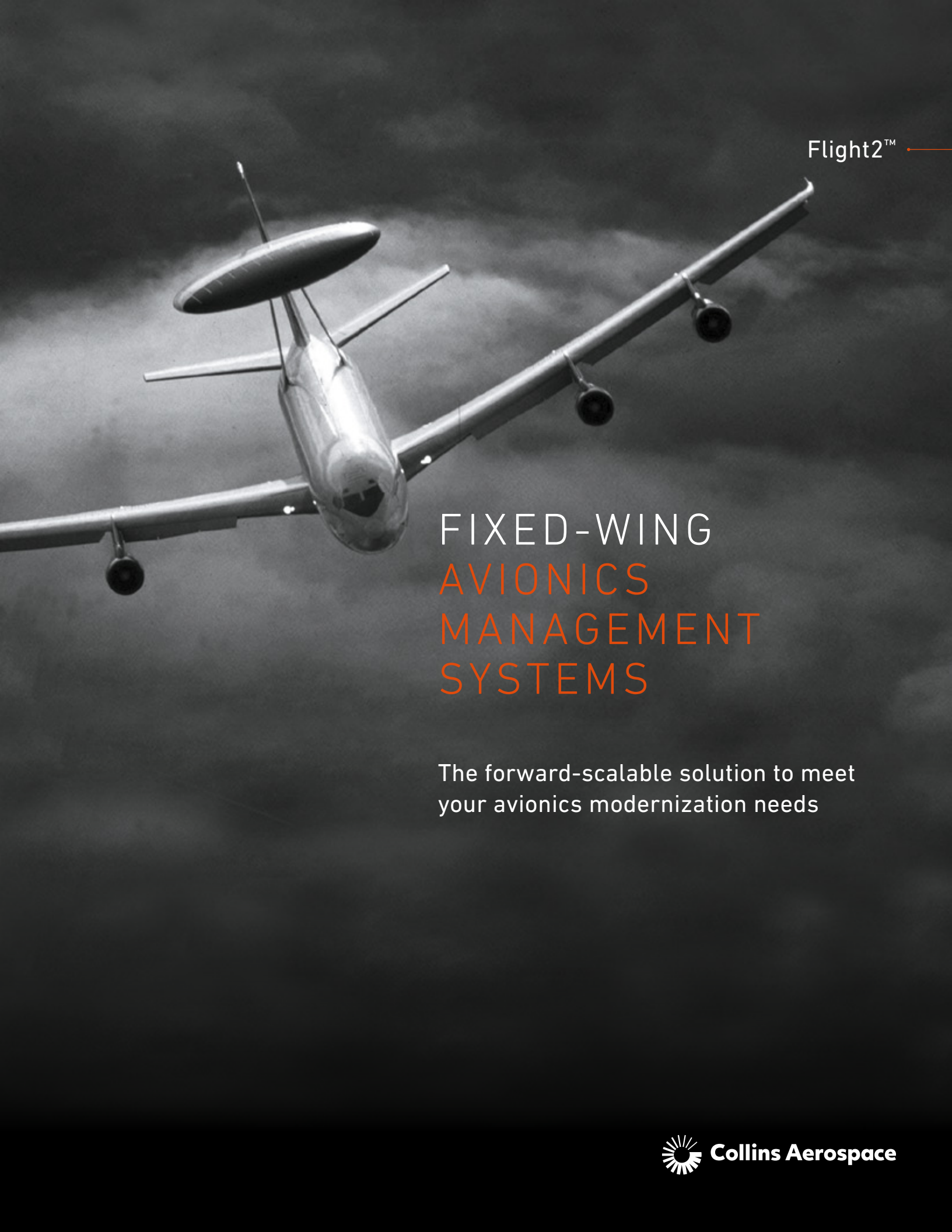


Flight2™



FIXED-WING
AVIONICS
MANAGEMENT
SYSTEMS

The forward-scalable solution to meet
your avionics modernization needs

OUR VISION. YOUR AVIONICS ANSWER TO EVER-CHANGING MISSION REQUIREMENTS.

When we introduced the Collins Aerospace Flight2™ integrated avionics system for the C/KC-135 Global Air Traffic Management program, it changed the flight experience for pilots. They no longer needed to focus solely on “see and avoid” responsibilities for flight hazards related to navigation, terrain, traffic and weather. Flight2 not only automatically detected these hazards but provided complete situational awareness and hazard avoidance guidance for flight crews.

Flight2 transformed a federated system into a modern digital system and provided commonality with commercial aircraft. Its high degree of integration and commercial off-the-shelf (COTS) equipment offer a greater degree of:

- Direct lineage with commercial avionics development using common modules for the displays, control display units (CDUs) and processing centers
- Ethernet local area network
- Fault tolerance
- On-board diagnostics

Today, because of the flexible design of the Flight2 architecture, the system is as relevant as when it was first introduced.. Our next-generation Flight2 system continues to build upon that visionary architectural design, so you can easily and cost effectively upgrade your aircraft today with a flexible platform designed for future growth linked to commercial development.

CONFIGURABLE SOLUTIONS

Our evolutionary Flight2 system’s configurable architecture helps you maximize your budget while minimizing aircraft downtime. Flight2 seamlessly integrates new-generation displays and avionics with your aircraft’s legacy analog sensors, radios, autopilots and other systems. This integration brings a host of new capabilities to popular aircraft types, including the C-130, P-3, KC-135, KC-10, C-2A, E-3 and others.

Flight2 is based on the Collins Aerospace Pro Line 21™ integrated avionics system – the most popular commercial retrofit avionics solution – giving you more installation options than any other system. Configurable solutions can begin with simple modernization of your aircraft’s Communications, Navigation and Surveillance (CNS) systems and end with the creation of the ultimate tactical avionics suite, including satellite communications, large-format digital flight displays, tactical situational awareness and more.

The Flight2 system delivers the most advanced capabilities available today, but with a foundation based on proven, scalable, all-digital architecture. With it, you can easily integrate emerging technologies and capabilities into your aircraft. We created Flight2 to address obsolescence issues while providing complete CNS/Air Traffic Management (ATM) capabilities.

When the goal is to cost effectively increase the safety, functionality and capabilities of your current fleet, the one solution is Flight2.





Flight2 provides configurable avionics solutions based on your requirements and budget. From stand-alone components, to full CNS/ATM upgrades, to mission, situational awareness and safety capabilities, we have a proven solution to meet your avionics needs.

STAND-ALONE COMPONENT UPGRADES

This approach addresses immediate needs such as communications, surveillance and/or obsolescence. You can choose to install any or all of the components as federated systems. For example: 8.33 V/UHF radios, traffic collision avoidance systems (TCAS), Mode S transponder, weather radar and electronic engine instrument displays.

FM immunity	8.33 V/UHF radios	HF radios	TCAS 7.1	Mode S transponder
WXR with wind shear detection	Emergency locator transmitter	CVR/FDR	Engine instruments	Cargo ACLADS

CNS/ATM COMPONENT UPGRADES

INTEGRATED CNS/ATM CAPABILITIES

Flight2 provides a fully integrated avionics system to meet global civil airspace requirements. Key components include the Flight Management System (FMS), multi-function displays, GPS/EGI and a digital autopilot and flight director.

FMS RNP 0.3	PFD/MFD	FULL CNS/ATM CAPABILITIES		
GPS/EGI	Digital autopilot/flight director	ADC/AHS	ADS-B Out	TAWS
FM immunity	8.33 V/UHF radios	HF radios	TCAS 7.1	Mode S transponder
VOR/ILS	Distance measuring equipment	CVR/FDR	SATCOM voice/data (a/c specific)	CPDLC/FANS 1/A (a/c specific)

ADDITIONAL MISSION CAPABILITIES

The configurable Flight2 system enables you to increase its operational capabilities with additional mission capabilities as well as situational awareness and safety upgrades. From EFB/digmap, to head-up displays (HUDs) and Enhanced Vision System (EVS), to Link 16, Flight2 delivers incredible capabilities today while ensuring a path to future technologies and capabilities.

IFF	MISSION, SITUATIONAL AWARENESS AND SAFETY CAPABILITIES			
Automatic direction finder	Direction finder	TACAN	Emergency locator transmitter	Engine instruments
EFB digmap	SAASM	M-Code GPS/EGI	Anti-jam	Link 16
WXR with wind shear detection	HUD/EVS	Synthetic vision system	Cargo ACLADS	EO/IR sensor



FLEXIBLE, MILITARY-PROVEN TECHNOLOGIES ENSURING OPTIMUM CAPABILITIES NOW AND IN THE FUTURE

Flight2's integrated avionics suite gives military mission planners a no-compromise solution to meet both their tactical and civil operations requirements. At the heart of the system is a proven, open architecture that not only provides integration with current digital and legacy analog instruments, avionics and systems, it also ensures seamless modernization to newly emerging technologies.

Because Flight2 continues a long tradition of providing unparalleled functionality, reliability and value to military operators, the system ensures smooth civil airspace interoperability while meeting specialized mission demands. This works to save operators both time and money.



FLIGHT2 CNS/ATM

With its all-digital CNS/ATM units, Flight2 gives your flight crews the clearest, most accurate communications, ensuring compliance with global air traffic control.

FLIGHT2 FMS

The CDU-7000 control display unit is the processing home of our powerful, integrated FMS. The FMS is driven by a proven complement of autonomous civil and military navigation sensors. This combination enables continuous precision navigation around the world, including an autonomous self-contained approach capability equivalent to a Category I ILS. In addition, the FMS automatically computes a variety of mission-related calculations, including search and rescue patterns and holding procedures for use in both civil and military airspace. The CDU-7000 also drastically reduces workload through automation. The NVG-compatible CDU serves as the primary mode control and status reporting interface with all major avionics subsystems, eliminating the need for inefficient remote control mode and tuning panels.

ENHANCED SYSTEM RELIABILITY YOU CAN COUNT ON

Legacy avionics can develop CNS/ATM performance issues that could compromise crew safety and mission success. Our next-generation Flight2 components are highly reliable, fully ruggedized and mission proven around the world.

Each Flight2 unit features a solid-state, all-digital architecture, which greatly reduces vibration- and shock-induced failures. Reliability and maintainability are further enhanced by state-of-the-art fault tolerance monitoring and full-time diagnostics to alert flight crews of any problems.

NOT SO MUCH RADICAL CHANGE AS EVOLUTIONARY GAINS

Multiple aircraft. One proven solution.

More than 900 Flight2 integrated cockpits fly aboard a wide array of aircraft, including the C-130, P-3, KC-135, KC-10, E-2C, C-2A, E-3, HC-130H and HC-144A.

We developed Flight2 as an avionics solution that would evolve to take advantage of emerging capabilities and technology,

ensuring that military customers would have the functionality their flight crews needed for mission success.

Today's next-generation Flight2 tiered solution delivers true 21st-century capabilities while continuing the original system's proven installation flexibility. Flight2's all-digital displays and components easily integrate with the avionics already on board your aircraft, enabling you to systematically and effectively complete a partial or full avionics modernization program.



C/KC-135 STRATOTANKER

Unrestricted CNS/ATM compliance

USAF C/KC-135	419 a/c	Awarded 1999, program complete
Turkey KC-135	7 a/c	Awarded 2010, program complete
France KC-135	3 a/c	Awarded 2013, program complete



USAF/INTERNATIONAL C-130 HERCULES

Unrestricted CNS/ATM compliance, growth for civil data links

USAF C-130 AMP		
Inc. 2	176 a/c	Awarded 2019
Portugal C-130	4 a/c	Awarded 2019, on contract
France C-130	14 a/c	Awarded 2016, on contract
Morocco C-130	5 a/c	Awarded 2016, on contract
Pakistan C-130	16 a/c	Awarded 2016, in flight test
USAF EC-130	15 a/c	Awarded 2013, in production
U.S. Coast Guard	2 a/c	Awarded 2012, program complete
Other int'l. C-130	138 a/c	Awarded 1997-2015



E-2C HAWKEYE

Unrestricted CNS/ATM compliance

E-2C Hawkeye	27 a/c	Awarded 2004, program complete
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KC-10 EXTENDER

Unrestricted CNS/ATM compliance

USAF KC-10	59 a/c	Awarded 2013, program complete
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Train them on the exact flight deck they'll use in the cockpit

One of the biggest challenges facing military operations is the speed at which their flight crews can be trained to use new avionics. To ease the transition, you can complete Flight2's initial and ongoing training with our Virtual Avionics Procedures Trainer (VAPT).

The VAPT is the only system that operates on the same software found in the Flight2 cockpit. It's the most cost-effective solution available that enables pilots to train on the system they'll use in the aircraft. Not simulations or replications – the real thing. Pilots walk away from a VAPT session with the knowledge and confidence they need to safely operate in today's active military operations environment.

With the VAPT, you have just one more element in your Collins Aerospace toolbox to ensure that Flight2 systems will meet your expectations now and well into the future.



P-3/EP-3 ORION

Unrestricted CNS/ATM compliance, growth for civil data links
 U.S. Navy P-3C/EP-3 165 a/c Awarded 2002, program complete
 South Korea P-3 16 a/c Awarded 2013, program complete
 Greece P-3 4 a/c Awarded 2016, on contract
 Chile P-3 2 a/c Awarded 2017, on contract



E-3 SENTRY AWACS

Unrestricted CNS/ATM compliance
 USAF E-3 33 a/c Awarded 2010, in flight test
 NATO E-3 17 a/c Awarded 2010, in production
 France E-3 4 a/c Awarded 2017, on contract

To learn more, go to
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