GE Aerospace

TrueCourse™

Flight Management Software

Futureproof Climb, Cruise, Approach for Fixed Wing, Rotorcraft and VTOL on any hardware

GE's TrueCourse™ is a modern Flight Management System (FMS) that delivers all the operational benefits sought by today's operators and is ready to adopt future capabilities that are sure to come.

With our pedigree of over 35 years and over 14,000 FMS deliveries, GE has experience on a multitude of aircraft and has designed this latest FMS to work across aircraft platforms and types, reducing the development costs and schedule for both new entrants and updates to existing platforms.

Faster customization is enabled by a simplified, innovate software architecture. The software can come hosted on a smart Touchscreen Control Display Unit that also acts as the Flight Management Computer or can be easily ported to another host computer for adaptability to existing avionics architectures, including ARINC 653. The software also meets FACE™ 3.0 conformance standards.

Connectivity allows the operators to link their Electronic Flight Bag (EFB) applications to the FMS for data exchange, reducing crew workload and enabling low-cost cockpit enhancements.

Connected

- Data exchange between EFB/mission apps and FMS
- Optionally connected digital twin for single pilot and remote pilot ops
- Operations connectivity to support fleet management

Customizable

- ARINC 661 user interface allows for wide-array of page customization, map overlays and screen sizes
- Only select the features required for the platform
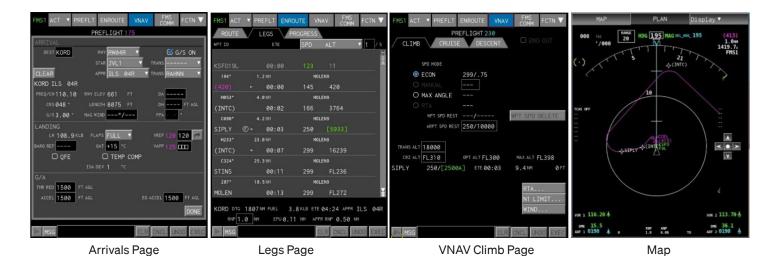- Customized Nav Databases (incl. DAFIF)

Portable

- ARINC 653 partitioning and FACE™ conformance allow for ease of portability to various platforms, operating systems, and architectures
- Civil certification documentation for DAL B implementations

Features

Flight Planning	• Active/Secondary flight plans w/on-board pilot interface, upload pre-planned nav data, upload via datalink, or connect to EFB flight/mission planning software/JMPS • Guides pilot in creation of flight plans • Integration of civil airspace rules and restrictions • DO-200B worldwide nav database (Type 2 LOA) - waypoints, airways, airports and runways, SIDS, STARS, precision approaches
Vertical Performance Optimization	• Optimized vertical and thrust profiles • Optimized fuel and time flight profiles • Required time of arrival at a waypoint • Available loiter time • Flight envelope protection • Integrated lateral profiles
Connectivity	• Bi-directional, secure interface with EFB applications and/or ground applications • Software development kit provides data access to applications • FM data selected through configuration file
Guidance	• Lateral/vertical coupling to flight director or autopilot/auto-throttle
Navigation	• Optimal position and velocity estimation (Kalman filter) • Multi-sensor navigation using available sensors - GPS, INS, DME, ILS, TACAN • Auto-selects best solution from available sensors • Automated navigation ratio tuning
Communications Management	• Automated communications management with AOC and ATC - FANS 1/A, ATN Baseline 1 • All current comm protocols supported - ACARS, ATN
Advanced Airspace Features	• RNAV/RNP AR 0.1 • Required time of arrival (5 seconds) • Continuous descent approach • Performance based navigation • LP/LPV approach navigation

Arrivals Page

Legs Page

VNAV Climb Page

Map