



Short Course Offering: *Introduction to Aircraft Systems: A Practical Perspective*

WHEN and WHERE: 25-27 Oct 2022, at the Hilton Garden Inn Warner Robins, 207 North Willie Lee Parkway, Warner Robins, GA. Class runs from 8:00 to 4:30 Tuesday and Wednesday, and from 8:00 to noon on Thursday.

- **COURSE DESCRIPTION and MATERIALS:** The aircraft is a collection of systems, a “collection” that must be successfully integrated for the aircraft to accomplish its mission. This 20-hour short course introduces the major systems—their purpose, how they operate (with theory), integration considerations, challenges, certification, and industry trends (including both military and civil designs). A “field trip” to a local air park or museum, where practical, will reinforce in-class discussions. With clear learning objectives and packed full of examples, the course follows the outline below:

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| <ul style="list-style-type: none">● Introduction and Setting the Stage● Powerplant – energy source for systems● Fluid-Based Systems<ul style="list-style-type: none">● Fuel● Hydraulics● Pneumatics● Environmental Systems● Takeoff and Landing Systems | } 1 st Day | <ul style="list-style-type: none">● Electrical Systems● Military Systems● Flight Control Systems● Tour (Where Practical) | } 2 nd Day |
| | | <ul style="list-style-type: none">● Avionics● Case Study/Group Project● Concluding Remarks | } 3 rd Day (AM only) |

Each student is provided a set of course notes and a copy of *Aviation Maintenance Technician Handbook-Airframe*, Volumes 1 and 2. 2.0 Continuing Education Units (CEUs) are awarded.

- **WHO SHOULD ATTEND:** Anyone who can benefit from an understanding of the various systems on an aircraft -- their function, how they operate, and how they are integrated with the aircraft as a whole. Interestingly, a study of aircraft systems is not traditionally incorporated into an undergraduate (or graduate-level) aeronautics curriculum. Although written for a technical audience, a building-block approach is used -- no prior knowledge is assumed. Here are a few comments from recent offerings:
 - “Great way to ‘connect the dots’ for those working in sectors of aviation.” – Columbia, South Carolina
 - “Helps me to better understand how my specific system works with the other areas of the aircraft and the demands it places on the system.” – Ogden, Utah
 - “It was practical aeronautics! Simple and covered material clearly. The personal experience of the instructors added so much depth to the material.” – Dayton, Ohio
 - “Good level of knowledge without getting bogged down with technical details, a good overview that helps understand the ‘big picture.’” – North Charleston, South Carolina
 - “Technical expertise and laid-back approach created a relaxed but informative environment. No complaints!” - Oklahoma City, Oklahoma
- **COURSE DIRECTOR:** Mr. John Norton is Practical Aeronautics’ Vice President for Aeronautics and is the author of the *Introduction to Aircraft Systems* course. He is a 1982 Graduate of the US Air Force Academy, retired Air Force pilot, and teaches for Embry-Riddle Aeronautical University and the National Test Pilot School. He has a BS in Aeronautical Engineering and a MS in Mechanical Engineering. John has over 8,200 flying hours, including 41 combat sorties—and served as a C-17 Operational Test pilot for four years. He is an active FAA Certified Flight Instructor in single/multi-engine airplanes and gliders.
- **COST, REGISTRATION, and CANCELLATION POLICY:** \$1450, (\$1400 if registered by October 3rd) \$1375 for Federal Government employees. Group discounts are available. For more information and to register, visit PracticalAero.com, contact JEllsworth@PracticalAero.com. Substitutions may be made at any time. Cancellations must be received two weeks prior to course start date and are subject to a \$50 fee. If you must cancel within the two-week period, and do not have a substitute, you may forfeit the entire fee. Total refunds are issued if the course is canceled.