You can rely on us to keep you flying.
our FOCUS

QUALITY, SAFETY AND SERVICE

With operations across the Asia Pacific and North America, we provide timely and efficient support to customers worldwide. Our focus on quality, technical excellence and customer service has enabled us to form strong partnerships with customers and OEMs.

To ensure quality, safety and your peace of mind, we maintain a broad suite of regulatory approvals and long-term partnerships with multiple OEMs.

To keep you flying, we are committed to 24/7 response times, efficient parts supply and diligent after-sales service.

Defence and Commercial aerospace operators expect the highest standards of quality, safety and service. We aim to surpass these expectations every time we connect.

“I have been dealing with companies similar to TAE Aerospace for a long time. Never have I come across one that is as easy to deal with, and knows what they are doing, as much as the team at TAE Aerospace. I give them 10 out of 10 for service and understanding our needs.”

Dave Porter, Chief Engineer, Seair
In the year 2000 we commenced operation as a Defence contractor, after winning a major F-111 aircraft maintenance contract for the Royal Australian Air Force (RAAF).

Successful execution of the first F-111 contract led to subsequent work on the F404/F414 engines of the Classic Hornet and Super Hornet. We have worked in partnership with GE Aviation on these engines since 2008.

In 2008–2009, we expanded into the commercial aviation industry with the purchase of Masling Industries, a Honeywell Authorised Warranty and Repair Station (AWARS) and Tenix Aviation, a Honeywell Authorised Service Centre for TPE331 engines. The following year, we acquired NAS Services, part of Cobham, further expanding our engine components and APU capabilities.

Along with our large aircraft wheels, tyres and brakes facility in Australia, we offer a broad range of engine and component services to the commercial aviation market.

In 2014, we moved further into the Defence space, crossing over into land platforms to service the AGT1500 engines of the Australian Army’s Abrams tanks. Then, in 2017, we were selected as Asia-Pacific’s MRO&U provider for the Pratt & Whitney F135 engine of the F-35 Joint Strike Fighter. Today, we also manufacture parts for the world’s F-35 fleet. Global demand for our advanced manufacturing capability continues to grow rapidly.

In 2018, we entered the Fire Protection and Rescue market for Defence and Commercial customers in Asia Pacific, acquiring the assets of Kidde Aerospace Australia from United Technologies Aerospace Systems. We also established a customer support office in Butterworth, Malaysia.

Then, in 2019, we expanded into the United States. We established a repair centre for AGT1500 engine fuel controls in Texas, and we also acquired three companies that specialise in TPE331 engines and components: Propulsion Controls Company in Kansas City, Missouri; Copper State Turbine Engine Company in Scottsdale, Arizona; and Ag Air Turbines in Midvale, Idaho. These acquisitions saw us become the world’s largest Honeywell-authorised TPE331 services provider, while also increasing our global footprint to be more accessible to our customers worldwide.

“We rate TAE Aerospace very highly for technical excellence.”

Paul Bayly, F404/F414 Program Manager, GE Aviation
our LOCATIONS
From 6 employees to more than 350, our sustained growth is the result of both organic expansion and targeted acquisition.
Our customers include Defence Forces, airlines, commuters, general aviation and agricultural operators around the world.

We are proud to have earned a reputation for quality and technical excellence among the biggest names in the industry.

Commercial airlines, global aerospace companies, Primes and military forces, all choose to send their work to us. We are proud to partner with companies like General Electric, Pratt & Whitney, Honeywell, Harris Corporation and Boeing, as well as the Royal Australian Air Force, the Australian Army, the Royal Malaysian Air Force, the Royal Thai Navy, and the United States Air Force, Navy and National Guard.

Defence and Commercial operators worldwide rely on us for a wide range of services including gas turbine engine and component MRO, specialised engineering and logistics, engine test facilities, advanced aerospace manufacturing, aircraft wheel and brake MRO, and fire protection and rescue.

Customers tell us they value our 24/7 AOG support, technical expertise and efficient parts supply.

“TAE Aerospace has set the standard for customer service, efficiency of parts supply and AOG support, constantly going above and beyond to surpass our expectations. Their knowledge, experience and expertise is second-to-none and they deliver a result on every occasion.”

Ryan Roche, General Manager Fixed-Wing Aircraft (Aus), Experience Co (formerly Skydive the Beach)
Our regulatory approvals support the quality and safety of the product we deliver.

- ISO9001:2015
- AS9100D for Aerospace Manufacturing and Aerospace Engineering
- DASR Part 145 and Part 21
- CASA Part 145
- FAA Part 145
- EASA Part 145
- Approved Maintenance Organisation approvals from CAA (Sri Lanka), DGCA (Indonesia), CAAN (Nepal) and CAA (Taiwan) CAAP (Philippines), DGAC (Mexico), ANAC (Argentina)
DEFENCE
Defence customers worldwide rely on us for:

- Aerospace engine MRO
- Military wheel and brake MRO
- Aerospace engine test cell design and upgrade
- Specialised engineering
- Advanced manufacturing
- Fire protection and rescue systems

The quality of our work and our commitment to excellent service has resulted in many awards over the past decade, including the prestigious Defence Contractor of the Year, and the Essington Lewis Award for the Land 907-1 Tank Replacement Project with the Australian Army.

“We are excited to partner with TAE Aerospace on the F135 engine program. We have always been very impressed by their engineering and maintenance capabilities.”

Kevin Kirkpatrick, Vice President Military Engine Sustainment Operations, Pratt & Whitney
As Australia’s first provider of military gas-turbine engine performance-based Total Logistics Support (TLS), we deliver turn-key solutions for Defence operators.
We understand the military operating environment. Our team has the experience and expertise to solve complex challenges.

Militaries including The Royal Australian Air Force, the Australian Army, the Royal Malaysian Air Force and the Royal Thai Navy all trust the quality of our aerospace engine services.

We offer a complete repair, overhaul and test capability for your military gas-turbine engines including:

- GE F404/F414 engines of the RAAF’s Classic Hornet, Super Hornet and Growler
- Honeywell AGT1500 engines of the Australian Army’s Abrams Main Battle Tank
- Pratt & Whitney F135 engines of the F-35 Joint Strike Fighter

Our turn-key engine solutions comprise:

- engine module heavy maintenance, repair and overhaul services (DASR Part 145)
- intermediate maintenance and computer controlled engine testing at the customer’s base
- engine fleet management and engine life optimisation
- design engineering (DASR Part 21.J)
- training
- material recovery and repair
- warehousing and logistics services
- program management for the AGT1500

Through a combination of strong OEM alignment, world-class engineering, asset management, and quality engine build philosophies, we have been able to significantly improve aircraft safety by reducing the Non Recoverable In Flight Shut Down Rate (NRIFSD) and Mission Aborts (MA) for engines we service.

By using data to drive continuous improvement, our engine solutions have led to higher reliability outcomes, faster repair turn times and a reduction in our customer’s fleet sustainment costs.
We have delivered turn-key AGT1500 engine solutions for the Abrams Main Battle Tank since 2014.
ENGINE COMPONENT REPAIR
Almost any part you need, we can repair – either in-house or using qualified repair vendors.

Our capability includes:
- bearing refurbishment
- approved cleaning processes
- Non-Destructive Testing (NDT) and inspection
- automated shot-peening
- heat treatment
- aerospace welding
- precision machining and grinding
- vacuum brazing
- painting
- support equipment design and manufacture
MILITARY WHEEL AND BRAKE MRO

Wheels and brakes are of critical importance to Defence operations. Our many years of experience allow us to maintain your wheels and brakes to the highest quality standards.

TAE Aerospace’s DASR Part 145 approved repair and overhaul capability for military aircraft wheels and brakes maintenance includes:
• KC30A Multi-role Tanker Transport
• C-27J Spartan Aircraft
• C-130J Hercules

Our modern workshop in Brisbane, Australia, has been purpose-designed for aircraft wheel and brake maintenance, ensuring full compliance to meet your expectations and those of the OEM. This includes full end-to-end process capability in-house for:
• automatic cleaning
• brake hydraulic testing
• eddy current, fluorescent penetrant and ultrasonic NDT inspections
• repainting
• anti-corrosion coating replacement
AEROSPACE ENGINE TEST CELLS

All aspects of your military turbine engine test cell design and data acquisition needs can be met by our experienced team. Whether you want to adapt and upgrade your existing facility for new or multi-OEM engine types, or develop a new turn-key facility, we can deliver the right solution and provide ongoing in-service support.

The best test cell design starts with understanding your needs.

As Australasia’s leading gas turbine MRO, we know the importance of a reliable test cell. You can rely on our team’s experience in designing and installing multiple test cells, globally, including Asia-Pacific’s only dual redundant F404/F414 afterburning gas turbine engine test cell.

This experience gives us a strong appreciation of the issues that matter to Defence operators. We will work with you to resolve problems with efficient designs, collaborative installations and upgrades and prepare precise documentation on how to operate and maintain your new facility.

With our industry partners, we provide our Defence customers with quality test facilities and data acquisition systems that support all types of military gas turbine engine testing, including turbofan and turboshaft engines.
We are industry leaders in designing, upgrading, manufacturing and integrating turbine engine test cell solutions.
You can rely on the technical expertise of our large and experienced propulsion engineering group.
SPECIALISED ENGINEERING

Defence operators looking for remarkable engineering solutions can rely on the technical skills of our team. We consistently receive high assessments for technical and engineering competence in Australian Defence Company Scorecard results and we understand the needs of Defence operators.

PERFORMANCE & RELIABILITY PROGRAMS

Fundamental to supporting any in-service engine, is the ability to understand how it behaves using real data. We use specialists to collect in-service engine data, then analyse and compare it against our performance models. We combine images and measurements collected during routine inspection with the wide range of part-usage and condition data we collect and feed the information into our engine fleet reliability program.

Any potential engine reliability issues are flagged to you in advance, so we can take corrective action before a failure occurs. The result is reduced maintenance downtime and associated costs for our customer.

DESIGN & SAFETY

The data we collect allows us to see potential issues in their infancy. This allows us to develop solutions that provide you with improved safety, availability and reliability of your engines, while reducing the total life cycle cost. Using our many years of engine experience and knowledge, coupled with Computer Aided Design and Finite Element Analysis, we can develop a range of design solutions to component inspection limits, maintenance policy, or repairs to damaged or worn parts.

All designs are validated against the same safety standards to which the engine was certified, ensuring they remain airworthy or roadworthy. Our Design and Safety team also use advanced statistical techniques and in-service data to provide part failure forecasts. These forecasts, in combination with the application of design solutions, let us quantify and mitigate any issues that might arise with an engine.

ENGINE & EQUIPMENT ASSET MANAGEMENT

Our skilled team manages engine components and test equipment. They ensure the configuration of all components and support equipment is accurately controlled, and maintenance policies appropriately applied. Engines are built by matching a variety of sub-assemblies in order to optimise their time in operation.
ADVANCED MANUFACTURING

ALUMINIUM VACUUM BRAZING

We have developed a niche aerospace manufacturing capability that supports the manufacture of liquid-cooled components and enclosures for programs such as the global F-35 program.

The Aluminium Vacuum Brazing (AVB) technique is our core manufacturing process, and we are one of only several companies in the world that has this capability. Beyond aviation, AVB can be used in many space-based and terrestrial applications that require increased cooling in restricted spaces.

AVB is a manufacturing process for fusing aluminium components together, which results in:

- high strength products that can operate at higher pressures and deliver leak-tight joints enabling integral liquid flow and electromagnetic interference reduction
- improved heat transfer and product stiffness as micro channel fin stock can be included during the braze
- reduced weight when compared to traditionally manufactured components
- lower component costs through reduced part counts and assembly labour
- excellent electrical and thermal conductivity compared with an adhesive bonded or mechanically attached assembly
- improved product reliability
- greater design choice, especially for high performance products

We currently provide a number of Defence primes with:

- cooled electronic/avionics enclosures including liquid-cooled chassis
- cold plates
- heat exchangers

From raw materials to fully completed components, our customers benefit from a complete, end-to-end solution. This includes not only the brazing process but also the associated steps such as precision machining, heat treatment, conversion coating, painting, component assembly and any required proof pressure testing and/or flow testing. The entire process can be completed in-house to customer-specific requirements.
“I am impressed by the excellent quality product and commitment to the program that TAE Aerospace delivers.”

Josh Nichols, Program Manager, F-35 Supply Chain, Harris Corporation
AEROSPACE MANUFACTURING

Other specialist aerospace manufacturing capabilities we offer under our AS9100 Rev D approval include:

- heat treatment including titanium heat treatment
- component painting
- Non-Destructive Testing (NDT)
- extensive aerospace welding capability including high strength super alloys and titanium components

Dedicated project management and engineering teams support our advanced manufacturing capability to ensure the product you receive meets the highest quality standards.

In addition to manufacturing, we also have the capability to assist in designing and prototyping components.
DEFENCE FIRE PROTECTION AND RESCUE

We are the Collins Aerospace authorised representative for Kidde Aerospace fire protection equipment and a range of other Collins Aerospace OEM products in Australia, New Zealand and much of Asia. You can access sales, product support, and quality maintenance, repair and overhaul (MRO) services for your Kidde fire protection equipment and suppression systems.

Our team supports a range of Defence aerospace platforms and military ground vehicles including:

- C-130J Hercules
- C-17A Globemaster
- C-27J Spartan
- KC-30A MRTT
- F/A-18F Super Hornet
- EA-18G Growler
- E-7A Wedgetail
- P-8A Poseidon
- M1 Abrams
- Bushmaster PMV
- HAWKEI PMV
- M88A2 Hercules
- ASLAV
- NZLAV
- Boxer CRV

As the Regional Service Centre for Winslow life rafts, we provide Defence customers with MRO, sales and product support for aviation and maritime rafts.

We also provide support for Goodrich branded rescue hoists and winches.
COMMERCIAL
Aviation customers worldwide rely on us for:

- Turboprop engine MRO, test cells and technical training
- Airline wheel and brake MRO
- Fuel controls and components
- Electromechanical component MRO
- Parts supply and sales
- Fire protection and rescue systems

Your need for fast turn times and responsive technical support 24/7 is our priority.

“Thrush Aircraft and Australian Ag operators hold TAE Aerospace in high regard for the high quality and timely work they perform.”

Eric Rojek, Vice President, Thrush Aircraft Inc
You can be assured of the best mix of quality and turn times in the industry when you send your engine to us. As a world-leading engine maintainer, we have the knowledge, tooling, resources, parts inventory, spare engine rental pool, rotatable pools and asset base to turn your engine around quickly while maintaining high quality standards.

You can access complete repair, overhaul and test capability for your turboprop engines:
- Honeywell TPE331
- Pratt & Whitney PT6A
- GE H80/M601

We are a CASA, FAA and EASA Part 145 approved repair station, along with multiple other country approvals. We hold key OEM approvals as a Honeywell Authorised Service Centre for the TPE331 engine, and we are a GE Aviation Designated Repair Centre for the H80/M601 engine.

Our range of engine services and support includes:
- engine repair and overhaul for TPE331 and PT6A from our facilities in Australia and North America
- H80/M601 engine repair and overhaul
- specialised ag engine expertise
- worldwide on-wing support
- CAM inspections (TPE331 only)
- hot section inspections
- gearbox inspections
- AGB repairs
- power section repairs
- boroscope inspections
- exhaust duct replacement
- engine performance runs in an OEM-correlated dynamometer test cell
- service bulletin and airworthiness directive compliance
- 24 hour customer help line
- part sales for PT6A and TPE331 engines
- technical training for TPE331 engine operators

To complement our engine maintenance activity, we have a large engine rental pool of TPE331 and PT6A engines available to support your operations worldwide.
**AUXILIARY POWER UNITS (APUs)**

We are Asia Pacific’s only OEM Authorised Repair Facility (ARF) for the Pratt & Whitney (formerly Hamilton Sundstrand) APS500 APUs fitted to Dash 8, as well as the APS1000 fitted to the Fokker 50 and BAE146 aircraft.

“Air 1st Aviation and its affiliated companies operate nine (9) Mitsubishi MU2 twin engine turbo props for the United States Air Force contract. We have held a 100% mission success rate for the entire 21-year contract period. We believe that this milestone has been achieved and maintained with the unwavering support and dedication of the management and staff in Scottsdale, Arizona. I am excited to continue working with them, now as part of TAE Aerospace, in support of our government contract. Without hesitation, I would highly recommend their professionalism and services to anyone.”

Michael S. Laver, President, Air 1st Aviation Companies, Inc.; Air 1st Inc.; Carolina Turbine Support, Inc.
FUEL CONTROLS AND COMPONENTS

Operating in Adelaide, Australia and Kansas City, Missouri, we offer a wide range of MRO services for fuel controls and governors. Our reputation among customers and global partners is for world-leading turn times, quality and customer service.

Our Licensed Repair Services Facility for TPE331 fuel controls is the only one in the world with approvals from both Honeywell and Woodward.

HONEYWELL AUTHORISED WARRANTY & REPAIR STATION (AWARS)

Fuel Control Units and Power Turbine Governors are the mainstay of the fuel system components we maintain. We support hundreds of fixed and rotary-wing customers around the world with:

- Honeywell LTS101 components from the 600 HP to 850HP
- Pratt & Whitney PT6A series from -11 to -62 and all the T3 and T6 series
- Torque controls and limiters
- Rolls Royce M250 series I to IV, B15 to C30

WOODWARD CERTIFIED COMPONENTS

We are the only facility in the world authorised to carry out repairs and overhauls on the Honeywell TPE331 Main Fuel Control. We are also a Licensed Repair Services Facility for fuel controls for the Pratt and Whitney PT6A-52 to 60 and PT6A-64 to 67 engine series.

In addition, we support overspeed, combined and propeller governors as well as hydraulic governors for both the TPE331 and PT6A engine series.

“The TAE Aerospace team understand what we need and how we work, and they help us solve problems to keep our customers happy.”

Campbell Briggs, Owner, Statewide Aviation
We are the only company in the world with approvals from both Honeywell and Woodward for TPE331 fuel controls.
Our leading engine component maintenance facilities for fixed and rotary wing aircraft are based in Asia-Pacific and the USA.
ENGINE COMPONENT MAINTENANCE
Our leading engine component maintenance and repair facilities operate from Adelaide, Australia, and Scottsdale, Arizona in the United States. As a Honeywell Authorised Warranty and Repair Station (AWARS) and Woodward Licensed Repair Services Facility (LRSF), with multiple Part 145 approvals, our engine component repair facilities are unique in the world. Our broad capability includes:

- turboprop and turboshaft fuel control units approved for Honeywell (TPE331 and LTS101), Pratt & Whitney Canada (PT6A, PT6T) and Rolls-Royce (M250)
- TPE331 Line Replaceable Units (LRUs) approved under Honeywell APIL41
- propeller pitch controls
- fuel pumps and shut off valves
- propeller and overspeed governors
- power turbine governors
- constant speed units and overspeed governors
- torque sensors, limiters and controllers
- flow dividers and regulators
- EEC and SRL computers

We can also exchange:

- fuel controls
- flow divider valves
- fuel nozzles
- fuel pumps
- start flow controls

PARTS REPAIR
Parts repair and refurbishment expertise saves you money. Our Aerospace Machining Centre enables us to ‘make the old like new’. Competitors also use our broad range of machining capabilities to satisfy their own customers.

Our machine shop capabilities include Aerospace machining and repairs for TPE331 authorised under Honeywell APIL41, including:

- DER approved gearbox, diaphragm and housing repairs and modifications
- IRM Overhaul Manual inspections and repairs
- Balancing of wheels and impellers
- Non-destructive testing

FUEL NOZZLES
We are a CASA, FAA and EASA approved turbine fuel nozzle maintenance facility with capability for the Honeywell TPE331, Pratt & Whitney Canada PT6A and PT6T, as well as APU fuel nozzles.
AIRLINE WHEEL AND BRAKE MRO

Quality wheel and brake MRO is essential to commercial aircraft operations. You can access fixed-priced solutions for specific wheel and brake types, ranging from a simple tyre change to full component overhaul. For larger fleet holders, we also offer cost-per-aircraft-landing solutions.

Our CASA Part 145 approved repair and overhaul capability for commercial aircraft wheel and brake maintenance includes:

**WIDE BODY**
- A330
- A380

**NARROW BODY & LIGHT**
- Dash 8 1/2/3/400
- B737
- ATR-72

Our modern workshop in Brisbane, Australia has been purpose-designed for aircraft wheels and brakes maintenance, ensuring full compliance with your expectations and those of the OEM. This includes full end-to-end process capability in-house for:

- automatic cleaning
- brake hydraulic testing
- eddy current, fluorescent penetrant and ultrasonic NDT inspections
- repainting
- anti-corrosion coating replacement
We operate an OEM-correlated, multi-engine dynamometer equipped test cell with a load rating of up to 2,500 SHP, ensuring the reliable performance of each engine we service.
Our maintenance, repair and overhaul services for electromechanical components include repairs to card and board level.

We are an FAA-certified repair station for Single Red Line (SRL) and Electronic Engine Computers (EEC) for a range of aircraft.

ELECTRICAL
• alternators and generators
• electric motors, actuators and pumps
• electric power control and distribution
• emergency power supplies
• galley equipment
• generator control units – GCU
• lead acid batteries
• lighting systems
• magnetos
• nicad batteries
• power supplies and inverters
• starter generators

STARTER GENERATORS
Aircraft operators worldwide rely on us for reliable maintenance, repair and overhaul of their starter generators. Our customers benefit from lower cost per overhaul and more flight time between scheduled services, due to our renowned quality and experience.

Our experienced team supports starter generators in the 200/250/300 AMP range for engines including TPE331, PT6A, PW100, CT7, JT15D, and DHC8, with new capabilities being added regularly.
COMMERCIAL FIRE PROTECTION AND RESCUE

Our experienced fire protection and rescue team supports a wide range of commercial aviation customers, including major airlines.

We are the Collins Aerospace authorised representative for Kidde Aerospace fire protection equipment and a range of other Collins Aerospace OEM products in Australia, New Zealand and much of Asia. We provide sales, product support and maintenance, repair and overhaul (MRO) services for Kidde fire protection equipment and suppression systems.

Our Kidde fire protection and suppression systems support the following aircraft types:

- A320
- A330
- B717
- B737
- B777
- B787
- Q400
- Saab 340
- B717
- B787

In addition to fire protection products for commercial aircraft, we are also the Regional Service Centre for Winslow life rafts, providing MRO, sales and product support for aviation and maritime rafts.

Winslow life rafts are fitted with Emergency Locator Transmitters (ELT) which automatically activate when the raft is in contact with water after opening.