

GENESYS AVIONICS SUITE[™]

FLIGHT DECK MODERNIZATION FOR FOR PILATUS PC-7 TRAINER AIRCRAFT



MODERNIZED PILOT TRAINING COCKPIT SOLUTION

Moog's Genesys Avionics Suite[™] provides the latest state-of-the-art avionics package allowing seamless transition from training aircraft to fleet aircraft. The Pilatus PC-7 Turbo Trainer is a low-wing tandem-seat training aircraft, capable of all basic training functions, including aerobatics, instrument, tactical, and night flying. It has developed a sizable presence of the global trainer market and has been adopted by more than twenty air forces as their ab initio trainer, as well as multiple civilian operators. Moog's customizable Genesys Avionics Suite brings modern glass-cockpit functionality to the PC-7 fleet. The PC-7 avionics package also has direct appliciability to the Pilatus PC-9 and Beechcraft T-6A Texan II trainer aircraft utilizing Moog's PC-7 Approved Model List (AML) Supplemental Type Certificate (STC) with only completion of company ground and flight tests without additional involvement from the FAA.

The Genesys Avionics Suite[™] provides a future-forward technology architecture with future-proof upgradability. This allows the aircraft to be upgraded as new features and technologies are fielded in the future to keep training fleets modernized and mission effective.

Features of the PC-7 Genesys Avionics Suite include:

- PFD and MFD EFIS digital cockpit display suite
- Synthetic Vision and Highway-In-The-Sky flight navigation symbology
- Terrain Awareness & Warning System (TAWS)
- Full EICAS display capability
- Integrated Genesys GDR VHF & UHF Nav/Comm radio package
- MIL-STD qualified
- NVG compatible



SYSTEM COMPONENTS

- EFIS Displays
- Autopilot
- NAV/COMM Radios
- Electronic Flight Bags
- Transponders
- Sensors & Antennas
- Audio Management
- Control Panels
- Switches & Indicators
- GPS & ADAHRS

OPS FEATURES







Moving Map/Terrain/Obstructs





Traffic Alerts + Lightning



Graphical Flight Planner



Basic PF



Customizable Synoptic



Datalink Weather, FIS-E



Selectable Video Inputs



Comms Management



GENESYS AVIONICS SUITE[™] COMPONENTS

EFIS - PRIMARY & MULTI-FUNCTION FLIGHT DISPLAYS



Genesys IDU EFIS suites feature a variety of PFD and MFD formats that can be configured to show flight instruments, moving map, HSI, flight planner, traffic, terrain, weather radar, datalink, video, radio/audio management, and engine displays.

FMS – FLIGHT MANAGEMENT SYSTEM



Genesys IDU EFIS suites feature a built-in Flight Management System for improved mission effectiveness, enhanced safety, and workload management.

EICAS - ENGINE INDICATION & CREW ALERTING SYSTEM



Patented OASIS (Open Architecture System Integration Symbology) software allows easy customization and display of engine information and CAS messages.

TAWS – FIXED-WING & ROTARY-WING



Genesys IDU EFIS suites feature all classes of fixed wing and helicopter TAWS (Terrain Awareness and Warning System) for enhanced safety and workload management.

SVS - SYNTHETIC VISION & HIGHWAY-IN-THE-SKY



Genesys 3D Synthetic Vision and Highway-In-The-Sky flight navigation enhances safety and reduces pilot workload plus provides precision aircraft operations including RNP and LPV approaches.

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FIXED-WING AUTOPILOTS

Genesys S-TEC fixed-wing autopilots are fullfeatured, attitude-based digital flight control systems that provide dramatic workload reduction and safety enhancements making flying safer and more enjoyable.



ELECTRONIC FLIGHT BAGS

Optional electronic flight bags (EFB) provide increased mission planning and execution effectiveness. EFB's provide off-the-shelf ready solutions for tactical air drop planning (HARP/CARP) and other planning benefits.



RADIOS – NAVIGATION & COMMUNICATION

The Genesys Digital Radio (GDR[™]) is a family of remote-mount, software-definable radios combining VOR/localizer/glideslope and marker beacon navigation and VHF communication with a UHF communication option in a single box.





INTERFACES

System interfaces are key to the openarchitecture design to help dramatically reduce integration costs and schedules. The Genesys Avionics Suite includes all necessary interfaces to get the aircraft up and flying.



SENSORS

Sensors provide key aircraft system inputs to help increase aircraft operational performance and reduce integration costs and schedules. The Genesys Avionics Suite includes all necessary sensors to get the aircraft up and flying.





MOOG | Shaping the way our world moves[™]

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