Pratt & Whitney was founded in Hartford, Connecticut, in 1925 by Frederick Rentschler. Pratt & Whitney’s first aircraft engine was the 410-horsepower, air-cooled Wasp that delivered unprecedented performance and reliability for the time and transformed the aviation industry. Pratt & Whitney has led the change ever since.

Pratt & Whitney’s well-balanced portfolio includes engines for very light jets to engines for jumbo jets, auxiliary power units for commercial and military aircraft, engines for fifth-generation fighters and our PurePower® engine family for the next generation of commercial aircraft. It also includes part development and full-service maintenance, repair and overhaul support for Pratt & Whitney products and competitors’ products.

Pratt & Whitney. It’s in our power.™
Pratt & Whitney provides dependable power to hundreds of airlines and operators every day. Our fleet of commercial engines has logged more than 1 billion hours of flight powering the single-aisle and wide-body aircraft that fly both passengers and cargo around the world.

With a focus on fuel efficiency and reliability, our engines meet all current and projected environmental regulations for noise and emissions. We continue to invest in our current engines, developing new technologies to improve fuel efficiency, performance and environmental impact. Our PurePower® family of engines for the next generation of commercial aircraft is setting higher standards for fuel efficiency, environmental emissions, engine noise and operating costs.

Pratt & Whitney's worldwide aftermarket services network provides commercial engine customers with a broad range of maintenance, repair and overhaul offerings; customized maintenance management programs; and a complete range of line maintenance capabilities. These are available for all Pratt & Whitney products, as well as products offered by General Electric, Rolls-Royce and CFMI.
JT9D Engine

Pratt & Whitney’s JT9D engine opened a new era in commercial aviation: the high-bypass-ratio engine to power wide-body aircraft. As Pratt & Whitney’s first high-bypass-ratio turbofan, it introduced many advanced technologies in the areas of structures, aerodynamics and materials to maximize fuel efficiency and component durability. For JT9D-7R4 twinjet installations, the engines are approved for 180-minute ETOPS.

PW2000 Engine

Covering the mid-thrust range from 37,250 to 43,000 pounds, the PW2000 engine powers all models of the twin-engine Boeing 757, and it is the exclusive power as the F117 engine for the four-engine U.S. Air Force C-17 Globemaster III military transport. The PW2000 engine entered revenue service in 1984 as the first commercial engine equipped with FADEC (Full-Authority Digital Electronic Control) technology.

In 1994, a technologically upgraded PW2000 engine, the Reduced Temperature Configuration (RTC), was certified with a number of durability and reliability enhancements. The PW2000 engine is approved for 180-minute ETOPS (Extended-range Twin-engine Operations) and meets all current and proposed noise and emissions regulations.

JT8D-200 Engine

JT8D-200 engines are the exclusive power for MD-80 twinjets and re-engined 727 trijets, or Super 27s – a program offered by Pratt & Whitney and UTC Aerospace Systems. Since entering service in 1974, more than 2,900 engines have been produced in five models, covering a thrust range of 19,250 to 21,700 pounds. In addition, the -200 engines have built on the standard JT8D engine’s excellent reputation for high reliability and low maintenance costs. Improvement programs continue to keep the JT8D-200 fleet operating effectively for today’s airlines.
PW4000
94-inch Fan Engine

The 94-inch fan model is the first in the PW4000 high-thrust engine family. This engine series consists of nine models and spans the 52,000- to 62,000-pound-thrust range. Since its introduction in 1987, more than 2,000 engines have been produced for more than 75 operators worldwide. More than half of these customers use the engine to fly 180-minute ETOPS routes. PW4000 94-inch fan engines feature several advanced, service-proven technologies, such as single-crystal superalloy materials and high-temperature ceramic coatings. Options include a low-emissions TALON™ (Technology for Advanced Low NOx) combustor and a noise-reduction upgrade.

PW4000
100-inch Fan Engine

The first PW4000 growth model, certified at 64,000 to 68,000 pounds thrust, was designed specifically for the A330 twinjet. It entered service in 1994, already approved for early ETOPS. Some technological features are its Kevlar® aramid fiber containment case, Floatwall combustor with segmented linear panels and advanced FADEC system. For A330 aircraft, the PW4000 100-inch fan engine is the in-service experience leader with the lowest environmental emissions in its class.

Pratt & Whitney’s Advantage70™ engine can improve hot and high performance for the A330, as well as lower fuel consumption by one percent and reduce maintenance costs by 10 to 15 percent.
PW4000
112-inch Fan Engine
The PW4000 112-inch fan model was the launch engine for Boeing’s 777 twinjet. Certificated models in this engine series cover a thrust range from 74,000 to 90,000 pounds. All models were approved for 180-minute ETOPS prior to service launch, an industry first. Now, ETOPS approval has been increased to 207 minutes, demonstrating the high level of reliability operators expect from the 112-inch fan engine.

Wide-chord, hollow and shroudless fan blades have been incorporated in the PW4000 112-inch fan engine series. Other advanced technology features include lightweight Kevlar® aramid fiber fan blade containment, a low-emissions combustor and aggressive, high-work compressor aerodynamics.

PW6000 Engine
The PW6000 engine has a thrust range of 18,000 to 24,000 pounds. Targeted for new 100-passenger-sized aircraft, it features a number of new technologies enabling low operational and acquisition costs.

A prominent design feature is the overall reduction in compressor and turbine stages that contributes substantially to lower maintenance and ownership costs. The engine’s core, for example, features a six-stage high-pressure compressor driven by a single-stage high-pressure turbine. The engine’s maintainability is further enhanced with 15-minute removal and replacement of line replaceable units.

V2500® Engine
The V2500 engine is designed and manufactured by International Aero Engines (IAE), a global partnership of aerospace leaders including Pratt & Whitney, Japanese Aero Engine Corporation and MTU Aero Engines. The V2500 engine offers advantages in technical excellence and manufacturing experience, with a reputation of being the preferred engine choice for the A320 family.

V2500 engines offer the most advanced technologies in their 22,000- to 33,000-pound-thrust range and enhance operating and environmental performance. The IAE V2500Select® engine program offers significant improvements in fuel burn and maintenance costs.
GP7200 Engine

Engine Alliance LLC, a joint company of Pratt & Whitney and General Electric, produces the GP7200 turbofan engine, designed specifically for the Airbus A380. The GP7200 engine covers the 70,000- to 81,500-pound-thrust range and incorporates many proven technologies currently operating in Pratt & Whitney and GE commercial engines. This integration of technological advances and operating experience gives the GP7200 engine competitive benefits in fuel economy, reliability and environmental performance.

Pratt & Whitney
PurePower® Engines: Power People Depend On™

Pratt & Whitney's game-changing PurePower® engine leads the industry with innovative and flight-proven technology for the next generation of commercial aircraft. Initially referred to as the Geared Turbofan™ engine, Pratt & Whitney's PurePower PW1000G engine family delivers double-digit improvements in:

- Fuel burn
- Environmental emissions
- Engine noise
- Operating costs

In February 2009, Pratt & Whitney announced the successfully completed PurePower PW1000G demonstrator engine program that accumulated 406 hours of testing including 120 hours in flight. The PurePower engine has been selected to power five aircraft applications: the Bombardier CSeries aircraft, the Mitsubishi Regional Jet, the Airbus A320neo (new engine option), Russia’s Irkt MC-21 aircraft and Embraer’s E2 aircraft, the second generation of E-Jets.

In 2010, Pratt & Whitney began full engine testing on the PW1500G engine for the Bombardier CSeries. The PW1500G began certification testing in the fall of 2010, which included nine full engines that accumulated more than 2,500 hours of rigorous testing and validated performance, noise, emissions and the architecture’s robustness. In February 2013 the first PurePower Geared Turbofan engine was certified by Transport Canada. The PurePower engine is scheduled to enter service on the Bombardier CSeries aircraft in 2014.

In October 2012 Pratt & Whitney celebrated the completion of the PW1100G-JM first engine to test (FETT). With first flight completed in the second quarter of 2013 and ground testing complete, engine certification for the PW1100G-JM engine is planned for third quarter of 2014 with entry into service planned for the fourth quarter of 2015.

It’s Real. It’s Ready. It Works.
Pratt & Whitney has one mission – to help its customers succeed. With a global network of engine service facilities and a broad portfolio of service solutions, we partner with you to provide solutions that meet your individual business needs.

For 87 years, Pratt & Whitney has been a leader in the engine industry, amassing a wealth of experience unmatched in the business. Today, Pratt & Whitney blends its OEM (original equipment manufacturer) capability with its MRO (maintenance, repair and overhaul) flexibility; we listen to our customers and provide exactly what they want from both parts of the business.

With our comprehensive engine overhaul services, we help you operate smoothly and cost effectively. We overhaul engines made by Pratt & Whitney, International Aero Engines and CFMI. With 20 MRO locations worldwide, we provide solutions wherever you need us.

Pratt & Whitney also provides advanced, dependable repairs that increase part durability, extend time on-wing and lower your cost of ownership. We offer competitive turn times and innovative repairs on our own parts as well as parts for CFM56® and V2500® engines. Our Scrap Avoidance and Value Engineering (SAVE) program has resulted in hundreds of new repairs and saved our customers millions of dollars.

Our line maintenance teams get your engines back in service – fast. We perform borescope inspections and blade blending repairs on-wing at your site. EcoServices, LLC’s EcoPower® engine wash system cleans engines right on the tarmac using atomized water in a closed-loop, environmentally friendly system. A cleaner engine cuts fuel burn and extends parts life and time on-wing.

Pratt & Whitney will partner with you to manage your engines’ maintenance. On-wing or off, our fleet management programs will help you take care of engine maintenance cost and ensure reliability on a dollar-per-engine-flight-hour basis. We can help you forecast material needs, secure the material required to support your flight schedule, manage repair suppliers and analyze engine operational data to improve engine performance. We use Advanced Diagnostics and Engine Management (ADEM) systems, a wireless tool that sends real-time engine data to the ground during flight. We can spot operational trends and maintenance issues early, before they cost significant time and money.

Our integrated and flexible network can respond with fleet management, engine overhaul, parts repair and line maintenance services to keep your aircraft flying, so you can focus on your customers.

CFM56 is a registered trademark of CFM International, Inc.
V2500 is a registered trademark of International Aero Engines
EcoPower is a registered trademark of EcoServices, LLC
Military Engines

Accelerates to supersonic speeds in seconds. Operation at metal-searing temperatures, with uncompromising reliability. These are some of the performance demands placed on Pratt & Whitney engines that power the world’s most technologically sophisticated weapon systems – the F-22 Raptor and the F-35 Lightning II – today and into the future.

Pratt & Whitney’s F100-series engines are the workhorse for the U.S. Air Force’s (USAF) F-15 Eagle and F-16 Fighting Falcon and air forces in 22 nations. More than 7,200 engines have been built. The latest evolution, the F100-PW-229 EEP, is now in production.

Our F117 turbofan engines are the exclusive propulsion system for the C-17 Globemaster III transport, which holds 33 world records. Two PW4062 engines, each with a 94-inch fan blade diameter, will exclusively power the U.S. Air Force’s new KC-46 air refueling aircraft. The engine offers the KC-46 program a propulsion system that has proven performance, fuel economy and durability.

Our military products and customers worldwide benefit from a proven and comprehensive range of services to meet all maintenance, readiness and product-support requirements.
The PW4062 engine, rated at 62,000 pounds takeoff thrust, provides the U.S. Air Force with the best combination of value, technical performance and maturity for the KC-46A.

**F100-PW-229 Engine**

In service since 1989, the F100-PW-229 engine has the highest thrust-to-weight ratio of any fighter engine, producing 29,160 pounds of thrust. The engine is the most technologically advanced model in the F100 engine family. It utilizes advanced technology from the Pratt & Whitney F119-PW-100 engine, and it is the exclusive power for the USAF’s F-15E. The F100-PW-229 engine is also the fighter engine of choice in the international market. The F100-PW-229 engine sets the standard as the safest fighter engine in the USAF history. F100-PW-229 engines have powered the USAF F-16 Thunderbird team since 2009.

The latest configuration of the engine, the F100-PW-229 Engine Enhancement Package (EEP), includes a sixth-generation DEEC system. This incorporates advanced engine health monitoring (prognostics and diagnostics) and aircraft interactive capabilities, as well as the advanced hot-section technology developed for the F-22 Raptor F119 engine and the F-35 Lightning II F135 propulsion and lift system. The F100-PW-229 EEP significantly increases the life capability of the turbine hardware by incorporating these low-risk technologies developed and matured for the fifth-generation fighter engines – Pratt & Whitney’s F119 and F135 engines.

The EEP is the only fighter engine qualified to a 6,000-cycle depot interval. This will result in significantly reduced costs of ownership, as well as a reduction in maintenance infrastructure requirements. No other production fighter engine manufacturer in the world can incorporate these proven, advanced technologies into its products.

The PW4000 engine incorporates the latest engine technologies for superior operating economics and high reliability. Advanced, service-proven technologies that deliver maintenance diagnostics, high operational performance and low fuel burn.

**F100-PW-220 Engine**

In service since 1984, the F100-PW-220 engine is the successor to the F100-PW-100 engine and -200 models. It produces more than 23,000 pounds of thrust in full augmentation and powers the twin-engine F-15 Eagle and single-engine F-16 Fighting Falcon. The F100-PW-220 engine also powers the majority of F-15s and F-16s in the international market. The engine was the first fighter engine with Digital Electronic Engine Control (DEEC) technology incorporating real-time engine monitoring. The F100-PW-220 engine’s reliability, durability and modular design maximize operational readiness and provide the F100-PW-220 an exceptional safety record.

**PW4062 Engine**

The PW4062 is the latest member of the PW4000 94-inch family of high-thrust turbofans that are in service with over 70 operators worldwide on a variety of commercial aircraft. The PW4062 engine was selected as the exclusive engine for the multimission KC-46A tanker that will provide superior effectiveness, agility and flexibility for effective global combat operations.
F135 Engine

Pratt & Whitney’s most powerful fighter engine ever built – the F135 – will power all three variants of the new, advanced, single-engine tactical fighter, the F-35 Lightning II developed by Lockheed Martin. The F-35 includes a conventional take off and landing (CTOL) variant, carrier variant (CV) and short take off and vertical landing (STOVL) variant. The F135 engine has successfully completed numerous milestones, including initial service release for CTOL/CV and STOVL variants, first production deliveries of CTOL and STOVL variants and powered the first STOVL vertical landing. The F135 continues to successfully power Lockheed Martin’s F-35 flight test program.

The F135 engine is an evolution of the technologically advanced F119 engine that powers the U.S. Air Force’s F-22 Raptor. In the 40,000-pound-thrust class, it adopts the F119’s core – a high-performing six-stage compressor driven by a single-stage turbine – with a new low-pressure spool, providing enhanced maturity and safety for the F135.
**F117-PW-100 Engine**

The F117-PW-100 engine is a military version of the PW2040 commercial engine. It is the power plant for the U.S. Air Force’s C-17 Globemaster III, a four-engine transport that received initial operating capability status in 1995. With four engines producing 40,400 pounds of thrust each, the C-17 can carry a maximum payload of 160,600 pounds. Unique to the C-17, the F117 engines are equipped with a directed-flow thrust reverser capable of being deployed in flight. On the ground, the thrust reverser can back a fully loaded aircraft up a two-degree slope. On-wing time for the F117 has increased sixfold since the late 1990s.

**F119-PW-100 Engine**

Pratt & Whitney is the exclusive designer and manufacturer of the only operationally fielded fifth-generation fighter propulsion system in production today – the F119 turbofan engine – that powers the U.S. Air Force’s F-22 Raptor. The F119 propulsion system supports the Raptor’s ability to achieve its objectives through its maturity, affordability and performance. In the 35,000-pound-thrust class, two F119 engines are capable of sustaining F-22 supersonic flight for extended periods without afterburner operation, giving the F-22 exceptional combat performance without compromising mission range. The F119 engine combines stealth technologies and vectored thrust with high thrust-to-weight performance to provide unprecedented maneuverability and survivability. The Raptor entered operational service in December 2005, and the U.S. Air Force declared full operational capability in December 2007.
Founded in 1928 and a global leader in aerospace, Pratt & Whitney Canada (P&WC) is shaping the future of business, general, helicopter and regional aviation with dependable new-generation engines. There are currently more than 51,000 P&WC engines in service on more than 29,000 aircraft operated by some 10,000 operators. Throughout its rich history, P&WC has set new standards in performance, fuel consumption, emissions and quiet operations, driven by its passion to innovate.

P&WC has continued to invest in R&D to maintain our leadership in each of the segments we serve:

- In business aviation, we continue to develop our Pure Power® PW800 engine to ensure we have the technology to support next-generation aircraft in the large-cabin business jet segment. We continue to have success in the medium category with our PW300 engine family, given wins on the Learjet 85, Dassault 2000S and Cessna Citation Latitude programs.

- The helicopter segment is an important part of the P&WC portfolio. The PW210 engine family has strong momentum with selection of the Eurocopter X4, certification for the Sikorsky S-76D and the continued progress for the AgustaWestland AW169.

- P&WC has been a leader in the regional turboprop segment for decades with the PW100/PW150 family of engines. We plan to maintain our leadership position by bringing to market an all-new turboprop engine targeted toward next-generation aircraft in the 70-90 seat class. With rising fuel prices and emerging markets, we see a strong future for the regional turboprop.

- Finally, P&WC continues to lead the general aviation segment with the PT6 turboprop engine, celebrating its 50th anniversary in 2013. Over the past 50 years, we have consistently introduced new versions, leading to more than 130 applications for business, commuter, utility and trainer aircraft and helicopters. Compared to the first PT6A model, today’s PT6A engine is up to 4 times more powerful, with a 40% better power-to-weight ratio, and has up to 20% better specific fuel consumption.

P&WC has built the largest, most comprehensive customer service network in the industry. Through its Customer First Centre, P&WC is always just a call or click away, providing unparalleled technical support.
PT6
*Turboprop Engine Family*
The PT6 is P&WC’s iconic turboprop engine which celebrates its 50th anniversary in 2013. This engine family offers unmatched performance, reliability and value in a wide range of applications. From flying into Antarctic darkness at 75°F below zero to supporting environmental efforts in reforestation programs, the dependability and versatility of the PT6 engine family continues to earn the highest respect from pilots worldwide. Ranging in power from 500 shp to more than 2,000 shp, PT6 turboprop engines offer unsurpassed flexibility and capability for a variety of applications.

PW100/PW150
*Turboprop Engine Family*
The PW100 turboprop engine is the proven airline benchmark for low fuel consumption. Compared with a similarly-sized regional jet, a PW100-powered turboprop aircraft burns 30-45% less fuel and delivers a similar reduction in greenhouse gas emissions. And we continue to build on the PW100/PW150 family’s competitive advantages, incorporating the latest technologies to build on its dependability, dispatch reliability, durability, and excellent operating economics. The PW100 engine family (PW118 to PW150) offers a power range of 1,800 to over 5,000 shp.
PW300

*Engine Family*

Designed for mid-sized to large business jets, the PW300 engine family combines high performance with excellent operating economics. The PW300 series is built with the latest technologies to deliver highly dependable, fuel-efficient power for its long-range business jet applications. The PW300 turbofan engine family ranges from 4,700 to 7,000 pounds of thrust.

PW500

*Engine Family*

The PW500 turbofan engine family incorporates the latest advanced technologies in the drive to exceed our customers’ expectations in performance, fuel consumption and environmental friendliness. It is designed for light to mid-sized business jets from engine to fully integrated powerplants and offers a power range of 2,900 to 4,500 pounds of thrust.

PW600

*Engine Family*

The PW600 engine is at the heart of the light jet segment. The PW600 turbofan engine family, in the 900 to 3,000 pounds thrust class, is specially designed for point-to-point travel in a new generation of light jets. Compact and light weight, the PW600 is fuel efficient and clean with excellent operating economics.

JT15D

*Engine Family*

The JT15D turbofan engine family is P&WC’s first turbofan engine. Since its introduction in the 1970s, the JT15D engine family has expanded to power a wide range of business aviation and government applications. The JT15D engine family offers a power range of 2,200 to 3,400 pounds of thrust.
PW200
_Turboshaft Engine Family_

From the start of production in the early 1990s, the PW200 became the world’s leading powerplant for light twin helicopters. With 621 to 735 shp take-off power, it is well-suited for utility, EMS, offshore, corporate, law-enforcement and paramilitary roles. Fully functional and operable in all flight conditions, it features a single-channel Electronic Engine Control (EEC) with full hydro-mechanical backup. The simplicity of its modular design, with only three major rotating components, assures easy maintenance access. And its low specific fuel consumption, lightweight materials and a compact architecture further enhance its impressive thermodynamic performance.

PW210
_Turboshaft Engine Family_

Specifically designed for multi-role demands of the helicopter segment, the PW210 sets the stage for the new family of helicopter engines in the 1,000 shp class delivering a wide-range of power along with legendary P&WC standards of reliability and durability plus reduced pilot workload. By leveraging proven advanced technologies from the entire family of P&WC engines, the PW210 significantly reduces ownership cost and delivers the best value to our customers, including the highest power-to-weight ratio and lowest fuel burn in this industry, which translates into payload and range benefits for single and intermediate-to-medium twin helicopters in this class.
PurePower® PW800

Engine Family

The new-generation PurePower® PW800 engine family raises the bar on performance and economics by taking advantage of the latest material, aerodynamic and design technologies. The engine incorporates advanced fan, compressor, turbine technologies and the low-emissions TALON™ X combustion system for exceptional fuel consumption, future thrust-growth capability and improved environmental performance.
For more than 50 years – from its beginnings as the Radial Turbine Division of Solar Turbines Incorporated through its acquisition by Sundstrand, its incorporation into Hamilton Sundstrand and realignment with Pratt & Whitney, now known as Pratt & Whitney AeroPower – the company has grown into a world leader in the development and integration of auxiliary power units (APUs).

Pratt & Whitney AeroPower is an industry leader in the design, development, integration, management and manufacture of auxiliary power systems and small turbojet engines. Pratt & Whitney AeroPower designs and manufactures APUs and turbojet engines for commercial and military aircraft. Products include airborne auxiliary power units, ground power units and small, expendable turbojet propulsion systems.

For the past five decades, the company has produced more than 9,000 military and over 6,000 commercial APUs, with over 40 million operating hours for commercial airline service alone.
Auxiliary Power Units

APUs are gas turbine engines used primarily during aircraft ground operation to provide electricity and compressed air for main engine start, air conditioning, electric power and other aircraft systems. APUs can also provide backup electric power during in-flight operation.

Pratt & Whitney AeroPower’s products are installed in a variety of commercial aircraft, including the Embraer 135, 145, 170 and 190; Bombardier’s Dash 8-100/-200/-300/-400; as well as the Boeing 717, 747-400, 747-8 and 787 Dreamliner. The organization’s APUs are also on board the Airbus A320 family of aircraft and the Airbus A380 double-deck, wide-body jet liner.

Pratt & Whitney AeroPower APUs are also established on a number of military applications, including helicopters such as the Bell-Boeing V-22 Osprey, Sikorsky CH-53K Super Stallion, H-60 Black Hawk and Boeing CH-47 Chinook; in fixed-wing aircraft such as the Lockheed Martin F-16 Fighting Falcon and KAI T-50 Golden Eagle; as well as in military transports including the Lockheed C-5 Galaxy, Alenia C-27 Spartan, Airbus A400M Atlas and Embraer KC-390.

Expendable Turbojets

Pratt & Whitney AeroPower’s expendable turbojet engines are designed for military applications including tactical missiles, decoys, jammers, aerial targets and UAVs. Although simple in design, these engines incorporate advanced turbine technologies that provide reliable high-altitude start capability, low fuel burn, compact packaging and state-of-the-art Full Authority Digital Electronic Control (FADEC) engine controllers.

PW980

P&W AeroPower’s PW980 is the largest APU in commercial airline service. This APU is a two-shaft gas turbine engine, specifically designed for the Airbus A380 wide-body jet liner. During on-ground operation, it provides bleed air for cabin conditioning from a low spool-driven load compressor, main engine start capability, and electrical power from two gearbox-mounted, 120kVA generators. The APU is also designed to deliver in-flight backup power.

APS5000

The P&W AeroPower APS5000 APU is the industry’s first all-electric APU for large commercial aircraft. This single-shaft, variable-speed gas turbine APU develops 450kVA of electrical power at sea level that starts and operates up to 43,100 feet. The APS5000 APU was designed exclusively for the Boeing 787 Dreamliner. It is the quietest APU in its class with the lowest emissions in the industry.

PW901C

P&W AeroPower’s PW901C APU is a two-shaft gas turbine engine, originally derived from a Pratt & Whitney turbofan engine used in popular business jets. It provides power for the Boeing 747-8 and its predecessor, the PW901A-powered Boeing 747-400. During on-ground operation, it provides bleed air for cabin conditioning from a low spool-driven load compressor, and electrical power from two gearbox-mounted 90kVA generators.
**APS500 Engine Family**

The APS500 APU is designed with simplicity and maintainability in view, offering a constant-speed, single-shaft gas turbine with overhung back-to-back radial compressor and turbine components. The modular construction of the APS500 APU allows for easy assembly and disassembly, reducing maintenance time and operational costs.

This APU is designed to supply pneumatic and electrical power for aircraft systems. Compressor bleed air can be used for main engine starting on the ground and in the air, and also powers the environmental control system to provide cabin climate control.

The APS500 APU has found wide acceptance in the regional aircraft market segment on board the Bombardier Dash 8-100/200/300 series, using models T-62T-40C7B, B1 and D, and the Embraer EMB145 family of aircraft, using model T-62T-40C14 (APS500R).

**APS1000 Engine Family**

The APS1000 APU series is designed to supply ground and airborne electrical power to the aircraft system. This APU offers capability to provide electrical power or bleed air for main engine starting. The APS1000 is configured to provide bleed air for cabin environmental control, and is equipped with a 28VDC starter generator suitable for main engine starting and in-flight electrical loads.

The APS1000 APU has found wide acceptance in the regional aircraft market segments since its introduction in 1993. The APU has been selected for use on the Avro International (British Aerospace) 146/Regional Jetliner family of aircraft, using model T-62T-46C3; the Saab 2000, using model T-62T-46C7; and the Bombardier Dash 8 Series 400, using model T-62T-46C12.

**APS2300 Engine Family**

The APS2300 APU is the most technologically advanced regional aircraft APU system available today. Originally, the APU was designed for the rigorous utilization of 60- to 110-passenger regional jet aircraft, namely the Embraer 170/195-series aircraft. The APS2300 APU is now installed in Embraer’s fleet of E170/175/190/195 regional jets as well as Embraer’s Lineage 1000 business jets. A derivative of this APU has been selected by Bombardier for the Global 7000/8000 business jet.

The APS2300 APU is an integral bleed, constant speed, continuous cycle gas turbine engine that incorporates a single-stage centrifugal compressor, a reverse flow annular combustor, and a two-stage axial turbine.
APS3000/T-62T-48  
*Military APU Family*

Derived from the APS3200 APU, which is in service on the Airbus A320 series aircraft, this family of APUs has been designed to provide commercial levels of APU reliability in military applications. Versions of this single-shaft load compressor APU are in service in the Lockheed Martin C-5M strategic freighter as well as the Airbus A400M tactical freighter, and are also in development for the Boeing E-6B Tacamo and the Embraer KC-390 freighter/tanker.

T-62T-46  
*Engine Family*

Designed for high-power density, this series of APUs include the shaft power version installed in the Bell-Boeing V-22 Osprey, the integral bleed configuration used in the Alenia C-27J tactical freighter and Embraer 145AEW&C surveillance aircraft. The load compressor version is employed in the Saab JAS-39 Gripen, Sikorsky CH-53K Super Stallion and Korea Aerospace KAI T/A-50 fighters.

TJ-150  
*Turbojet Family*

The culmination of more than 20 years of turbojet engine development is offered in the 150 lbf thrust class TJ-150 series turbojet engines, featuring very high thrust per frontal area. The engine is in volume production for the Raytheon ADM-160 Miniature Air Launch Decoy (MALD®) and the MALD®-J Jammer missiles. A derivative is in development to power the MBDA (UK) SPEAR 100B missile.
PRATT & WHITNEY

Home of dependable engines made by dependable people.

Est. 1925
Powering an innovative future.