



Illuminating Flight Control Through Innovation.

## CONTROL PANEL ASSEMBLIES Flight Deck Controls

### Custom Solutions for Control Panel Assemblies.

IDD Aerospace is globally recognized for producing advanced human machine interface solutions with uniform lighting, sharp crisp tactile feedback, and revolutionary packing concepts that de-clutter pilot controls and streamline manufacturing. IDD Aerospace brings an understanding of the latest digital interfaces and busses, and we incorporate the latest microprocessors and software.

Engineering competencies in mechanical and lighting designs for the cockpit, combined with electrical and systems

engineering capabilities allow IDD Aerospace to take our customers' preliminary control panel designs and specifications and turn them into Human Machine Interface solutions. Combined with program management, IDD Aerospace projects for our customers allow us to operate as a trusted extension of our customers' engineering resources for HMI solutions. Together we augment Customers' development cost and time.

IDD Aerospace's solutions include complete control panel assemblies for both civil and military applications. We specialize in rapid prototyping, development of new flight decks as well as single control applications with automated processes.

Our Night Vision Goggle (NVG) and Night Vision Imaging System (NVIS) capabilities allow us to act as development partners for military aircraft applications and retrofit programs as well as military all-terrain-vehicle controls (M-ATV).

Contact an IDD Aerospace representative today to talk about your next project.



# CAPABILITIES

IDD Aerospace engineers use 3D modeling, finite element analysis and electronic simulation to design and develop a range of functionality into our panels and control panel assemblies - from electromechanical designs to digital interface specifications. Our core capabilities include development, test and compliance documentation to meet DO-160, DO-178B and DO-254 industry standards.

IDD Aerospace can help by providing complete design and manufacturing solutions for Control Panel Avionics at the LRU and subsystems levels. Whether you require basic electromechanical control panels or “digital” control panels IDD Aerospace provides superior products so that you can focus on the system level.

## Lighting Technologies

IDD Aerospace designs both Incandescent (Type V) and LED (Type VII) technologies for panel lighting. Our lighting uniformity, laser indicia, and computerized balancing ensures manufacturing consistency and part quality. We also have solutions for NVIS and NVG compliance.

## Electronic

- Analog circuit design, including a variety of unique lighting solutions
- Power conversion
- Embedded control

## Embedded Logic Systems

- Programmable Logic Devices (PLDs)
- Field Programmable Gate Arrays (FPGAs)
- Analog circuit design and simulation
- Power conversion
- High Density PCB design (BGA, surface mount)

## Embedded Software Systems

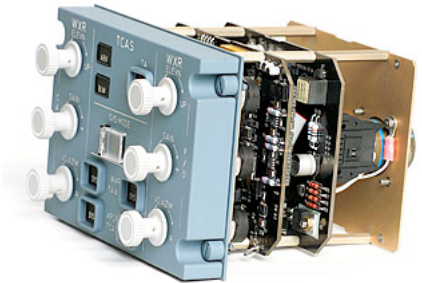
- C, C++, WinCE
- 8, 16, 32, and 64 bit micro-controllers
- Development to DO-178B, DO-254

## Industry Standard Busses and Protocols

- Ethernet, ARINC 429, CAN bus, FTP, RS-422, MIL-STD 1553, USB, SD/MMC

## NVG and NVIS

IDD Aerospace’s state-of-the-art engineering and manufacturing processes ensure superior NVIS-compatible lighting performance. NVIS Red and Green panel class A or B illumination can meet or exceed NVIS A or B performance requirements of MIL-L-85762A or MIL-STD-3009. This is achieved through the use of the latest LED or incandescent illumination technologies.



## IDD AEROSPACE

AIRCRAFT SYSTEMS

