

STATE AND LOCAL *Commitment*

There are many state and local organizations dedicated to aerospace advancement such as the Arizona Aerospace and Defense Commission. The Commission was established to develop an aerospace and defense strategic plan that builds synergy between government, industry and education. The Commission works to enhance, foster and drive the aerospace

and defense industry in Arizona. Another group committed to advancements in the industry is the Arizona Technology Council (AZTC). The AZTC is a non-profit trade association that connects, represents and supports members through initiatives, advocacy, networking, effective communications, business support and access to educational forums. The association will



benefit the interests of a variety of technology, manufacturing and service firms, such as those in the aerospace, bioscience, defense, electronics, information technology, nanotechnology, optics, semiconductors and telecommunications sectors.

Incentives

The State of Arizona offers a number of incentives for high technology companies. The Arizona Department of Commerce (ADOC) administers the state incentive programs including Enterprise Zones, Military Re-Use Zones and Arizona Job Training Grants.

The City of Tucson, Pima County, and the private business community are committed to a pro-business environment that will promote and sustain economic growth for the Tucson region. A variety of incentives and services can assist companies in their profitable growth efforts. Such programs include:

- Enterprise Zones
- Foreign Trade Zones
- Job Training Funds
- Research & Development Expense Credit
- Pollution Control Equipment Credit
- Accelerated Depreciation of Personal Property
- Central Business District Location
- Supply Chain Development Assistance
- Soft Landing Program

WHAT CAN THE TUCSON REGION OFFER YOU?

To learn more about the business advantages of locating your aerospace company in Southern Arizona, call 866.600.0331 or visit our web site at www.treoaz.org.

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SPOTLIGHT ON AEROSPACE AND DEFENSE

TUCSON.

Soaring to New Heights.



SOUTHERN ARIZONA'S *Soaring Aerospace Industry*

Tucson's clear blue skies and dry climate have been attracting aerospace related attention since the early 1900s. The aerospace industry is a key employer in the Tucson region and is considered one of the community's stronger private sector economic industries.

The aerospace industry represents defense and space-related manufacturing, research and development, industrial high-tech fields, assembly, distribution and warehousing. It also includes firms that maintain and rehabilitate the nation's commercial aircraft fleet.

Tucson's highly concentrated aerospace product and parts manufacturing sector has an 8.35 location quotient (source: economy.com), a ratio calculated to compare a region's industrial activity level to the rest of the United States. The location quotient means Tucson is 8.35 times more concentrated in the aerospace product and parts manufacturing industry than the average of all metropolitan statistical areas across the country.



ON THE *Space Frontier*

Tucson came into the space exploration and research spotlight in 2008 when the Phoenix Mars Mission was launched. The Mission, operated for NASA by the Lunar and Planetary Laboratory at The University of Arizona in partnership with the Jet Propulsion Laboratory, Lockheed Martin, and the Canadian Space Agency, spent more than five months excavating, sampling and analyzing Martian soil. The lander also sent back more than 25,000 photos and enough data to keep mission analysis teams busy for years.

The first Mars mission ever led by a public university, Phoenix used some of the world's most sophisticated and advanced space exploration technology to study the history of water and habitability potential in the ice-rich soil of Mars. Among the mission's many prominent achievements, it verified the presence of water-based ice in the Martian subsurface.

Phoenix was designed to be an innovative, low-cost part of NASA's Mars Exploration Program, which aims to incrementally lay the scientific groundwork for human exploration of the Red Planet.

Tucson is seen as a flagship in civil space innovation. The exceptional talent and resources in Southern Arizona have the capability and opportunity to truly go where no man has gone before.



TUCSON
is in the
TOP 5 METRO AREAS
NATIONWIDE
for its concentration
of employment in
aerospace and defense.



World Class Companies

The aerospace and defense industry in Southern Arizona generates between \$5 and \$6 billion in revenues annually from more than 200 aerospace companies.

Major Employers

Abrams Airborne Manufacturing Inc.

Bombardier Aerospace

B/E Aerospace

Davis-Monthan Air Force Base

Evergreen Air Center

Fort Huachuca

General Dynamics

Global Aircraft Solutions

Honeywell Aerospace

Lockheed Martin

Northrop Grumman (in Sierra Vista)

**Paragon Space
Development Corporation**

Raytheon Missile Systems

Sargent Aerospace & Defense

Universal Avionics Systems

HIGHLY EDUCATED *Workforce*

From aerospace engineers to FAA-certified airframe technicians, Tucson has the educational resources to supply all levels of aerospace workers to companies in the region. Throughout Southern Arizona, there are currently between 20,000 and 30,000 people employed in the aerospace industry.

The University of Arizona (UA)

- The College of Engineering at The University of Arizona offers many outstanding engineering programs, granting 434 bachelor's degrees, 130 master's, and 48 doctoral degrees in 2007-2008.
- The Department of Aerospace and Mechanical Engineering (AME) offers ABET accredited undergraduate, master's, and doctoral programs in aerospace engineering and mechanical engineering.
- AME research activities are concentrated in fluid mechanics and aerodynamics, multi-body dynamics and control, heat transfer, solid mechanics and composite materials, space technology, biomedical engineering and reliability. Some of

the emerging areas of concentration include micro-electrical-mechanical systems (MEMS), nanotechnology and opto-mechanics.

- UA ranks in the top 10 of NASA grant recipients and is No. 1 in space science research. UA's Lunar and Planetary Laboratory is instrumental in several ongoing NASA space missions, including the Mercury Messenger, Cassini Saturn and Phoenix Mars missions.
- Arizona Center for Innovation, located at the UA Science and Technology Park, is a high tech incubator that focuses on important developing areas including aerospace, advance composites, information technology and the life sciences.

Pima Community College (PCC)

- PCC's dedicated Aviation Technology Center and new Avionics Expansion provides FAA-approved Airframe and Powerplant Certification, Aviation Structural Repair and Avionics Technician Training. PCC's aviation technology degrees and certifications can be paired with training programs customized to employer's requirements, and are nationally recognized for producing highly-skilled, industry-ready workers.

Embry-Riddle Aeronautical University

- Embry-Riddle Aeronautical University offers several degrees at its Davis-Monthan AFB Campus (over 1,000 students in 2009).

THE MILITARY *Defending America*

The military is a key employer in Southern Arizona and a critical component of the aerospace and defense industry. Many of the aerospace industry's finest companies benefit from the vast experience of military retirees that choose to continue their professional careers in the region.

Davis-Monthan Air Force Base

Davis-Monthan Air Force Base, founded in 1925, is the fourth-largest employer in Pima County and the third-largest installation in Air Combat Command. The 355th Wing is the host unit at the base and provides medical, logistical, and operational support to all associate units. The associate units are represented by almost all major air commands, the Air Force Reserve and the Air National Guard. The wing's missions are to train A-10 and OA-10 pilots and to provide close support and forward air control to ground forces worldwide.

Fort Huachuca

Fort Huachuca, annexed by Sierra Vista in 1971, is located in southeast Arizona, about 15 miles north of the Mexico border. Fort Huachuca is under the command of the United States Army Installation Management Command and its major tenants are the Army Network Enterprise Technology Command (NETCOM)/9th Army Signal Command and the United States Army Intelligence Center. The fort is now the largest employer in Cochise County and in southeast Arizona.

"Paragon is the fastest growing private aerospace company in America, so being located in what is considered one of the "Mega Trend" cities of the 21st century is crucial. The combination of resources, culture and phenomenal weather make recruiting and retaining exceptional employees seem effortless."

~ Taber MacCallum
CEO, Paragon Space Development Corporation

