

Integrated Glass Cockpit Retrofits



The modernization of avionics and cockpits is mainly driven by our customers' flight missions and their operational requirements. In parallel, the requirements of the airworthiness authorities need to be met to keep the aircraft continuously airworthy, operational and safe.

Description

RUAG Aerospace Services GmbH has extensive experience in the design, integration and certification of glass cockpit and avionics retrofits. We have successfully modified a number of Part-23/Part-25 customer aircraft, e.g. the RUAG Dornier 228 Series, different Bombardier Challengers and Part-27/Part-29 rotary wing aircraft such as the Bell UH-1D series of the German Army.

RUAG is the OEM of the Dornier 228

RUAG's subsidiary RUAG Aerospace Services GmbH is the OEM of the Dornier 228 19-seater turboprop aircraft. For the civil and military aviation market RUAG Aerospace Services GmbH is a leading integrator of systems and components, is a supplier and is a life-time support provider. The core competencies cover upgrades and retrofits, integration of subsystems, production of aircraft and MRO services for aircraft and helicopters.

Main advantages of Glass Cockpit and Avionics Retrofits

Modern state-of-the-art avionics components	Improved component location, improved access, less wiring, less weight, less maintenance, no obsolescence, no related price increase compared to electro-mechanical equipment
Modular open architecture	Growth potential for future integrations (software, hardware, customer and authority requirements)
Visibility	Improved arrangement, improved readability, improved Human Machine Interface
Compliance with up-to-date airworthiness requirements	E.g. ICAO Annex 6, EASA, EU-OPS, FAA, the Military and National Authorities
Spare parts	Less devices and less different part numbers
System safety & redundancy	Display of navigation information on different devices (including stand-by instrument), on-side and cross-side, tuning of radios from independent sources, MFDs can be reverted to serve as PFDs in case of failure

Benefits

- End-to-end and turn-key certified solutions
- High-professional systems engineering (more than 400 STCs, hundreds of minor changes)
- One stop for design, production, integration, certification and Permit-to-Fly
- EASA, FAA and BWB approvals
- High flexibility and quick response times

RUAG References

RUAG has successfully performed and certified different avionics and glass cockpit retrofits.



Dornier 228



Bombardier Challengers 601 of the German MOD