



**PARTS SPECIALISTS FOR ROTARY WING AIRCRAFT**







The Blade Cuff Assembly provides the attachment point for the main rotor blades and is subject to multiple oscillating loads.

## Parts Specialists for Rotary Wing Aircraft

Founded by Herb Harrington, for over five decades Rotair Aerospace has been an industry leader and expert in the manufacturing of spare parts and flight-safety assemblies related to mechanical, hydraulic, and avionic systems.

### Our capabilities include:

#### Engineering, Assembly & Flight Critical Expertise

Manufacturer of critical assemblies and components that involve frozen planning, extensive processing, and handling of critical characteristics.

#### Hydraulic & Environmental Testing

Test facilities for a variety of components including landing gear, dampeners, servos, hydraulic systems, and more.

#### Avionics Department

Manufacture and overhaul a variety of parts including microprocessor-based components, flight control systems, control panels, relays, and more.

#### Quality Assurance

Rotair conforms to AS9100 & ISO 9001. We meet all the requirements for a FAA Production Type Certificate holder as well as Army QE-STD-1, -2 and Navy NAVAIRINST 4200.56 for Critical Safety Items.

#### Paint

Fully equipped paint facility for the application of a wide variety of protective finishes with strict adherence to commercial and military standards.



Critical Processes and Flight Safety Planning are paramount for gears like this Spiral Bevel Gear.



Drive Shaft Support



Walking Beam







A highly-skilled technician inspects and tests a Stabilator Amplifier component in our state-of-the-art Avionics testing lab.

## We know Avionics

Rotair manufactures highly complex and critical avionic assemblies such as the UH-60 Stabilator Amplifier with over 600 components. We manufacture and overhaul a variety of components including microprocessor-based components, flight control electronics, switch panels, control panels, relays, and much more.

## Extensive Hydraulic Capability

Rotair has a Class 100,000 hydraulic test facility complete with numerous sophisticated hydraulic fixtures capable of full acceptance testing of a wide range of aircraft hydraulics including landing gear, dampeners, servos, control systems, and much more. This facility meets the standards of FED-STD-209 and ISO 14644-1, -2.

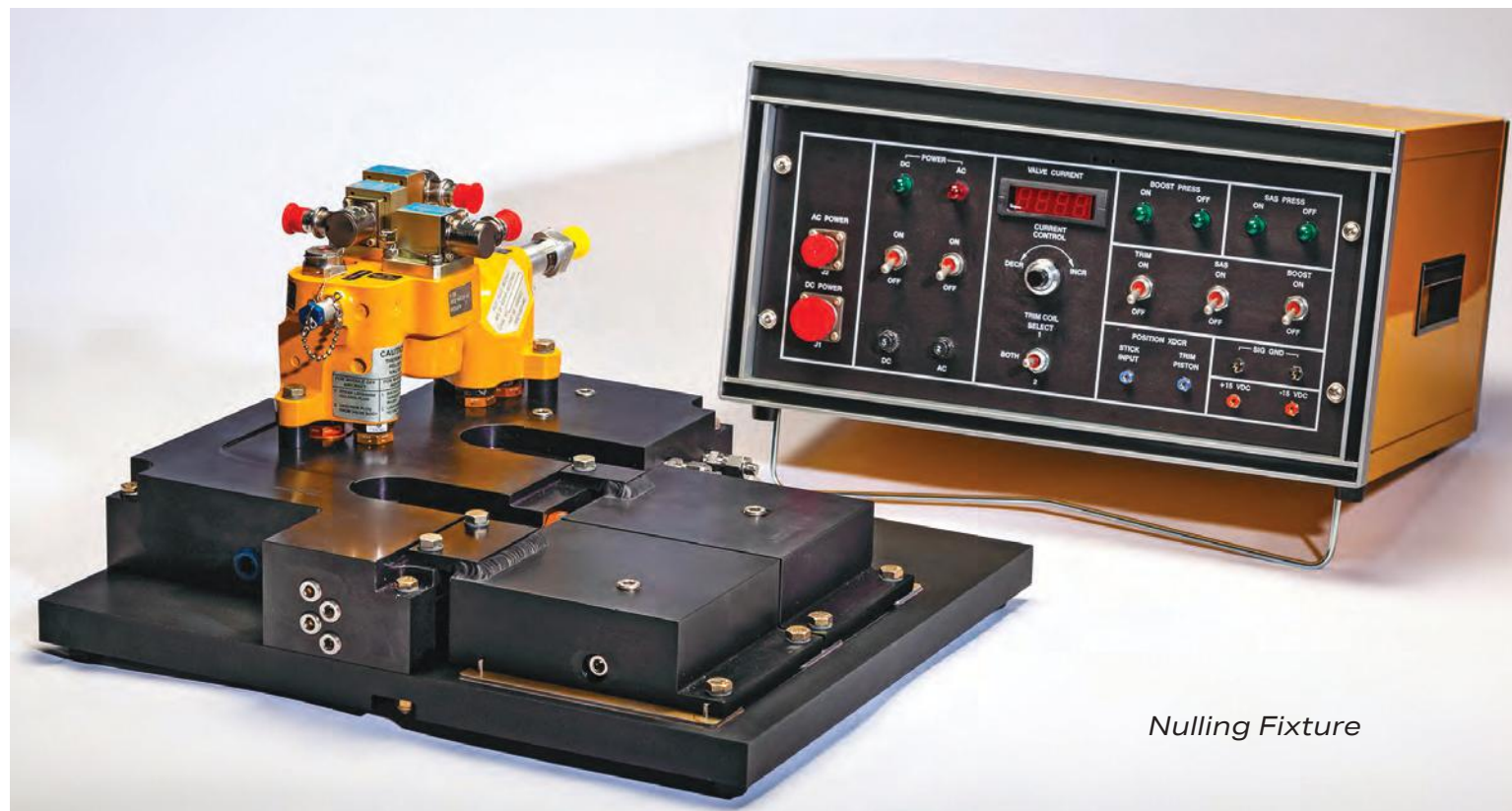


*Damper Assembly*

A Rotor Damper absorbs the stress generated by rotor blades in full flight.



*Landing Gear*



*Nulling Fixture*

Hydraulic systems control the Swashplate and Landing Gear Mechanisms. Rotair has various test cells that simulate these systems on a helicopter, including a Force Velocity Test Chamber that emulates the dynamic loads experienced during flight.





# Held to the highest standards

## Rotair Aerospace holds over 3,500 PMAs

Our fundamental expertise is in delivering FAA – Parts Manufacturing Approval (PMA) replacement components for rotary wing aircraft, such as the Sikorsky S-61 and UH-60 Blackhawk. The FAA Design Approval Standards and policies are strictly followed during our PMA process. These products meet or exceed OEM design specifications while complying with regulatory body requirements. Our engineers collaborate with customers to guarantee the final product satisfies all requirements, including form, fit, function, and flight safety.

As an **FAA Repair Station**, Rotair has the capability to overhaul and repair all makes and models of Sikorsky and Bell commercial helicopter components under *FAA Certificate # OHBR591K*.

## Sophisticated Test Equipment

Our production department has a variety of sophisticated computer-controlled test equipment including vibration, environmental, avionic, hydraulic and pneudraulic test systems.

**Crafting a precision machined Bifilar Assembly.**



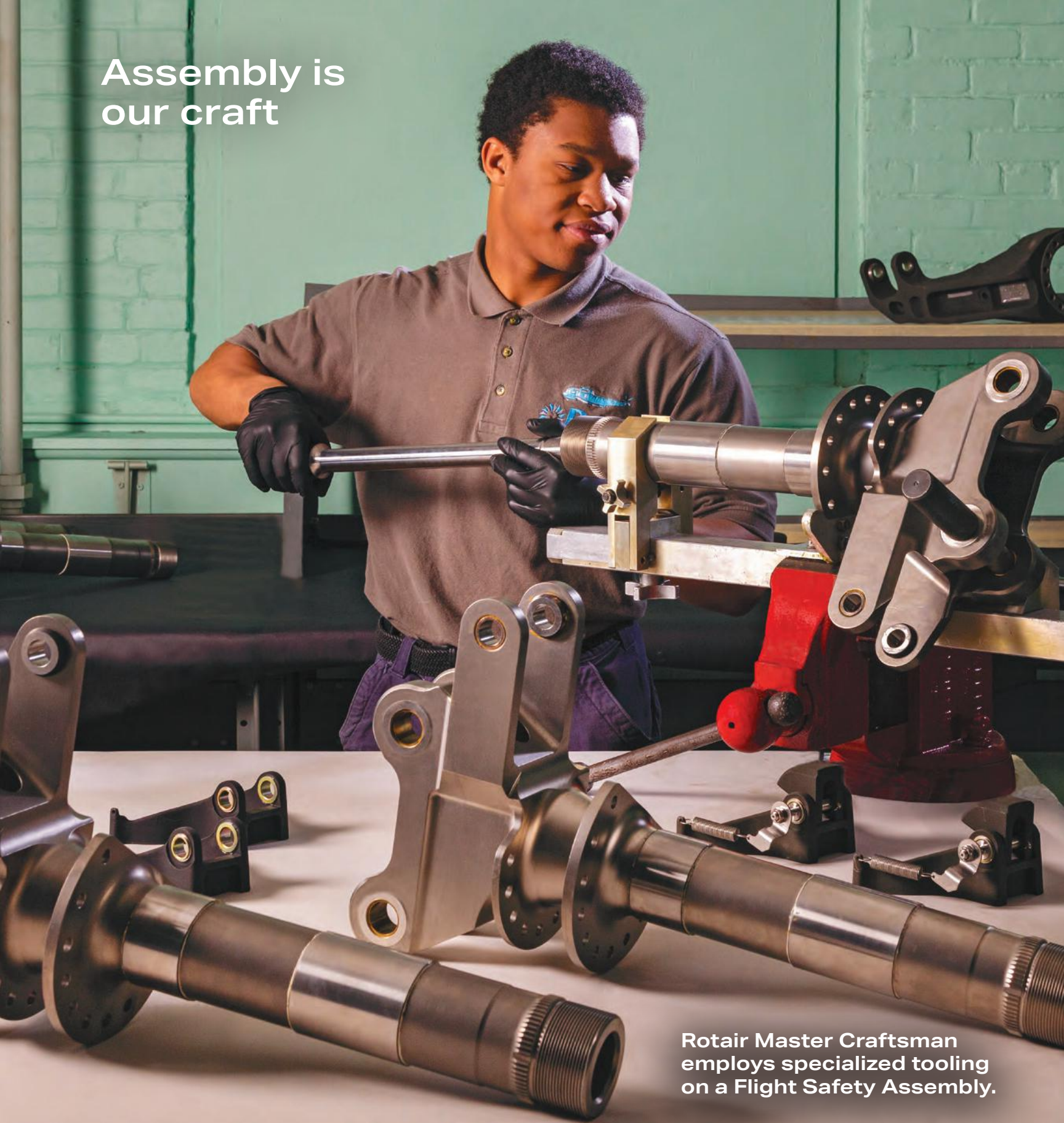


Quality is our foundation



Detailed inspection of a Swashplate Assembly.

Assembly is our craft



Rotair Master Craftsman employs specialized tooling on a Flight Safety Assembly.

Rotair has invested millions of dollars in inspection and production testing equipment.

The Rotair Aerospace Quality Management System (AQMS) meets the highest standards of compliance in the aerospace industry. Our AQMS is registered with the International Organization for Standards under current AS9100 & ISO 9001 certifications. The system also conforms to U.S. Federal Aviation Administration (FAA) Part 21 requirements for Parts Manufacturer Approval (PMA). Rotair utilizes specialized equipment which includes a complete selection of hardness testers, optical comparators, coordinate-measuring machines, and a complete array of gauges and measuring instruments.



Retaining Rod

Rotair stocks over 50,000 line items to support rotorcraft operators. We have developed advanced inventory forecasting procedures that keep quantities of rotables on hand at all times.

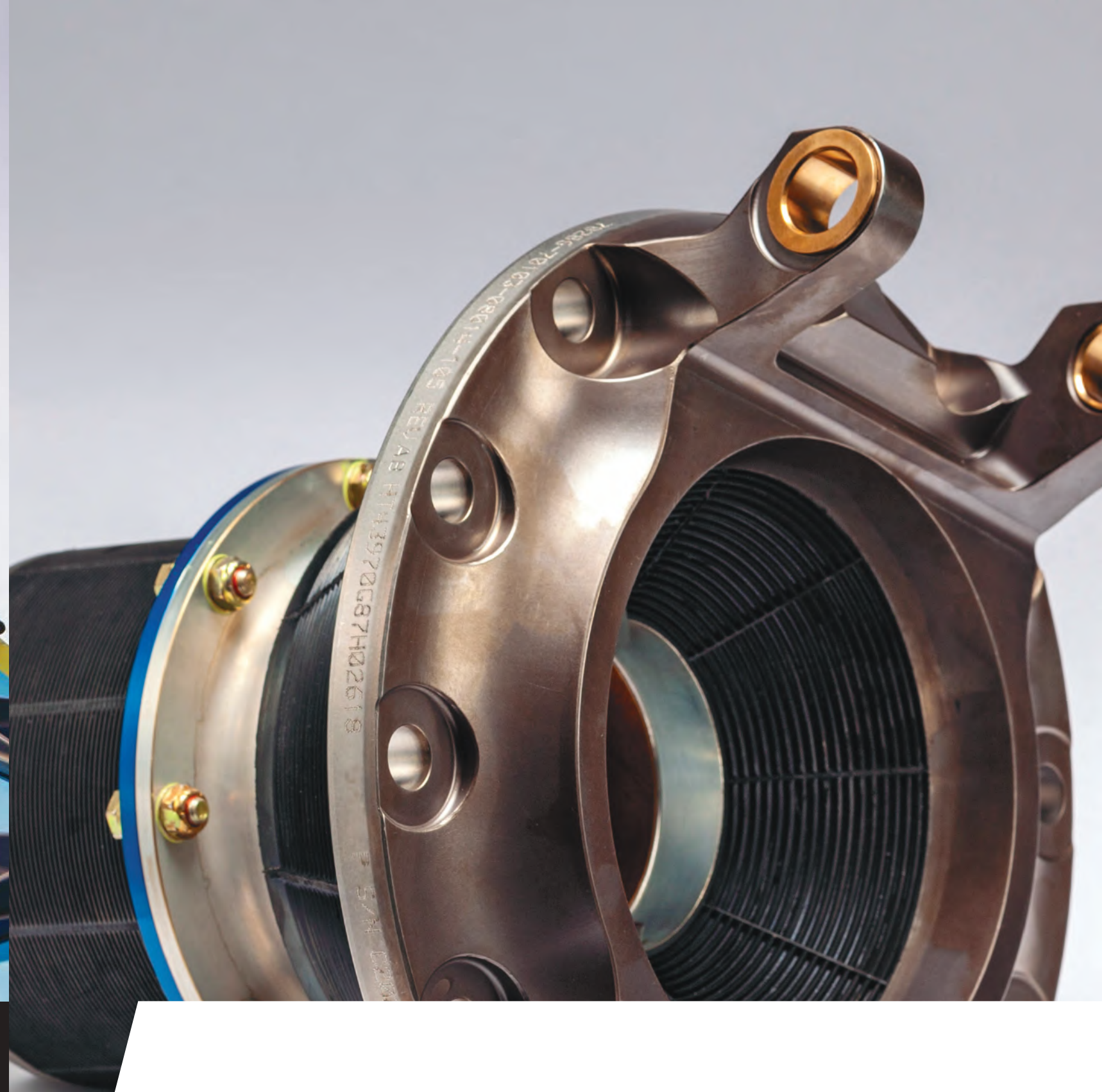




Rotair has the capability of applying paints and other organic finishes to the most exacting aerospace standards, such as MIL-PRF-23377 and MIL-DTL-53039.



*Tungsten Weight*  
One of the hardest and most difficult to machine metals on earth.



Please call 203-576-6545  
or visit us on the web at [rotair.com](http://rotair.com)  
to learn how our highly skilled team  
can provide you with the safest and most  
reliable parts and services anywhere.





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FRONT COVER: UH-60 DoD photo by Gertrud Zach S-61 photo by Marek Wozniak BACK COVER: CH-53 US Navy photo by Photographer's Mate 3rd Class Kristopher Wilson