



Aircraft Type: Agusta AW109E **Date of Manufacture:** 31/07/2006

Aircraft Registration: G-WOFM **Aircraft Serial Number:** 11678

Airframe Hours: 4054.9 (08/02/2024)

Engine Type: Pratt & Whitney Canada PW206C

Engine 1 Ser No: PCE BC0595 **Engine 2 Ser No:** PCE BC0592

Engine 1 Hours 4054.9 **TSN 499.3 TSO Engine 2 Hours:** 3967.38 **TSN 499.3 TSO**

Basic Weight 2041.50 Kg, 3000kg MTOW option added

Operational Conditions: Single / Dual Pilot IFR

The Aircraft

STANDARD AIRCRAFT: with passenger cabin sliding doors.

Airframe and landing gear modifications in accordance with FM STC number SR01848NY.

Inclined rear bulkhead to increase cabin space.

Airframe

- Aluminium alloy and bonded fuselage.
- Semi monocoque aluminium alloy tail boom.
- Two hinged jettisonable crew doors (LH & RH).
- Two passenger sliding doors (LH & RH) with jettisonable window.
- Acrylic overhead windows.
- Removable fibreglass tail rotor gearbox fairing.
- Quick removable tail rotor drive shaft cover.
- Three-wheel retractable landing gear.
- Interchangeable landing gear tires.
- Separate baggage compartment with hinged door.
- Three jacking points.
- Removable fairing and cowlings providing complete accessibility to the controls and drive components.
- Swivelling front wheel provided with tow bar attachment.
- Quick opening hinged inspection doors to allow visual check of engine oil levels and maintenance inspection points.
- Grounding points.

Interior arrangement

- Two individual pilot seats, fore and aft adjustable, with tap belts.
- Aluminium alloy honeycomb reinforced floor with anti-skid finish.

- Ventilation ram air inlets.
- Anti reflection instrument panel.
- Ashtray.
- Engine mounted oil pump and filter assembly.
- Engine mounted fuel control and governor (FMM).
- Engine electronic control (FADEC).
- Lubrication and cooling system.
- Engine oil chip detectors (2).
- Three cells (160 US Gall) fuel system.
- RH refuelling point.
- Fuel system control panel.
- Airframe mounted easy access fuel filter.
- Submerged fuel boost pump (2).
- Ground fuel drains.
- Engine mounted fuel pump and filter assembly.

Transmission Drive System

- 900 SHP for take-off and continuous operation main transmission.
- Two stage transmission
- Two freewheeling units
- Two transmission mounted hydraulic pumps with separate reservoir and ripple damper.
- Internal dry sump transmission lubrication with pressure and scavenge pump, and oil filter.
- Transmission oil chip detectors (2).
- Single stage, bevel gear T/R 90° gear box including oil level sight glass and chip detector.
- Transmission cooling and lubrication system.
- Transmission shafts (engines to transmission, transmission to tail rotor, engines to blowers).

Rotors and controls

- Titanium metal main rotor hub, corrosion protected, fully articulated with four composite grips, four elastomeric bearings, four individually interchangeable composite blades, swept tips, and dampers.
- All metal tail rotor, two blades, semi-rigid, delta hinged type, individually interchangeable.
- Cyclic and collective controls powered by two hydraulic systems.
- Hydraulically powered anti torque system.
- Adjustable friction devices on cyclic and collective system.
- Force trim and artificial feel system.
- Adjustable directional control pedals.
- Dynamic flapping lock mechanism.

Electrical

- 28-volt DC nickel cadmium battery with temperature probe.
- 160 Ampere self-cooled starter generators (2).
- Voltage regulators (2).
- Battery relay.
- Interconnecting bus relay (2).
- External power relay.
- Distribution buses (2).
- External power receptacle.
- Dual DC ammeter (on IDS display).
- Dual DC voltmeter (on IDS display).
- Position lights.
- 250W landing lights (2).
- Utility: lights (2).
- Anti-collision lights (2).

- Instrument lights with dimming switch.
- Radio master switch.

Airframe Instruments

(all on IDS displays)

- Dual torque meter indicator.
- Triple tachometer (rotor and two Ng).
- Transmission oil temperature and pressure indicator.
- Engine oil temperature and pressure indicator (2).
- Dual fuel pressure indicator.
- Fuel quantity indicator.
- Gas producer tachometer indicators (2).
- Turbine outlet temperature indicators (2).
- Dual hydraulic pressure indicator.
- Utility hydraulic pressure indicators (2).

Caution warning and advisory system

- Master warning lights.
 - Master Caution lights.
- (All on IDS displays)*
- Advisory panel.
 - Engine fire detection panel.
 - Utility hydraulic advisory lights.
 - Voice Warning Generator system.

Flight instruments – Pilot

- Barometric. encoding altimeter.
- Air speed indicator.
- Instantaneous vertical speed indicator.

Navigation instrument – Pilot

- Magnetic compass indicator.

General instruments

- Clock, 8 days, and elapsed time.

Standard equipment

- Internal Structural provision for utility equipment.
- Cabin Fire Extinguisher.
- Crew open door actuators.
- First aid kit.
- Pilot/co-pilot shoulder harness with inertial reel.
- Quick Disconnecting chip detectors.
- Baggage compartment light.
- Tall boom strake.
- Fuel drain electrical valves.
- Pilot headsets (2).

Single pilot IFR package

- AC system (2 inverters).

- Pilot navigation instruments including the following instruments:
- LCD EADI & EHSI, Stand by ADI.
- Gyrocompass C14 A Honeywell.
- Vertical gyros (N.1) 46060-11 Flightline system.
- Vertical gyros (N.2) VG 208 Jet Electronics.
- AFCS 3 Axis Duplex SP711 Honeywell.
- ADF KR87 Bendix King.
- Transponder GTX345R Garmin.
- VHF/COM/NAV GTN650 Garmin.
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- ICS Pilot/Co-Pilot AG 06 1U Agusta/Gemelli.
- DME KDM 706A Bendix King.
- Marker Beacon KMR 675 King.

Avionic Equipment

- Co-pilot flight/navigation instruments.
Including:
- LCD EADI and EHSI.
- Barometric altimeter.
- Air speed indicator.
- Vertical speed indicator.
- Flight director and auto trim FZ 702 Honeywell.
- Radio altimeter AA300 Honeywell.
- E.L.T. (three frequencies) C 406 2HM Artex.
- GPS interfaced with EHSI and B-RNAV function 2101 I/O Trimble.
- EFIS Pilot/Co-pilot command switch.
- Moving map KMD 550 Bendix King.

Additional equipment

- Dual controls.
- Dual controls.
- Rotor brake.
- Windshield wipers (Pilot/Co-pilot).
- Wiper switch on cyclic grip.
- Engine compartment fire extinguishers.
- Radio master switch with ground function.
- Airframe hour meter, complete provision.
- Retractable landing light (450W).
- VLE & VLO Extension up to 140 Kias.

Interior

- Air Conditioning Garret ECU.
- Vibration dampers installation.
- VIP INTERIOR including:
 - Silent Soundproofing.
 - Leatherette covered liners or painted.
 - All seats VIP model covered with leather or fabric/leather.
 - 3 seats central bench with foldable armrest.
 - 3 seats aft bench with foldable armrest.
 - 3 points shoulder harness with inertia reels and safety belts on all seats.
 - Reading lights.
 - Advisory lights.
 - Floor carpeting.
 - Floor courtesy lights.

- Leather bellows on flight controls.
- Carpeting protection.
- Seat covers.
- Customised finishing.

Installed optional equipment

- Weather radar presented on Pilot/Co-pilot EHSI RDR 2000 Bendix/King.
- Baggage compartment extension (2.3 m).
- Emergency floats provision only.
- 221 US Gall. Fuel system.
- Pulsed chip detectors (transmission and engine).
- Strobe light on horizontal stabilizer.
- Taxiing and landing lights on landing gear sponsons.
- Central single drawer.
- 8 Active noise reducing headsets (4 Bose A20, 4 Bose X).
- Pilot multipurpose holder.
- Pilot seats headrest.
- Rear cabinet with bar
- 5/8 pax conversion (Seating module replacing the aft cabinet)