Welcome to the next generation of vehicle control

Advanced fly-by-wire capabilities backed by flexible, high-power computing
ACHIEVE AUTONOMY LIKE NEVER BEFORE

As a leader in flight control technology, our flight control computers (FCCs) are currently used on thousands of military and commercial rotorcraft worldwide. Now, we’re unveiling the Perigon™ vehicle management computer, enabling complete flight control systems integration through a highly configurable solution backed by flexible, high-power computing.

NEXT-GENERATION CAPABILITIES IN VEHICLE CONTROL

With 20 times the computing power of our current FCCs, the VMC uses up to three high-integrity, multicore processors to provide advanced fly-by-wire control, autonomous support and unmanned operation.

DESIGNED FOR TODAY’S DEMANDS IN AVIATION

For high-redundancy flight critical applications, the VMC provides safer operation in all conditions. It supports operation in degraded visual environments (DVE) and optionally piloted vehicle (OPV) capabilities. Affordable and adaptable, our VMC can be certified for civil and military aircraft as a new or retrofit installation.

FLEXIBLE AND SCALABLE FOR EASY UPDATES AND ADDED CAPABILITY

Our VMC can be modified to meet your specific integration needs. But even after it’s installed, the VMC’s Modular Open Systems Architecture (MOSA), robust software partitioning and reconfigurable I/O make updates simple and affordable. It’s even designed to host third-party functions, such as mission management and utility management, so you can expand the VMC’s capabilities to fit the needs of your operation.

DEVELOPED TO THE LATEST CIVIL AND MILITARY STANDARDS

- ARP4754A, ARP4761
- DO-254, DO-178C, DO-297
- DO-160G, Mil-810

VMC DEVELOPMENT

Despite its highly configurable set of features, the VMC comes ready to install and certify at a “catalog price.” That’s because we’ve utilized a shared-cost approach to develop the VMC, saving our customers a substantial amount of non-recurring engineering (NRE) costs for developing the computer from the ground up for their platforms.
SYSTEMS CONNECTIVITY

The VMC is more than a mission or flight control computer. By integrating systems across the aircraft, it enables greater cross-functionality – reducing pilot workload and overall aircraft weight and streamlining aircraft operation.

PROVEN FLIGHT-CONTROL CAPABILITIES

Collins Aerospace has decades of innovation experience developing flight control computers on military and civil aircraft, ranging from rotary wing to fixed wing to UAV. These systems span a range of capabilities, from simple partial authority Stability Augmentation Systems (SAS) to complex, safety-critical, multi-redundant fly-by-wire systems.