



WHITE EAGLE  
AEROSPACE



# Flight Control Design for Air Vehicles

MAKE YOUR CAREER SOAR

# Welcome

Thank you very much for your interest in White Eagle Aerospace. Since our founding in 2006, we have become a trusted leader in professional technical training and education throughout the aerospace industry.

As a fellow aerospace professional with over 50 years of industry experience, I understand the critical need for ongoing technical training in the workplace. White Eagle Aerospace was established in order to meet this pressing need.

For many years, we have recognized a looming crisis in the aerospace workforce. Throughout the industry, there is an increasingly bimodal distribution of aerospace professionals. One end of that distribution contains young, well trained, highly motivated, but very inexperienced professionals. The other end of that distribution involves individuals who have been around for a long time, have a great deal of experience and are on their way out of their chosen profession. This leaves a valley between the two.

Who is going to pass the baton to the upcoming generation of aerospace professionals? Where will they get their knowledge – knowledge that goes beyond academia and even graduate degrees? Much of what they need to know is not available in today's standard university curricula. What they need is:

- Specialized knowledge over a range of disciplines
- Knowledge provided by an experienced expert in the field
- Knowledge conveyed by a master instructor

White Eagle Aerospace recognizes these issues and provides effective solutions for your workforce. We are pleased to present you with this brochure, which outlines our Fundamentals of Compressible Flow (FCF) professional short course. Our team of industry experts and master instructors is dedicated to your success. Should you have any questions about our course catalog or desire more information on how we can help MAKE YOUR CAREER SOAR, please contact us today.

Best Regards,



John Terry White,  
Founder/Senior Technical Advisor  
White Eagle Aerospace



## About Our Company

**Whether you are new to the aerospace industry or have years of professional experience, we are your provider-of-choice for expert technical training.**

**Acquiring key knowledge, critical lessons-learned and technical know-how are crucial ingredients for success in today's complex and highly competitive aerospace market. Our nationally-acclaimed short courses cover a wide range of highly useful technical subjects. Each course is delivered by a subject matter expert who is also an expert technical instructor.**

**We offer you comprehensive technical training in essential topics, with minimal time away from work – all at a price that fits today's tight training budgets.**



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# Target Audience

**The Flight Control Design for Air Vehicles (FCD) technical short course is designed for the aerospace professional seeking a comprehensive training experience in flight control design principles and processes.**

This course is designed for professionals seeking to master flight control design processes and improve system performance in high-demand applications. Participants will benefit from detailed theoretical and practical training.

Flight control engineers, aerospace systems designers, UAV developers and missile systems engineers will particularly benefit from this unique training program. Course material equips participants with enhanced understanding and improved competency in the important realm of flight control design.

Delivered by a master instructor and subject matter expert with over 40 years of professional aerospace experience, this 3-day technical training course will provide participants with invaluable real-world knowledge, enhanced understanding, and improved competency in this key field of endeavor.

## Group Discounts

White Eagle Aerospace is dedicated to meeting your organization's professional training needs. In order to better serve you, we offer special group discounts rates and on-site training. If you have a group of 15 or more participants, we will bring our nationally acclaimed FGD short course to your location at a discounted rate. Please contact us today to learn how we can help MAKE YOUR ORGANIZATION SOAR!

## Who Will Benefit

- Flight Control Engineers
- Aerospace System Designers
- UAV Developers
- Missile Systems Engineers
- Propulsion Engineers
- Flight Test Engineers
- Flight Simulation Specialists
- Stability and Control Specialists
- Systems Engineers
- Program Managers
- College Students





# Course Description

**Flight Control Design for Air Vehicles (FCD) is a comprehensive technical short course that delves into the principles and processes of creating effective guidance and autopilot algorithms**

This course equips participants with the analytical tools needed to explore the fundamentals of control system design with an emphasis on air vehicle applications.

Participants will come to understand the methods for developing and optimizing flight control systems. They will also gain expertise in dynamics, guidance strategies, and flight software integration. Other classic topics include performance analysis, simulation, and testing methodologies.

This course blends foundational theory with hands-on application, ensuring participants acquire both knowledge and experience in flight control design.

Whether designing systems for military, commercial, or academic purposes, this course provides critical competencies for success.

## Key Course Topics

- **Basic Control System Theory Review**
- **Dynamics and Modeling**
- **Coordinate Frames**
- **Guidance Algorithms**
- **Autopilot Development**
- **Aerodynamic Models**
- **State Feedback and Pole Placement**
- **Flexible Structures in Air Vehicles**
- **Flight Software Integration**
- **Flight Testing Procedures**







# Information at a Glance

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This course equips participants with the analytical tools needed to explore the fundamentals of control system design with an emphasis on air vehicle applications.

Delivered by a master instructor and subject matter expert with over 40 years of professional aerospace experience, this 3-day intensive training course will provide participants with invaluable real-world knowledge, enhanced understanding and improved competency in this exciting field.

## Key Course Information

- **Instructor:** WEA Training Cadre
- **Duration:** 3 instructional days; 24 instructional hours.
- **Materials:** Shared folder access to all course materials
- **Cost (Online): \$995**
- **Cost (In Person): \$1,995**
- **Registration:** Please visit our website to view the most current Course Calendar. Select a course, then complete and submit the online registration form.
- **Group Discounts:** In order to better serve your organization, we offer special group discount rates and on-site training. For information, please contact our administration at [training@whiteeagleaerospace.com](mailto:training@whiteeagleaerospace.com).

## Contact White Eagle Aerospace

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