehring's book. Despite the installation of a specially fabricated 12x20 foot laminated fiberglass radome panel on the fuselage of the aircraft, it had no flight restrictions on the aircraft other than those of the original aircraft.

Lisa Ann/Rivet Amber worked in the field and even cycled back through Greenville for

maintenance in 1966. However, in June of 1969, during a routine ferry flight, the aircraft and all aboard perished somewhere in the Bering Sea, according to Buehring's book.

The year 1964 brought a new capability to the company's offerings when it developed an Airborne Battlefield Command and Control Center that fit into a multi-use shelter that could be carried and operated on a C-130 aircraft or on the ground independent of the aircraft.

LTV conducted a company-wide reorganization in 1965, the same year the company went public. But a program that began in 1965 installing a special electronic system aboard auxiliary light-cargo class vessels for the U.S. Navy. One of these ships, the U.S.S. Pueblo would be thrust into the world spotlight in 1968 when it was captured by North Korea.

Growth continued at Greenville and, in 1968, another program began that would prove to be a great long-term customer and company relationship that continues today. This foreign military sales program involved the designed, fabricated, installed and tested the Peace Peek Airborne System on a fleet of Breguet 1150 Atlantic aircraft for the Federal Republic of Germany.

In 1969, a program was started that was revolutionary involving a turboprop aircraft that eventually could be operated either by a pilot or by remote control. This aircraft, known as the L-450F, would eventually achieve 16 world records for turbo-prop aircraft in its class. (As an aside, a group of volunteers in Fort Worth have fully-restored an L-450 with Air Force markings for future inclusion in an aviation museum being built at Alliance Airport.)

A new, 65,000 square foot hangar known as Hangar 150 was constructed in 1969 to accommodate the new age of large jet aircraft.

Despite the successes of the '60s, Greenville began to see a downturn in activities at the same time troops were beginning to be withdrawn from Vietnam in mid 1969. This would foreshadow, perhaps, the next couple years for the Greenville division.

Part 3

The 1970s: Emerging from a dark period

Though many programs remained strong in the early 1970s, the Greenville division of then-LTV Electrosystems was experiencing the first real downturn in its business. The division had just experienced its first loss in 1969 and President Nixon was gradually limiting the country's involvement in Vietnam.

Ongoing programs involving installing Gunship modifications on C-130s continued, as did maintenance and modification programs on other C-130s and C-135s. A 1971 Air Force contract had the company developing and producing a military version of its L-450 aircraft. The L-450, which would be designated the XQM-93A by the military, was a high-altitude turbo-prop that could be flown either by a pilot or by remote control.

A C-135 program in 1971 known as TRAP MATS would prove to be a technical achievement for Greenville. The program involved design, installation and testing of an electro-optical sensor system that would take four years of intensive effort to complete.

Greenville reached one of its darkest points in early 1972 when it suffered a labor strike that lasted from February to August. The company and the union eventually resolved the strike with an agreement that former company executive the late E. Fred Buehring would describe in his book, *How E-Systems Came to Be E-Systems*, as having a "positive, long-term effect on our competitive position." This would lead, according to Buehring, to future successes for all of Greenville and its employees.

Work continued through these troubled times and change was ever present. In May of 1972, LTV divested itself from many of its holdings, including LTV Electrosystems. The new, independent company would include the Greenville division and, in order to separate the new company from LTV, it changed its name to "E-Systems," which was simply an abbreviated "Electrosystems."

Employment declined to about 1,470 during 1972, though new business that year helped those numbers begin to rebound.

One significant program award in 1972 did much to raise the pride of the E-Systems workforce. The award of a program to design, develop and fabricate interior modification kits for five VC-135 aircraft in the U.S. Air Force's Special Air Mission (SAM) fleet was the beginning of a long-term relationship with another great customer.

A new program in 1973 involved the Advanced Airborne Command Post program, which called for the demodification of EC-135 aircraft and re-installation of removed equipment into Boeing 747 aircraft designated E-4As.

As the final C-130 in the Air Force's special Big Safari Program was retired in 1975, the C-135 jet continued to thrive.

An incredible quick-reaction program in 1976 had Greenville planning, shipping and building an entire facility for an electronic peace-monitoring system to help maintain peace between Egypt and Israel. This program, known as the Sinai Field Mission, would see a permanent facility for the almost 200 personnel constructed within 6 months of contract signing. The Greenville facility was abuzz in the first half of 1976 with load-after-load of cargo 747s taking everything from building materials to jeeps to a remote area of the Sinai Desert.

In the mid-1970s, E-Systems Greenville had been involved with head-of-state aircraft for countries throughout the world and did several interior modifications for these aircraft. The reputation for Greenville's excellence extended from military to commercial customers, including several airlines that had the company performing aircraft interior modifications.

By the late 1970s, continued performance and many follow-on contracts had helped the division grow its employment level to more than 2,500 employees.

Part 4
The 1980s: Decade of solid performance, growth

The Greenville-based defense contractor E-Systems (now Raytheon) continued its growth despite a brief period of decline in the early 1970s. The Cold War helped the Greenville division continue its strong performance throughout the '80s with many long-standing programs continuing to make technical advances as well as aircraft maintenance remaining strong part of the business.

Perhaps no program better described this period for the Majors Field-based operations than the Advanced Airborne Command Post program. A third phase of the program that had its original involvement with Greenville in 1973 was awarded to a Boeing/E-Systems team. This win would make a quantum increase in activity at Greenville for the next several years.

Another program that continued success at Greenville was the Peace Peek program, a foreign military sales program that involved an airborne system for a fleet of Breguet 1150 Atlantic aircraft for the Federal Republic of Germany. A 1980 Lifetime Extension Program was awarded that would extend the life of the Breguet 1150s' mission system well into the 1990s by incorporating state-of-the-art technology.

Meanwhile, the relationship between the U.S. Air Force's Big Safari program and E-Systems continued to advance the capabilities of the RC-135 fleet.

The development of a transportable satellite communications system known as the AN/TSC-102 was so successful that it resulted in the award of several follow-on contracts in 1980.

Greenville employees has something to be especially proud of that same year when all 14 aircraft on the U.S. Air Force Special Air Mission program were delivered with zero defects despite very stringent customer requirements.

The '80s continued to see Greenville producing head-of-state interiors, including a 727 for the President of Nigeria in 1981.

The company announced in 1982 that it would embark upon a $10 million expansion program in Greenville that would eventually increase the under-roof square footage by 25 percent to a total of 1.8 million.

In 1983, E-Systems won a third 5-year contract on the SAM program. A related program was also won on which the company teamed with Gulfstream to modify C-20A aircraft (military versions of the Gulfstream III aircraft) to replace the aging VC-140 aircraft in the SAM fleet.

The first major helicopter program was won in 1983 in a teaming arrangement with IBM. It involved the integration of advanced avionics in HH-60D helicopters.

Another program in which E-Systems Greenville teamed with IBM would result in the award in 1984 of the Combat Talon II program, which would provide advanced capabilities for the U.S. Special Operations Force. The program involved design, fabrication, installation and test of Group A equipment in 11 C-130 aircraft.

The E-Systems L-450 turbo-prop aircraft that the company had designed in the '70s participated in air shows in Europe in 1984, helping to spark new interest in a high-altitude aircraft. This would lead to the development of a new aircraft with aircraft manufacturer Grob and engine-maker Garrett Aviation, which was eventually called the EGRETT (a contraction of E-Systems, Grob and Garrett).

The new EGRETT aircraft development would be announced in 1986 as a multi-purpose, all-composite, turboprop with a broad spectrum of capabilities for both commercial and military markets.

The first flight of the EGRETT proof-of-concept was accomplished in early 1987. The aircraft would eventually set several world records for turboprops in its class for altitude and endurance.

In 1986, E-Systems Greenville was named an associate contractor to develop a mission

communications system for the new Air Force One widebody aircraft, a continued source of pride for the division employees.

Employment had grown to 4,500 by 1987 and the facility had continued to grow with new buildings constructed almost every year.

The Civil Reserve Air Fleet Aeromedical Evacuation Ship Set program in 1988 called for the development of kits to convert commercial MD-80 and Boeing 767 airliners for aeromedical evacuation missions in the event of national emergency. This program harked back to the early days of the division when TEMCO, as it was then named, converted C-54s to flying hospitals from cargo aircraft in the early '50s.

In 1989, Majors Field became the first airport in the U.S. to receive a non-federal, private-sector installation of an airport surveillance radar.

Later that year, a rare fighter-class aircraft program was awarded to E-Systems Greenville known as ATARS, which involved installing a special sensor system in RF-4C aircraft. It would bring an exciting new kind of program to the plant following a decade of continued performance for repeat customers.

Part 5
The 1990s: A whole new world

World politics were at a point of dramatic change in the early 1990s and E-Systems Greenville (presently L-3 Communications Integrated Systems) would experience many of the effects of these changes.

One bright spot in the early '90s came as the result of the partnership between the City of Greenville, E-Systems, the Federal Emergency Management Agency and the Economic Development Administration. A $12 million, two-phase Airport Improvement Program was initiated that consisted of deepening and widening drainage ditches, adding approximately a mile of culverts, extending concrete runway overruns to 1,000 feet at both ends of the principal runway, adding a special engine-run station for widebody aircraft, and overlaying runway and taxiway pavement.

With a war pending in Iraq, activity was brisk for Greenville. Work accelerated on U.S. military programs as Operations Desert Shield and Desert Storm went from peacekeeping to war. Among the many accomplishments of the company in the war, the Tactical Information Broadcast Service (TIBS) had been rushed into use as a prototype. Following its success in battle, the TIBS system went into production in 1992.

Peace wouldn't be limited to the Middle East. Germany would be reunified in the early 1990s following the fall of the Berlin Wall in 1989. A large program known as GAFECS, which would have used the EGRETT aircraft, would be canceled due to this and Greenville would experience a reduction in workforce of several hundred.

By 1993, the U.S. defense industry was facing a post-Cold War world of shrinking defense budgets and a perception of excess capacity. A dinner for top defense executives hosted by the U.S. Secretary of Defense was credited with triggering a series of major industry-wide mergers and acquisitions.

During this period of defense cuts, companies began looking for ways to diversify. Greenville was among those to apply military innovations to the commercial world. A pioneering mass transit system called AccuTrans was developed to provide real-time location and status of large vehicles such as buses using global positioning technology. This business would prove so successful that it would eventually be spun-off.

Another diversification effort involved the development of large database systems for the U.S. Department of Education to better track student loans. These successful programs would also launch another separate business area that would eventually be separated from Greenville division operations and moved to another facility in Greenville.

In 1993, E-Systems was awarded a non-defense aircraft integration program by the Federal Aviation Administration to develop and install flight inspection systems that in several different models of business jets.

A big blow came in 1993 when the company learned it did not win a fifth consecutive 5-year program for the Special Air Mission program. However, the company's long-standing work on the mission communications system would continue for the fleet as an associate contractor.

Another non-defense integration job would be won a year later when Greenville delivered a specially instrumented Gulfstream IV nicknamed the Hurricane Hunter to the U.S. Department of Commerce's National Oceanic and Atmospheric Administration. This aircraft would be used for hurricane surveillance, reconnaissance and atmospheric research.

A new business area was launched for Greenville in 1994 with two program wins involving P-3 maritime patrol aircraft. The first program involved the design and installation of a tactical mission system for the Royal Australian Air Force's fleet of P-3 aircraft. The second program was awarded by the U.S. Navy and called the Sustained Readiness Program (SRP). It involved the pre-emptive refurbishment and replacement of airframe components and systems to extend the life of the aircraft.

Because of its reputation as a leader in defense electronics, E-Systems was considered a prime candidate for merger and in 1995, it was announced that missile company Raytheon would merge with E-Systems. This specific combination would prove to be especially critical to the future of Greenville division. Since its specialty was the integration of airborne systems, it was key that Raytheon was not primarily an aircraft manufacturer like Boeing or Lockheed. Otherwise, the Greenville facility could have fallen victim to elimination as a redundant capability. While Raytheon did produce business jets and had purchased the former Beech aircraft, Greenville's aircraft systems integration experience was a unique capability to the company.

As the 21st century began, Raytheon's Greenville operations at Majors Field, designated by the company as its Aircraft Integration Systems business unit, continued as a world leader in the integration of complex electronic systems in airborne applications.

A 2000 award of the United Kingdom's Airborne Stand-Off Radar (ASTOR) program to Raytheon was due largely in part to the role that Greenville plays as the system designer and aircraft integrator. This highly sophisticated, long range airborne surveillance system will be carried on board Bombardier Global Express aircraft and is scheduled to enter service in 2005.

Long-term customer relationships established decades ago by TEMCO, LTV and E-Systems continue today for L-3 Integrated Systems with customers such as the U.S. Air Force and the Federal Republic of Germany. While the signage on the facility has changed with each transition in corporate ownership, Majors Field remains a choice facility for customers seeking technical innovation and excellence, quick reaction capabilities and can-do employee attitudes.

The values of the Greenville workforce remain the same. The L-3 employees continue to give back to the community in ways that have withstood the test of time. The many ways they help include the company's own annual Project Christmas Spirit drive (originally called Operation Christmas Basket), United Way contributions (originally known as the United Fund drive), and even U.S. Savings Bonds (from earning the Minuteman Flag in 1960 to a continued payroll-deduction drive today).

So while the airplanes that flew out of Majors Field when it was a World War II pilot training base probably left much worse for the wear, those that departed during the last five decades enjoyed the service and care of the world's most accomplished aerospace organization. The Greenville facility has maintained and modified more than 15,000 aircraft of more than 125 types in the past 50 years and is poised to continue its technological leadership well into the 21st century.

Part 6
A postscript: The second half-century begins

In March of 2002, L-3 Communications acquired the assets of Raytheon's Aircraft Integration Systems (AIS) for $1.13 billion and renamed it L-3 Communications Integrated Systems. The growing L-3, founded and managed by industry veterans Frank Lanza and Robert LaPenta, considered its new Integrated Systems division integral to its business strategy.

"AIS is our largest acquisition to date and represents an excellent strategic fit for L-3 Communications," Frank C. Lanza, chairman and chief executive officer of L-3 Communications, said at the time of the acquisition. "It is a solid company with excellent management, and is in a market niche we know well and serve with our secure communications and electronic products."

Lanza's largest acquisition flourished under the L-3 banner. In March of 2003, L-3/IS captured what would be L-3's largest contract win ever – a $1.5 billion, 10-year contract for logistic support of the U.S. Special Operations Command.

Soon after in June 2003, an acquisition added to the Greenville-headquartered Integrated Systems portfolio. The company purchased Aeromet, based in Tulsa, Okla., which provides a broad array of services, including electro-optical and infrared programs and specialized meteorological applications. Its systems are used extensively for missile defense applications.

Another huge success would come in September of 2003 when L-3/IS teamed with aerospace services company Vertex Aerospace and two other companies to form a joint venture known as Army Fleet Support. The joint venture competed for and won a $2.7 billion contract to support the U.S. Army's 600-plus helicopter fleet at Fort Rucker, Ala., where the majority of Army helicopter training is conducted.

The relationship with Vertex Aerospace would become even more important in October of 2003, when L-3 Integrated Systems added the company to its capabilities as a subsidiary when L-3 purchased Vertex Aerospace. L-3 Vertex services include logistics support, modernization, maintenance, supply chain management and pilot training. L-3 Vertex supports military training aircraft, tactical aircraft, cargo and utility aircraft and other defense-related platforms representing more than 2,600 active fixed- and rotary-wing aircraft and more than 85 vehicle platforms. It employs more than 10,000 employees worldwide, with approximately 1,800 working in Texas at various customer locations.

In mid-2004, the company acquired Avisys, headquartered in Austin, Texas, a leading provider of aircraft self-protection systems including electronic warfare and countermeasure systems, and avionics systems integration. L-3 Avisys was one of three teams selected by the U.S. Department of Homeland Security to design a solution to the threat of shoulder-fired missiles against commercial airliners.

With the addition of Avisys, Aeromet and Vertex Aerospace, L-3 Integrated Systems has grown to meet the new challenges of its second half-century of operation. It remains committed to the programs that helped establish it as a dominant provider of intelligence, surveillance and reconnaissance systems. And now as part of one of the world's pre-eminent defense companies, L-3 Integrated Systems is poised for more growth.

"(L-3/IS) is a national defense asset that for decades has had a special relationship with the US intelligence community," Lanza said. "(L-3/IS) has outfitted over 15,000 aircraft of more than 125 types. So as the nation's military forces continue to pursue our enemies in 'Operation Enduring Freedom' and as the DoD begins the task of transformation to improve its information dominance in its legacy platforms, (L-3/IS') capabilities in multi-intelligence and multi-platform operations are even more critical."

[Credits: The information in this series of essays was compiled by L-3 employee Lance Martin from several sources, including numerous L-3 Integrated Systems company histories and the E. Fred Buehring book, *How E-Systems Came to Be E-Systems*.]