



## GENESYS AVIONICS SUITE™

### BELL 412 AIRCRAFT – INCREASE MISSION CAPABILITIES



The Genesys Avionics Suite™ provides the Bell 412EP and 412HP helicopters with state-of-the-art digital avionics for primary flight, navigation, engine/systems displays, solid-state sensors, and integrated SBAS GPS navigation. The IDU-680 avionics suite is a complete flight and navigation system designed to seamlessly integrate into the aircraft's existing systems. The screen displays include three-dimensional, enhanced situational awareness Primary Flight Information and Multi-Function displays. Multi-Function displays can be configured to show a moving map, an HSI, traffic, terrain, hover vector, weather, radio/audio control, video input, or engine displays.

The Level A certified IDU-680 EFIS utilizes ADAHRS and GPS SBAS data for precision aircraft operation including RNP and LPV approaches, and patented OASIS (Open Architecture System Integration Symbology) to display engine information and CAS messages. The system also integrates with select radios and weather radar and offers expansion ports supporting a path for future growth. The STC meets all IFR regulations, increasing the mission capabilities, dispatch ability, and usefulness of the aircraft. Additionally, the IDU-680 comes standard with:

- 3D Synthetic Vision
- Highway-In-The-Sky (HITS) navigation
- Geo-referenced Hover Vector
- Helicopter TAWS (HTAWS)
- Graphical Flight Management System (FMS)
- Digital flight recorder
- NVIS compatibility
- MIL-STD qualification
- Search and Rescue patterns
- And more

# FLIGHT DECK MODERNIZATION FOR TODAY'S AND TOMORROW'S MISSIONS



## GLASS EFIS UPGRADE - IDU-680 DISPLAYS

Lightest, most comprehensive, integrated Electronic Flight Instrument System enhances safety, reduces pilot workload, and increases mission flexibility.

Features include:

- Redundant ADAHRS attitude source (replaces legacy attitude sensors)
- Redundant GPS/SBAS receivers
- Dual NAV/COMM radios
- Integrated radio/audio management
- Mode S ADS-B compliant transponder
- Weather radar control and display
- Built-in support/interfaces for FLIR, Satcom, DF, HF, UHF, TACAN, Datalink, SELCAL, tactical radios, etc.



## AUTOPILOT UPGRADE\*

Optionally, an autopilot upgrade can be included. The Genesys GRC™ Rotorcraft Autopilot delivers safety and workload reduction benefits with fully coupled IFR approved autopilot and stability augmentation in a compact lightweight package.

Features include:

- Lightweight, weighs less than 30 pounds (14 kg)
- Dramatically reduced pilot workload
- Safer, more confident command, even under demanding conditions
- Autopilot fully-coupled to FMS, GPS, and navigation radios
- Designed for three-axis (pitch, roll and yaw) autopilot configuration for IFR use.

\*this option would require an STC completion before installation



## NAV/COMM RADIO UPGRADE - GDR\*

Optionally, a Nav/Comm radio can be included. 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. GDR lowers weight, increases reliability, reduces cost, and increases mission readiness. In addition, the Genesys Control Panel (GCP™) would be paired with the GDR to provide necessary Nav/Comm operation and control.

\*this option would require an STC completion before installation



## EICAS UPGRADE

Provides customizable full engine indication and crew alerting system, replacing outdated gauges and annunciators.

Features include:

- Color graphical presentation, reducing cockpit workload
- Enhances safety
- Warning and Caution messages are tailored to eliminate incorrect interpretation
- Exceedence log recording



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