

MODULAR FLIGHT DECK (aka MFD)

Introducing Precision Flight Controls (AKA PFC) **MFD**. For decades, Precision Flight Controls (PFC) has set the standard in professional flight simulation. The **MFD** is a High-Fidelity, FAA-Approved Advanced Aviation Training Device engineered specifically for basic and advanced training, instrument proficiency, and crew coordination.



Note: This simulator offers additional capabilities beyond our DCX MAX, including a Master Caution and Fire Suppression System, an additional Annunciator Panel, Pressurization Controls and an enhanced Center Flight Console. The system is available with either a GNS 530w and GNS 430w units or a Garmin GTN 750TXi / GTN 650TXi configuration.

Key Benefits

FAA-Approved AATD – Maximizes loggable training time under Parts 61 and 141

- True Single and Multi- Engine Training – Accurate Flight Model Performance
- All-Metal Cockpit Structure – Commercial-grade durability
- Low Cost of Ownership – Minimal maintenance and high dispatch reliability
- Designed to evolve with avionics and training requirements.
- Small Footprint

Flight Deck Realism

The MFD cockpit delivers true general aviation realism—replicating the look, feel, and layout pilots expect—building confidence and improving skill transfer from simulator to aircraft.

Integrated High-Resolution Visual System

Integrated High-Resolution visual system, including multi-channel and wide field-of-view (220 degree) configuration optimized for smooth performance and realistic visual cues. World-Wide Visuals and Navigation Aids are included. The **MFD** uses the X-Plane 12 Professional visual system, delivering advanced flight dynamics and improved atmospheric modeling. Custom scenery is available!



Instructor Operator Station (IOS)

The integrated Instructor Operator Station (IOS) allows instructors to manage training sessions through aircraft repositioning, insertion of system failures, environmental and weather control, and real-time monitoring of aircraft state and pilot inputs.



Lower Total Cost of Ownership

While some simulators cost less upfront, PFC focuses on **long-term value**:

- Fewer repairs
- Longer service life
- Upgradeable platforms (avionics, visuals, software)



Over time, schools consistently see **lower costs per training hour**.

Real Support from Real Aviation Professionals

Precision Flight Controls does not outsource support to call centers.

You get:

- Knowledgeable technicians
- Direct access to engineers when needed
- Ongoing training and operational support



Shown Above in MEL Configuration



Shown Above in Jet Configuration (Cessna 501 and 550)

QUALITY SIMULATION = POSITIVE TRAINING RESULTS



3-4 DOF Motion System:

Provides realistic pitch, roll, heave, and yaw effects utilizing advanced washout algorithms to deliver smooth, natural motion cueing while maintaining simulator envelope limits.

6 DOF Motion System:

Adds full-axis motion capability, providing pitch, roll, heave, yaw, surge, and sway for maximum realism and enhanced vestibular cueing during complex flight maneuvers, turbulence, and runway operations.

Motion and Cueing Effects Include:

Stall buffet, parasitic drag response, flap deployment cues, landing gear extension effects, turbulence modeling, runway surface texture feedback, engine vibration simulation, and realistic acceleration and deceleration forces and more.....

High Fidelity/Quality Interfaces



**Type Specific
Master Starter Panels
for
SEL, MEL, Turboprop and JET Aircraft**

Not All Master Starter Panels Are Shown

**Type Specific Throttle Quadrants
for
SEL, MEL, Turboprop and JET Aircraft**



Not All Throttle Quadrants Are Shown

Avionics & Systems Available

Standard Nav/Comms, Bendix King Style Autopilot, ALT- Pre-Selector, Flight Director

Advanced Avionics: options include G1000, G600Tx, GTN750Xi, GTN650Xi, GFC 700 Autopilot, KAP140. Garmin's GFC™ 600 Digital Autopilot, G430w, G530w software and replica panels with aircraft quality reliability and feel.

All systems are available as high-fidelity software implementations paired with replica panels, delivering aircraft-quality reliability, authentic tactile response, and long-term durability — while minimizing negative training transfer for more effective and realistic pilot training.



Our high-resolution instrument displays provide exceptional clarity, responsiveness, and remote-control capability for instructor-driven training scenarios. The display architecture is fully modular and interchangeable, allowing seamless integration with our precision-machined, bezeled instrument panels (as shown). Each panel configuration reflects the layout, functionality, and workflow commonly found in modern General Aviation aircraft, minimizing negative training transfer and reinforcing cockpit familiarity. All panels are constructed using high-quality, aviation-grade switches and components to ensure proper tactile feel, durability, and long service life. Backlit legends and annunciators are standard, enabling effective night and low-visibility training operations.





Garmin G1000 Avionics Retrofit
One Hundred % G1000 Software Accuracy

Features Include: Synthetic Vision, Safe Taxi, TCAS, SafeTaxi® and Runway Advisory and Alerting Features

While the competition offers aftermarket software and avionics, we offer Level D Fidelity by offering OEM Software and Hardware.



Actual G1000 Screen Capture



Custom Instrumentation

Interchangeable Avionics to Meet your Training Requirements



The MFD Avionics Comes Complete With:

Master Caution and Annunciator System

Fire Detection and Fire Suppression System

Altitude Pre-Selector

Audio Panel / Marker Beacons

PFC 530w

PFC 430w

or Option for the

PFC 750/50

Autopilot with Flight Director

DME

Transponder

ADF

GPS Panels Are Upgradable and Interchangeable

The key to true **quality** lies in the components we integrate into every system. We utilize **Grayhill encoders**, precision **Hall Effect sensors**, aircraft-grade switches and knobs, durable **Lexan and Mylar Decals**, and professionally manufactured, high-reliability PCBs.

Each element is selected not simply for appearance, but for **tactile fidelity, electrical integrity, and long-term durability**. The result is measurable reliability, consistent performance, and authentic control feedback.

Interchangeable Avionics to Meet your Training Requirements



Choose Your Avionics

Master Caution and Annunciator System

Fire Detection and Fire Suppression System

Altitude Pre-Selector

Audio Panel/Marker Beacons

1- GTN 750TXi

1- GTN 650TXi

Autopilot with Flight Director

DME

Transponder

ADF

The Garmin GTN 750TXi / GTN 650 TXi

Think of it as an **all-in-one flight management center** that combines:

- WAAS GPS navigation
- VHF NAV radio (VOR/LOC/ILS)
- COM radio
- Multi-Function Display (moving map, traffic, weather, charts)
- Flight planning and approach management

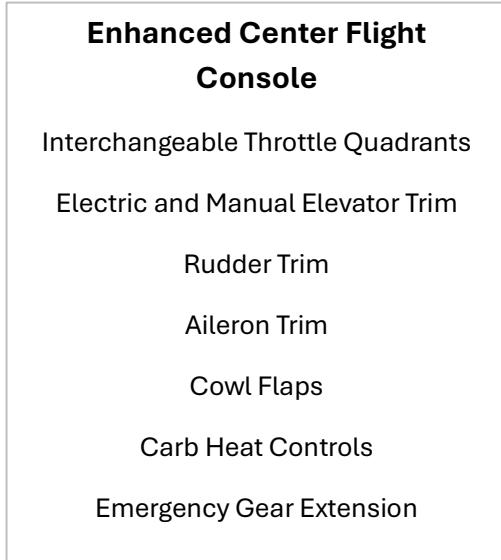
It is one of Garmin's flagship retrofit avionics for general aviation and turboprop aircraft.

A Higher Level of Realism = Better Training



Elevator trim is controlled through **Dual Trim Switches** mounted on each control yoke, allowing either pilot to command precise pitch trim inputs. Elevator Trim can also be adjusted manually via the **Mechanical Trim Wheel**, providing direct tactile feedback consistent with certified aircraft.

The trim system is fully integrated with the **Autopilot**, enabling automatic pitch trim compensation during coupled flight operations. This ensures proper servo load relief, smoother control response, and realistic system behavior during autopilot engagement and mode transitions.

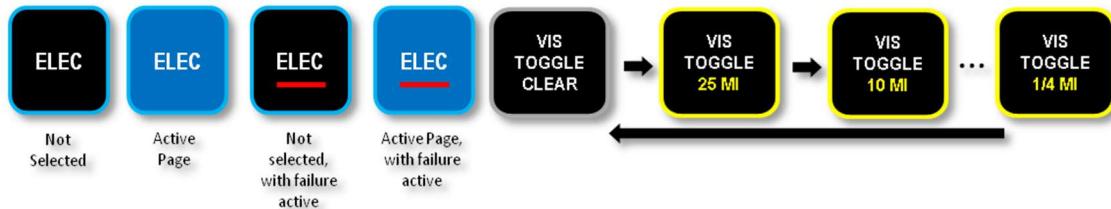
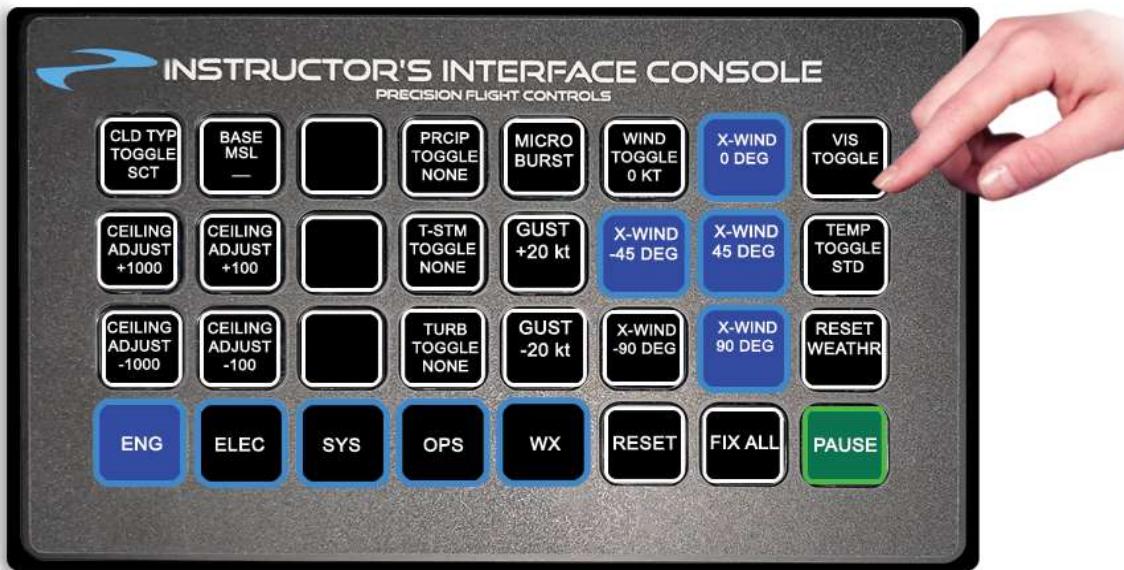


Geo Reference Integration (ForeFlight or Jeppesen)

Examples of Analog Bezeled Instrument Panels with Co-Located Encoders



Touch Based IOS Interface



The Instructor's Interface Console is plug and play with a simple USB connection.

You can immediately or pre-set a system failure(s), reposition the airplane, pause the simulation and make weather changes on the fly.

Each tactile button changes color depending on the situation, for example: If you choose to set an engine fire push the Engine Fire Button, (defaulted to green meaning there are no failures selected) once depressed, the button will turn Red indicating an Engine Fire has been initiated). You can reset the failure by pushing the button again.

Can be operated from Inside the Flightdeck or outside the Flightdeck at the Instructors Station

Stay Current and Maintain Proficiency

A complete training solution—from first solo to advanced proficiency.

Crafted with **precision engineering**, **real Garmin™ integration**, and a fully **FAA-compliant architecture**, our simulators deliver **uncompromising realism** and measurable **training value**.

Whether you are training a new pilot or refining advanced procedures, this is the platform professional's trust.

Built for Flight School Reality

Flight schools need equipment that works every day.

System Features:

- All-metal Cockpit Structure
- Commercial-grade Components
- High Dispatch Reliability
- Low Maintenance Requirements
- 3 Axis Control Loading
- OEM Garmin G1000 Software
- Optional 3-4 DOF or 6DOF Motion
- Many Options to fit your training



Aircraft Flight Models Available:

Cessna 172, 182, 206, 414 and 421, Cessna 501 and 550, Cessna 210, Beechcraft A36, B58, G36, G58, King Air C90, King Air B200, Piper Archer, Piper Arrow, Piper Seminole, Piper Seneca V, Piper Malibu, Piper Corvalis, Kodiak 100, Pilatus PC-12/45 and Caravan 208

Most Aircraft Are Available with Analog or G1000 Instrument Panels
Custom Aircraft Available Upon Request

We understand flight school pressures because we collaborate with them.

You are not just buying a simulator, you are investing in reliability, credibility, and training outcomes!

Why purchase from Precision Flight Controls?

For over 30 years Precision Flight Controls helped flight schools train better pilots, reduce operating costs, increase utilization, and protect long-term investments.

Pricing Starting as Low as:

\$175,000



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