Flight Control and Hydraulic Systems
Instructor: Wayne Stout

SAN DIEGO, CALIFORNIA
September 19–23, 2016
Monday–Thursday,
8:00 a.m.–4:00 p.m. and
Friday, 8:00 a.m.–11:30 a.m.
Course Number AA171130

CEUS
31.5 classroom hours
3.15 CEUs

COST $2,495
Includes instruction,
course materials,
refreshments and lunches.

EARN A CERTIFICATE
This course is part of the Certificate of Specialization in Aircraft Design.

SAN DIEGO, CALIFORNIA 785-864-5823 or toll-free in the U.S. 877-404-5823

Description
This course covers fundamental design issues, along with analysis and design methodologies for aerospace hydraulic and flight control systems. It includes design requirements, component description and operation, component and system math modeling, component sizing, system layout rationale, system sizing and airframe integration. The course emphasizes the fundamentals and necessary engineering tools (both analytical and otherwise) needed to understand and design aerospace hydraulic and flight control systems. Practical examples and actual systems are presented and discussed throughout the class.

Highlights
- Hydraulic flow fundamentals
- Hydraulic components operation and sizing (actuators, valves, regulators, pumps, motors, accumulators, etc.)
- Servovalve operation and sizing
- Power Control Units (PCUs) function and operation
- Hydraulic system design and airframe integration
- Mechanism fundamentals
- Flight control system design and airframe integration
- Flight control system failure modes and design considerations

Who should attend?
Designed for system- and component-level engineers and managers—including airframe, vendor, industry and government—and educators involved with aerospace mechanical systems.

“This course covers all major topics, design aspects and components pertinent to any practicing flight controls engineer. I highly recommend it.”
—Daniel Alberici, Gulfstream Aerospace