Federal Aviation Administration

Aviation Safety Courses Available Through the FAA

Add These Training Courses to Your Aviation Safety Checklist:

- One-day aviation physiology workshop with altitude chamber, vertigo simulation, and night vision demonstration
- One-day post-crash survival workshop

FAA Aeromedical Training Programs for Civil Aviation Pilots

Physiological Training Course. The FAA Civil Aerospace Medical Institute (CAMI) offers a 1-day training course to familiarize U.S. civil aviation pilots and flight crews with the physiological and psychological stresses of flight.

Why Is Training Necessary? Pilots who are knowledgeable about physiological phenomena encountered in the aviation environment are better prepared to deal with such potentially fatal inflight events as:

- loss of cabin pressure
- hypoxia
- spatial disorientation
- trapped gas problems
- decompression sickness
- acceleration forces leading to gray-out, black-out, or even unconsciousness
- noise, vibration, and thermal stress
- self-imposed stresses that can magnify any of the above physiological events.

Flying Above 10,000 Feet? The U.S. Code of Federal Regulations, Title 14, Part 61.31 (g)(1-3) prescribes the knowledge and skill requirements for the various airman certificates and ratings. Several civil aviation airframes are capable of flight in the high-altitude environment. Pilots operating aircraft in the high-altitude environment must receive certain knowledge in the critical factors regarding the physiological aspects of flight operations.

For these reasons, CAMI offers physiological training for civil aviation pilots, FAA flight crews, and FAA aviation medical examiners at our facilities in Oklahoma City, Okla. In addition to the basic academic contents, this course offers practical demonstrations of rapid decompression (8,000 to 18,000 feet AGL), hypoxia (25,000 feet AGL), and visual acuity (18,000 feet AGL) in a hypobaric (altitude) chamber or the ability to experience hypoxia in a normobaric hypoxia training device that simulates altitude by reducing oxygen percentage wihout reducing atmospheric pressure. Also included in this course is a safe, practical demonstration of spatial disorientation in the General Aviation Spatial Disorientation Demonstrator.

Night Vision. Demonstrations and orientation to night vision devices.

Scheduling. To schedule your training, we will need the following information:

- Full Name
- Date of birth
- Mailing Address
- Daytime phone number
- Country of origin (if other than U.S.)

Applying. When you are assigned a training date, you will receive a confirmation letter. Bring the notification letter and your current medical certificate on the day of training.

Altitude chamber at the Civil Aerospace Medical Institute in Oklahoma City, Okla.

The Spatial Disorientation Simulator is used to demonstrate the effects of vertigo in a safe, ground-based environment. Students use this trainer as part of the physiology training course. It is also often seen at airshows and special aviation events across the U.S. Built for the Civil Aerospace Medical Institute, the trainer is awaiting your clearance to "take off" on a personal training mission to improve your vertigo awareness.

Restrictions. Participation in an altitude chamber flight will not be permitted if the applicant:

- does not hold a valid class I, II, or III medical certificate
- has an acute respiratory and/or systemic infection
- has a beard
- has been scuba diving within 24 hours
- has donated one unit (500 ml) of blood within 24 hours or donated more than one unit of blood within 72 hours of the scheduled training
- has consumed any alcoholic beverage within eight hours or is under the influence of alcohol
- is less than 18 years of age

Certificate. Upon completion of the course, you will receive a certificate noting that you have completed the FAA's Physiological Training course. This training does not satisfy all requirements for the high-altitude endorsement; no logbook annotation is made.

Basic Survival Skills for General Aviation Pilots. CAMI's Aerospace Medical Education Division offers a free survival course for general aviation pilots at its facilities in Oklahoma City, Okla. Topics included in this 8-hour introductory course:

- basic knowledge and skills to cope with common survival scenarios
- psychology of survival
- hotland and coldland environments
- signaling and fire starting methods
- how to easily assemble and use a personal survival kit

Survival practice in a realistic outdoors setting.

Practice sessions are conducted using a thermal chamber, a ditching tank, and an emergency smoke evacuation aircraft simulator (as available).

Information you can use from the FAA website

- Looking for an aviation medical examiner? See our on-line database of AMEs near you—
  www.faa.gov/pilots/amelocator/
- Unable to attend a course in person? View information about an informative, downloadable 18-part DVD series on aviation physiology/survival —
  www.faa.gov/pilots/training/airman_education/
- To view pilot safety brochures —
  www.faa.gov/pilots/safety/pilotsafetybrochures/
- Health information Just for the Health of Pilots —
  www.faa.gov/library/reports/medical/

Kansas State University pilots taking hypoxia training in the PROTE (portable reduced oxygen training enclosure).

PROTE chamber can accommodate five trainees for a ground-base excursion to 25,000 feet.

A training device is used to teach students to escape a simulated aircraft submersion.

Recommended personal survival kit items are discussed during the survival course.

The Airman Education team (L-R): Brad, Roger, D.J., Rogers (TeamLead), Eric, and J.R.

The Civil Aerospace Medical Institute is located in Oklahoma City, Oklahoma.

How to contact us to attend a physiology or survival class in Oklahoma City, Oklahoma

Voice mail (405) 954-4837 Fax (405) 954-2305

To find us on the Internet

For more information about our training courses and to view aviation survival tips, visit our Web site at the FAA Civil Aerospace Medical Institute—

www.faa.gov/pilots/training/airman_education/

(Click on either Basic Survival Training or Aerospace Physiology Training).

Airman Education personnel

Rogers V. Shaw, II (Team Leader)
Rogers.V.Shaw@faa.gov

J.R. Brown
Junior.Brown@faa.gov

Roger Storey
Roger.Storey@faa.gov

Bradley Tucker
Bradley.Tucker@faa.gov

Eric Simson
Eric.Simson@faa.gov

D.J. Demuth
Donald.Demuth@faa.gov

Medical Facts for Pilots

Publication AM-400-01/ (rev. 11/9/2015)

Civil Aerospace Medical Institute
AAM-400, P.O. Box 25082
Oklahoma City, OK 73125

Dedicated to the Memory of Larry "Bo" Boshers