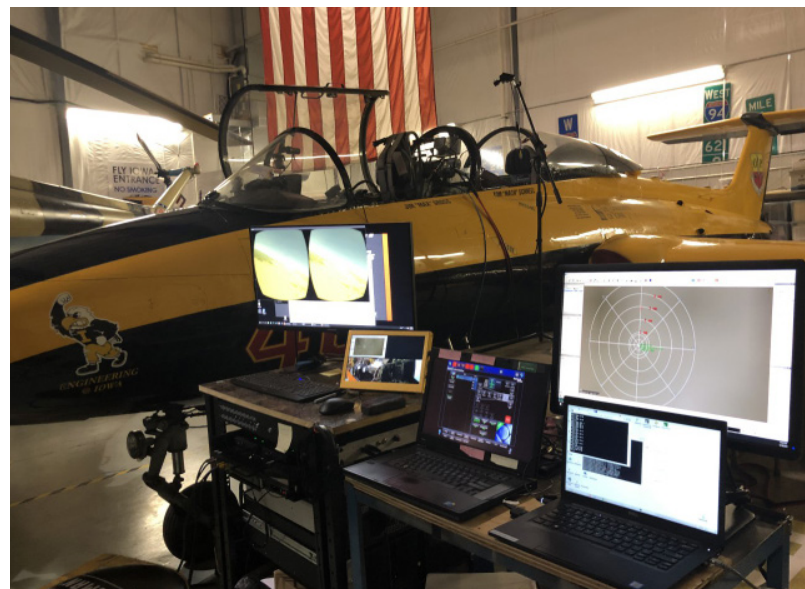




IOWA

Operator Performance Lab Simulator Capabilities

Simulated flight testing options include two dual purpose L-29s, the 737 Flight Deck Simulator, and the F-18 Simulator. Ability to safely test pilot workload and performance in military and commercial scenarios. A Live Virtual Constructive (LVC) simulation framework allows multiparticipant missions and interoperation with live aircraft.



IOWA | Technology
Institute

LET OPL SERVE YOUR FLIGHT TEST NEEDS

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FULL SERVICE FLIGHT TESTING

L-29 Aircraft-In-Loop Simulators

- Both OPL L-29s rigged for flight and sim
- Full LVC Capability
- Integrated with Coalescence mixed reality VR system
 - Can see the physical flight controls and displays simultaneously alongside simulated outside visuals
- Technical Specifications
 - Collins Core(TM) simulation software
 - Collins EP Image Generation software for outside visuals and HMD
 - Prepar3d simulation software
 - Full HOTAS controls
- Data Capabilities
 - HLA/DIS interoperability with live assets
 - Cognitive Assessment Tool Set (CATS) fully integrated
 - Records aircraft flight state, pilot physiological data, DIS traffic, eye tracking, head tracking, control inputs
 - Can record or stream data in real time
 - All data and video time-synced with linear time code
 - HD video recorders for flight displays, outside visuals, pilot-facing camera, and eye-tracking

737 Flight Deck Simulator

- 4 configurable glass flight displays
- 5-screen front-projected outside visuals
- Full flight controls
- Flight Management System (FMS)
- Mode Control Panel (MCP) tied into flight model
- Full flight data recorder in CATS
- Video recorders for all flight displays

Human Performance Assessment Fighter Simulator

- 3 HD Displays for outside visuals
- Full HOTAS control
- LVC capable
- [CATS](#)
- Core simulation software
- Collins EP Image Generation software for outside visuals

Authorities & Approvals

- FAA
- Current USAF/AFRL Public Aircraft Operations (PAO)
- Flight Test process for DoDD 5030.61/AWB-340 and GFR

