

Avanti
Special Missions



Special Missions Matter

**PIAGGIO
AERO** 



↑
5'9"

↑
1.75 m

← 6'1"

1.85 m →

↓

↓



The best choice for your mission

Versatility and reliability combined with advanced technology have made the Piaggio Aero P180 Avanti II the ideal aircraft for specialized, crucial missions such as air rescue and air ambulance flights. In its "Special Mission" configuration, the P180 Avanti II is also used as a multi-utility aircraft for multiple and diverse mission profiles such as patrolling, photo detection, and civil and military flight inspection.

The "Special Mission" configuration is actually also used by the Italian and other international Armed Forces as well as many government agencies as an air ambulance, a patrol unit for regional surveillance and for the defense and monitoring of coastal and territorial waters.

Operating costs matter



Aircraft	Class	Gallons per hour	LBS CO2 per hour
Gulfstream 400	Heavy	415	8785
Falcon 2000	Heavy	330	6985
Challenger 604	Heavy	285	6033
Citation X	Medium	295	6245
Hawker 800 XP	Medium	280	5927
Learjet 60XR	Medium	230	4869
Citation CJ1	Light	120	2540
Hawker 400XP	Light	180	3810
Learjet 40XR	Light	180	3810
P180 Avanti II	Light	100	2110

High performance and wide cabin platform

Innovative technical, design and construction solutions ensure the Piaggio Aero P180 Avanti II burns 40% less fuel than a jet in its category, which also means that 40% less emissions are released into the atmosphere.

The amazing three lifting surfaces design, which significantly reduces weight and drag, also translates into higher performance combined remarkably with much lower operating costs.

The category leading, stand up cabin of the P180 Avanti II has a height of 5'9" (1.75 m) and a width of 6'1" (1.85 m), and is the ideal space for work-whatever type of work, the mission may demand.

In the P180 Avanti II every component and system is carefully designed to provide the highest levels of efficiency and safety and with its extended cruising range, it can easily fly up to 5 hr endurance and reach any medium range destination without the need for inefficient, time consuming refueling stops.

Unlike many aircraft in its class, it can take off and land on runways less than 1000 meters long and thanks to this capability and its steep approach certification, the P180 Avanti II provides access to airports, many of which are not even served by scheduled airlines or business jets.

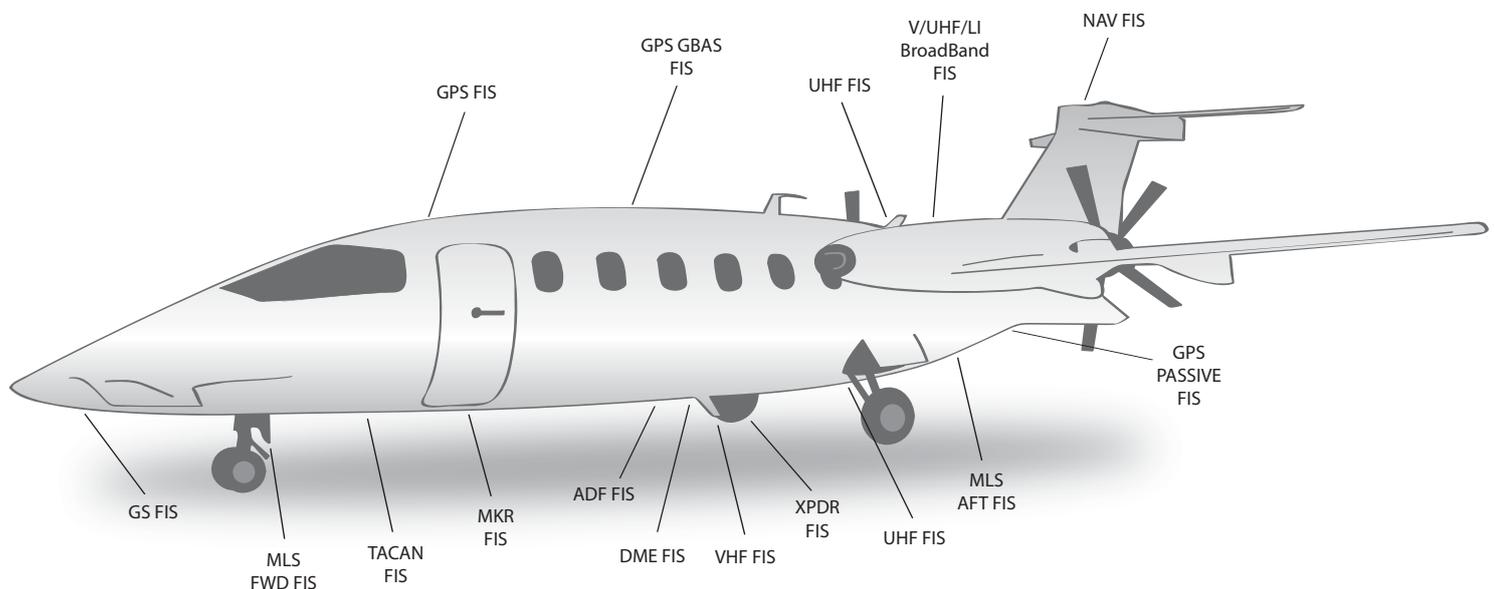


Flight Inspection

New airways and approach procedures are developed regularly to increase airspace capacity, efficiency and to protect the environment while, at the same time improving safety levels.

The characteristics of the P180 Avanti II aircraft, equipped with the most advanced navigation systems, enable safe flight operations at low and high altitudes during a variety of weather conditions, and have made it the ideal airplane for Flight Inspection operations as required by current radio regulations ICAO / NATO.

The P180 Avanti II can be equipped with state of the art systems such as the UNFIS 3000 designed and manufactured by NSM (Norwegian Special Mission) and AeroFIS by Aerodata AG creating a best in class aircraft for special missions' usage.



Thanks to its extreme fuel efficiency and up to 5 hours flight endurance, the P180 Avanti II allows full in-flight control without the support of ground based devices. The aircraft performs Flight Inspection activities by continual monitoring of the radio signals (Radar, VOR, DME, ILS, etc), to verify the validity of those signals transmitted during takeoff, landing and during normal aircraft cruise operations.

The efficiency of this service and these special mission aircraft, which confirm aircraft compliance with international standards for radio signals on approach and during instrumental flight, enables the air transport system to operate safely.



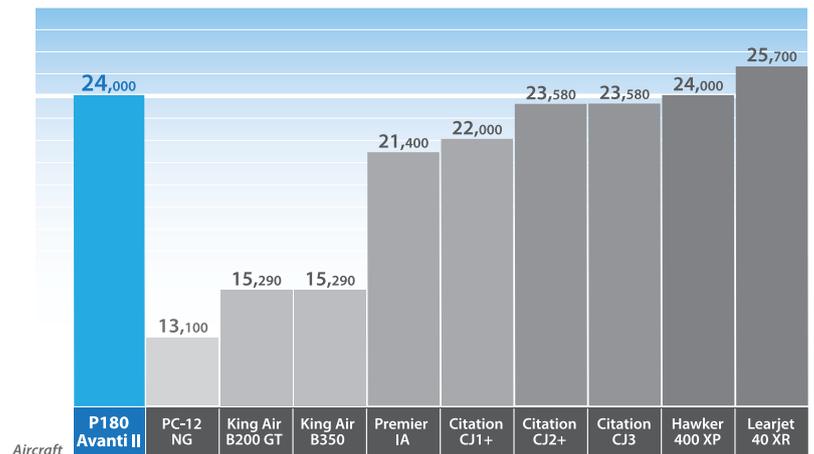
Aero Ambulance

With its industry leading operational capabilities, the P180 Avanti II delivers incredible operational performance and efficiencies when utilized for emergency medical transport missions and, is fully equipped to provide the most modern emergency care, in conjunction with our specialist equipment provider-Lifeport Inc.

The P180 Avanti II demonstrates an unmatched efficiency and operational flexibility. Due to the extraordinary size of the Avanti II's full stand up cabin, the largest in its segment, it provides outstanding accessibility for patient loading, and offers a work-friendly environment for medical staff to carefully look after up to two patients on the well-proven Lifeport stretcher systems.

For all on board, the Piaggio Avanti II also ensures the smoothest of rides with, the serenity of a cabin environment that has a noise level of only 68 db's. When this is coupled with the equivalent of sea level pressurization up to 24,000 feet, the extreme quietness and smoothness of the flight for all in the Piaggio Avanti II is guaranteed for such specialist missions.

**Maximum
altitude at Sea Level
cabin pressure [ft]**



The P180 Avanti Aero Ambulance has two medical specification options, with either a dedicated aero medical interior or with a quick change MEDEVAC layout for maximum flexibility.

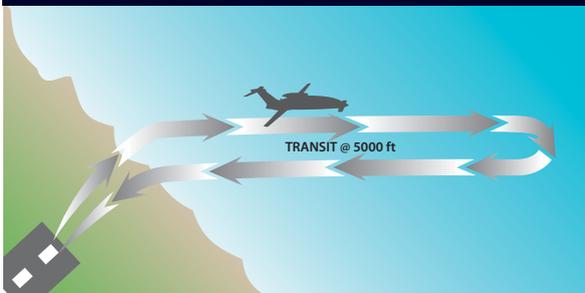
With this second option and without any structural or interior modifications, in less than two hours a passenger transport (shuttle or VIP) layout can be reconfigured to a single or dual Lifeport stretcher layout for Medical Evacuation missions.

The aircraft is also equipped for human organ transportation and a sophisticated emergency incubator.



Surveillance

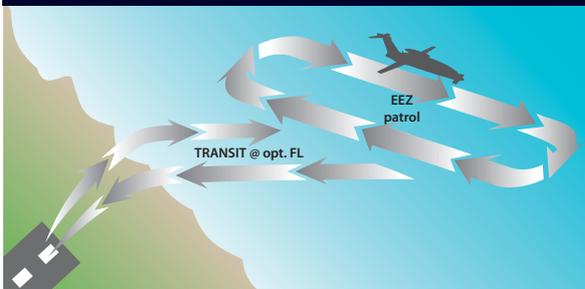
PATROL RADIUS: 370 NM @ 5000 ft



The Piaggio Aero P180 Avanti II is designed for maritime surveillance and border patrolling activities and multiple government agencies use it to protect land-use, illegal immigration, smuggling and illegal trafficking, both human and commodities. The aircraft design, and its state-of-the-art avionics suite, allows the P180 Avanti II to safely operate in the most severe conditions around the world.

As the most efficient aircraft in its category, the P180 Avanti II has the ability to fly up to 5 hours (VFR) without any refueling stop for over 1750 nm - 3240 km or 3 h 30 min at 5000 ft on a 370 nm range patrolling mission. Territory monitoring is carried out by a FLIR / TV Camera (Forward Looking Infra Red) installed on the lower part of the fuselage of the airplane. This equipment is very sensitive to thermal radiation and creates images that are then sent to video.

TIME ON STATION AT 200 NM DISTANCE: up to 3,5 hrs @ 2000 ft



The P180 Avanti II can also be equipped with AIS (Automated Identification System) and different Radar, both 360° radar and SLAR (Side Looking Airborne Radar) as well as other sensors as demanded by the mission profile.

The extraordinary full stand up cabin in the Avanti II, provides a huge amount of usable space to house instrumentation and operator consoles ensuring an ergonomically laid out and efficient workspace for the operators.

The integrated digital cockpit of the Piaggio Aero P180 Avanti II is designed to offer reliability, efficiency and the safe operation of the most advanced technology available on the market. It also offers the aircrafts pilot the ability to have the Radar / FLIR images directly on the MFD ensuring accurate identification.

P180 Avanti II Specification

Maximum Cruise Speed (at ft 31,000 ft ISA)	402 KTAS (745 km/h)	Baggage Compartment	Volume Length Maximum Weight	44.15 ft ³ /1.25 m ³ 5' 7" ft/1.70 m 300 lbs/136 kg
Maximum Ceiling	41,000 ft/12.500 m	Maximum Take-Off Weight		12,100 lbs/5,489 kg
Rate of Climb	2,770 fpm/844 mpm	Maximum Landing Weight		11,500 lbs/5,216 kg
Take-Off Distance (Sea Level, ISA, MTOW, 50 ft obstacle)	3,235 ft/986 m	Maximum Zero Fuel Weight		9,800 lbs/4,445 kg
Landing Distance (Sea Level, ISA, MLOW, 50 ft obstacle, no reverse)	3,282 ft/1.000 m	Standard Empty		7,800 lbs/3,538 kg
NBAA IFR Maximum Range	1,470 nm/2.722 km	Maximum Fuel Capacity (usable at 6.75 lbs/gal)		2,802 lbs/1,271 kg
Engines	Pratt & Whitney of Canada PT6A-66B Power 850 SHP/634kW ea. (flat rated from 1,630 HP)	Useful Load		4,150 lbs/1,882 kg
External Dimensions	Wing Span	46' 0.48"/14.03 m	Maximum Payload	1,800 lbs/816 kg
	Length	47' 3.24"/14.41 m	Fuel with Max. Payload	2,350 lbs/1,067 kg
	Height	13' 0.90"/3.98 m	Payload with Max. Fuel	1,350 lbs/613 kg
Cabin Dimensions	Height	5' 9"/1.75 m	Pressurisation	Differential 9.0 psi/0.62 bar (Sea Level Cabin up to 24,000 ft/7.315 m)
	Width	6' 1"/1.85 m	Maximum Seating Capacity	9+2 crew
	Length	14' 11"/4.55 m	Typical Executive Payload	6+1 crew

Avanti II

Special Missions



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