A look at an HAI member up close and personal.

Genesys Aerosystems, based in Mineral Wells, Texas, provides integrated avionics systems for military, government, and civilian airplanes and helicopters. The company was formed in 2014 when Cobham Avionics sold Chelton Flight Systems and S-TEC Corp., two innovative companies that pioneered many of the digital avionics products on the market today, to a group of former Chelton founders and Cobham executives.

Six years later, in 2020, Genesys was acquired by Moog, a worldwide designer, manufacturer, and integrator of precision control components and systems. The addition of Genesys to the Moog family brings increased research and development for flight-control systems in optionally piloted and unmanned vehicles.

The Back Story

Chelton Flight Systems, founded in 1997, developed the world's first FAA-certified 3-D synthetic-vision electronic flight instrument systems (EFISs) and GPS/WAAS (Wide Area Augmentation System) navigator. The company has since expanded its integrated cockpit avionics systems for special-mission aircraft, with systems certified in more than 700 aircraft types.

S-TEC Corp., founded in 1978, offers a full line of autopilots for airplanes and helicopters. It holds FAA certification for nearly 1,000 aircraft types and has delivered more than 40,000 autopilot systems. The company's new, 15-lb. HeliSAS system is a digital, full-authority autopilot technology for single- and twin-engine helicopters and is available as a stability augmentation system (SAS) only or in all-autopilot mode. HeliSAS comes as a VFR solution for light- and medium-duty helicopters and as an IFR solution for heavy-duty helicopters.

In addition to HeliSAS and other autopilot solutions, Genesys's product line includes EFISs, sensors, and avionics components, including the digital ADAHRS (Air Data and solid-state Attitude/Heading Reference System), GPS/WAAS receivers, and digital radios.

The Genesys Avionics Suite

To assist with cockpit modernization, increase aircraft safety, and boost mission efficiency, Genesys avionics systems are offered both individually and fully integrated, with the latter branded as the Genesys Avionics Suite.

A complete flight and navigation system, the suite is designed to integrate into an aircraft's existing systems. It includes solutions for primary flight, navigation, engine/system displays, solid-state sensors, and integrated SBAS (satellite-based augmentation system) GPS navigation for precision RNP (required navigation performance) and LPV (localizer performance with vertical guidance) approaches. The suite also includes EFIS displays featuring the single-pilot, IFR-rated HeliSAS autopilot and SAS. It uses integrated audio/radio management capabilities, Genesys's open architecture system integration symbology (OASIS), and an engine indicating and crew alerting system (EICAS) to meet specific aircraft platform and mission needs.

The Genesys Avionics Suite is currently certified and available for the Airbus AS350/355 and EC145e, Bell 412, Leonardo TH-119, Sikorsky S-61T, and UH-60 Black Hawk in addition to a range of fixed-wing aircraft.

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Jen Boyer is a 20-year journalism and public relations professional in the aviation industry, having worked for flight schools, OEMs, and operators. She holds a rotorcraft commercial instrument license with CFI and CFII ratings. Jen now runs her own public relations and communications firm.

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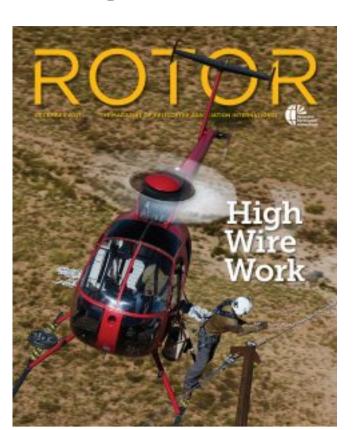
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