



AIRCRAFT SPECIFICATION

2013 AgustaWestland AW109SP Grand New

General

Aircraft SN: 22324

Registration: TBD

Aircraft Total Time: 689 SNEW

Engine: PW207C

Engine SN: PCE-BH0725 & PCE-BH0724

VIP & Single/Dual Pilot IFR Standard Configuration



California Aviation Services, Inc
6791 Airport Dr. STE A, Riverside, California 92504, USA
Leo Bell
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Standard Equipment

- Active Noise Reduction (**ANR**) headsets (pilot and co-pilot)
- Baggage compartment lights
- Crash-resistant co-pilot seat, fore and aft adjustable, with lap belts and headrest
- Crew open door actuators
- First aid kit
- Fuel drain electrical valves
- Internal structural provisions for utility equipment
- Portable fire extinguisher
- Shoulder harness with inertial reels (pilot and co-pilot)
- Tail boom strake

Single Pilot Dual Controls IFR Avionic Package

- Pilot flight/navigation EFIS (2 displays) with embedded FMS, Synthetic Vision (SVS), HTAWS (Helicopter Terrain Awareness and Warning System), slip indicator and Remote Bug Panel (RBP)
- (*) In lieu of basic Pilot flight/navigation EFIS (1 display) with slip indicator and Remote Bug Panel (RBP)
- Co-pilot flight/navigation EFIS (2 displays) with embedded FMS, Synthetic Vision (SVS), HTAWS (Helicopter Terrain Awareness and Warning System), slip indicator and Remote Bug Panel (RBP)
- Reversionary Control Panel (RCP)
- EFIS pilot/co-pilot navigation synchronization switch (FMS data)
- Electronic Standby Instrument System (ESIS)
- Second Radio Management System (RMS) RTU-4210 Collins
- Second VHF/AM VHF-4000E Collins
- VOR/ILS/ADF NAV-4000 Collins



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- DME DME-4000 Collins
- Radio altimeter ALT-4000 Collins
- Second Attitude Heading Reference System (AHRS)
- Second Air Data Unit (ADU)
- Pilot GPS/SBAS Chelton interfaced to EFIS/FMS
- Co-pilot GPS/SBAS Chelton interfaced to EFIS/FMS
- Digital Audio Control System (DACS) NAT additional cockpit panel
- 4-axis dual duplex digital AFCS with integrated Flight Director
- Second electronic clock
- Second magnetic compass indicator
- ELT C406-N HM Artex (with Navigation Interface Module embedded)
- Dual controls



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Additional Equipment

- Airframe hour meter
- Baggage compartment extension (1,9 m)
- Engine compartment fire extinguishers (Qty 2)
- Fuel cap with key-lock
- Pulsed chip detectors (in lieu of quick disconnecting chip detectors)
- Reinforced windshields (pilot and co-pilot)
- Retractable/rotating landing light (nose mounted)
- Rotor brake
- Windshield wipers (pilot and co-pilot) with wiper switch on cyclic grips

Interior

- Air conditioning ECS (Environment Control System)
- Primer finished cabin walls

Miscellaneous/Ground Equipment

- *Air intake/exhaust covers*
- *Ground tools kit (including tow bar, lifting tool, wheel chocks)*
- *Pitot tubes covers*
- *Rotorcraft Flight Manual (RFM) and technical publications*
- *Tie-down fittings (main rotor and tail rotor retention straps)*



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CORPORATE interior - 6 places

Passenger cabin

- *All seats crash-resistant covered with leather or fabric/leather*
- *3 fwd facing seats (aft bench) with foldable armrest and glass holder 3*
- *3 aft facing seats (central bench) with see-through modification and with foldable armrest and glass holder*
- *Forward facing side armrests*
- 4-point shoulder harness with inertial reels and safety belts for all passenger seats
- Super silent soundproofing
- Liners leather/leatherette covered
- Acoustic screen around doors
- Cabin double layer acrylic windows
- Customized Corporate cabin finishing
- Decoration trim with metal inserts
- Intercommunication system for passengers
- Cabin loudspeakers (Qty 2)
- Reading lights, emergency lights, floor courtesy lights
- Passenger hooks (Qty 4)
- Upper and lower air vents
- Floor carpeting
- Carpeting protection
- Seat covers



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Cockpit equipment

- Interseat console tray with 12 V power supply
- Multipurpose holder (with space provision for fire extinguisher)
- Right door pocket
- Headset hooks (Qty 2)
- Cyclic and collective leather gators
- Curtains in cockpit on upper windows

Installed optional equipment

- Electrically operated passenger steps (RH) -provision only
- Electrically operated passenger steps (LH) -removable only
- Customised painting scheme, metallic colours from Company selection
- 213 US gal crash-resistant fuel system (in lieu of 152 US gal)
- Baggage compartment extension (2.3 m)
- Stormscope Lightning Detection System WX-500 L3 (presented on EFIS)
- Traffic Advisory System TAS-620 Avydine (presented on EFIS)
- Weather radar RDR 2000 Bendix/King (presented on EFIS)
- Mast Vibration Absorber
- Provision for 8.4" display and provision for DMG



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a. Airframe

- Aluminum alloy/composite material and bonded panel fuselage
Semi-monocoque aluminum alloy tail boom
- Three-wheeled retractable landing gear
- Two hinged jettisonable crew doors (LH and RH)
- Two sliding passenger doors (LH and RH), 1 .40 m opening, with jettisonable windows
- Acrylic windshield and side windows Acrylic overhead windows
- Quick removable tail rotor drive shaft cover Separate baggage compartment with hinged door
- Removable fairing and cowlings, for complete accessibility to the controls and drive components
- Swiveling front wheel with tow bar attachment
- Quick opening hinged inspection doors, to allow visual check of engine oil levels and maintenance inspection points ○ Grounding points
- Jacking and hoisting points

b. Rotors and controls

- Titanium main rotor hub, corrosion protected, fully articulated with four composite grips, four elastomeric bearings, four individually interchangeable.
- Composite material blades, swept tips, and dampers
- Steel tail rotor hub, corrosion protected, semi-rigid delta hinged type, with two composite blades, 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 Flapping and droop restraint mechanism



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c. Power plant and fuel system

- Two Pratt & Whitney Canada PW207C turbo-shaft engines
- Two independent electronic control systems (FADEC) with normal, emergency, and training operation modes and auto-start
- Engine mounted fuel pump and filter assembly
- Engine mounted oil pump and filter assembly Engine mounted fuel control and governor
- Lubrication and cooling system
- Engine oil chip detectors (2) Engine control panel
- Two independent fuel systems with cross-feeding valve and control panel
- 3-cell crash-resistant fuel system (575 l - 152 US gal) Submerged fuel boost pump (2)
- Airframe mounted easy access fuel filter RH
- refueling point
- Ground fuel drains

d. Transmission drive system and hydraulic system

- 960 shp for takeoff and 900 shp continuous operation main transmission
- Three-stage transmission
- Free wheeling units (2)
- Dual independent, redundant hydraulic systems
- Transmission mounted hydraulic pumps (2) with separate reservoir
- Ripple dampers (2)
- Internal dry sump transmission lubrication with pressure and scavenge. o 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



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e. Electrical system

- 24 V DC 33 Ah nickel-cadmium battery with temperature probe
- 200 A self-cooled starter generators (2)
- Voltage regulators (2)
- Battery relay
- Interconnecting bus relays (2)
- External power relay
- Distribution buses (1 battery, 2 essential, 2 emergency, 2 main, 2 auxilliary)
- External power receptacle
- Position lights
- Taxing lights (2) and landing lights (2) on landing gear sponsons
- Anti collision lights
- Cockpit utility lights
- Instrument lights with dimming switch
- Radio master switch with ground function

f. Flight/navigation instruments

- Pilot flight/navigation EFIS (1 display) with slip indicator and Remote Bug Panel (RBP)
- Radio Management System (RMS) RTY-4210 Collins (1)
- VHF/AM VHF-4000E
- VOR/ILS NAV-4500 Collins
- Transponder (Mode S) TDR-94 Collins
- Attitude Heading Reference System (AHRS) (1) with one dual AHRS control panel
- Air Data Unit (ADU) (1)
- Digital Audio Control System (DACS) NAT with one cockpit panel
- Electronic clock
- Magnetic compass indicator



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g. Instrumentation (on IDS display)

- LCD Integrated Display System
- Dual gas generator speed indicator (N1%)
- Dual turbine outlet temperature indicator (TOT°C)
- Dual torque meter indicator (TQ%)
- Dual power turbine speed indicator (N2%)
- Rotor speed indicator (NR%)
- Transmission oil pressure (PSI) and temperature (°C) indicator
- Two engine oil pressure (PSI) and temperature (°C) indicators
- Two fuel pressure indicators (PSI)
- Two fuel quality indicators (kg)
- Two fuel flow indicators ((kg/hr)
- Two flight controls hydraulic system pressure indicators (PSI)
- Two utility hydraulic system pressure indicators (PSI)
- Outside air temperature indicator (°C)
- Two AC voltmeters (VAC)
- Two DC voltmeters (VDC)
- Two DC ammeters (Amp)

h. Warning/Caution Advisory and Maintenance System

- Master warning lights
- Master caution lights
- Warning, caution and advisory messages (on IDS display)
- Aural warning generator system
- Engine fire detection system
- Exceedance recorder system (on IDS display)

i. Interior arrangement

- Crash-resistant pilot seat, fore and aft adjustable, with lap belts and headrest
- Aluminum alloy honeycomb reinforced floor with anti-skid finishing
- Ventilation ram air inlets
- Anti reflection instrument panel