

# **Re-Enabling The Military Aircraft Parts Supply Chain**



**Vital PMA And DER Repair Services  
To Support Aging Aircraft Readiness**

# Tapping Advanced Technology To Assure The Continuing Availability of Critical Parts And Assemblies

It's a fact: The United States' fleet of military aircraft is aging - the average plane in the US Air force is over 27 years old. Yet, US armed forces have been tasked with maintaining combat readiness well beyond the intended useful life of these aircraft.

- How do you source replacement parts when the OEM is out of business?
- Are drawings available anywhere?
- What about enhancements to meet today's mission?
- And at what cost can parts be obtained?

## ThoughtFocus Has The Answers

With the speed, scale, technical know-how and on-demand capability to meet the growing and urgent need for replacement parts for aging military aircraft, ThoughtFocus applies the latest techniques and technologies to extend the life of serviceable parts and craft replacements that exceed the requirements of the originals.

Is your service organization's fleet supportable? Can you resurrect a 25, 30 or 40-year-old supply chain? Are you able to re-design key parts and components to keep up wrth today's mission requirements? ThoughtFocus can help. You can rely on our unmatched team of aerospace, manufacturing and product engineering experts to enable you to expand your supplier base and keep aircraft in ready condition, all within budget.

Leverage our broad range of engineering design and quality certification services to enhance your PMA and DER Repair capabilities, improve both performance and quality, and reduce your cost of operations.

## U.S. Armed Services Sample Roster of Aging Aircraft

Aircraft	Intro. Yr.
B-52 Stratofortress.....	1952
C-130 Hercules.....	1957
KC- 135 Stratotanker.....	1957
U-2.....	1957
P-3 Orion.....	1962
CH-47 Chinook.....	1962
C-5 Galaxy.....	1970
F-15 Eagle.....	1976
A-10C Thunderbolt.....	1977
MH-60 Black Hawk.....	1979
F/A-18 Hornet .....	1983
B-1B Lancer.....	1986
AH-64 Apache .....	1986
AH- 1W Super Cobra.....	1986



## Unrivaled Industry PMA And DER Expertise

**In cooperation with Level 3 Inspection, ThoughtFocus offers a globally integrated, advanced technology laboratory and development service boasting the latest advances in PMA and DER software, hardware, and testing.**

Our teams work alongside yours to design, build, inspect and certify superior parts, systems and solutions - at a fraction of the price and a faster time to service. Specializing in high-precision, high-reliability parts, we offer our military customers unsurpassed quality and budget-compliant performance. Better parts, better reliability, better results.

Our value engineering services result in superior designs and accelerated manufacture of high precision parts, and include:

- Computer Aided Inspection (CAI) from 30 scans, complete dimensional inspection (AS9102) from millions of data points
- Master practitioners and domain experts with advanced processes ISO 17025 accredited to +1-0.000078" (+/- 2 microns)
- **PMA reverse engineering to**
  - + Manufacture new replacement parts
  - + Cut iterations and scrap, saving months and millions
  - + Analyze competitor parts
  - + Create a digital 3D record of current products
- **DER scanning and other advanced technologies**
  - + CMM scanners, structured light digitizers, industrial CT scanning
  - + Inspect and document part tolerances
  - + Validate remaining utility and reliability of parts
- + **Extend the useful life of parts and reduce** replacement costs

## Core PMA/DER Repair Services Include

- Reducing the entire PMA approval process
- Custom designing supplier evaluation programs
- Streamlining and enhancing the supply chain through lean logistics
- Fine tuning airline MRO prioritization
- Overseeing new PMA development
- Applying advanced technologies to the DER repair function
- Extending the reliable life of parts
- Providing 24/7 on-site support
- Meeting your near-to long-term business initiatives

ThoughtFocus works with leading companies and organizations to optimize manufacturing, inspection and testing; improve supply chain processes and enhance the quality and useful life of parts, components and assemblies.

Our technical abilities in precision parts design and manufacturing are second to none, and our emphasis on cost-conscious solutions assures budget compliance. From design, certification, and manufacturing to testing, modification, and final disposal, our teams deliver with speed, scalability, and agility—helping customers maintain aircraft readiness.



**Repeatable quality Faster turnaround Augmented supply chain Referenceable clients.**

## Experience

Supporting commercial and military aviation and aerospace with advanced engineering design, manufacturing and compliance testing of new and upgraded parts. For product line expansion, new market initiatives, supply chain reinforcement and better, more cost-effective business process management.

### Business partner

- A valued business partner to commercial aviation businesses and military organizations around the globe
- An integral part of our clients' solutions delivery team, we form strong relationships with their management, manufacturers, and suppliers; ensuring complete transparency and tight alignment between teams and executive priorities

### Product delivery

- We offer a global footprint with domestic and offshore capabilities and facilities for industrial engineering, software development, and hardware design and manufacturing. Customers leverage these capabilities to extend their product and service lines, optimize costs, tap additional expert resources and adapt to a fluid global industry
- We offer customers the flexibility to scale operations to meet mission-critical requirements, while enhancing and sustaining existing product lines

### Transformation

- ThoughtFocus knows aviation and aerospace manufacturing, design, testing and IT from OEMs to aftermarket service providers, continually advancing our experience and industry-leading methods, investing in personnel and tools, and creating innovative solutions to supply chain challenges
- Our expertise in re-engineering processes and implementing strategic enterprise solutions has helped our business partners optimize logistics cycles, establish manufacturing and supply chain networks, overhaul existing systems and approaches, and achieve significant cost savings

### Knowledge Process Operations

- Based on a deep understanding of aircraft, regulatory processes, and procedural requirements, ThoughtFocus provides people, processes and systems that change how business and organizations operate up and down the supply chain

ThoughtFocus helps forward-looking companies and organizations in the financial services, manufacturing, and higher education/public services sectors innovate and achieve a better future faster. ThoughtFocus' innovative and cutting-edge technology solutions enable its customers to deploy new capabilities faster, deliver better user experiences, and drive operating efficiencies. We do this through executional excellence and mitigating the risk of change. With headquarters in the U.S., the Company has more than 2,100 employees in locations spread across five countries.

For more information, please visit the company website [www.thoughtfocus.com](http://www.thoughtfocus.com).

