

# 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),

feet AGL), and visual acuity (18,000 feet AGL) in a hypobaric (altitude) chamber, as well as a safe, practical demonstration of spatial disorientation in the General Aviation Spatial Disorientation Demonstrator.



Altitude Chamber at the Civil Aerospace Medical Institute in Oklahoma City.

Night Vision. Demonstrations and exposure to night vision devices.

For a Training Site Closer to You. The FAA's aviation physiology course is offered to civil aviation pilots at some U.S. Air Force and the U.S. Army physiological training facilities across the United States for a fee of \$50. Individuals wishing to attend an aviation physiology course can attend the training at these locations:

Andrews AFB, MD Beale AFB, CA

Brooks AFB, TX Columbus AFB, MS

Fairchild AFB, WA Ft. Rucker, AL

Holloman AFB, NM Langley AFB, VA

Peterson AFB, CO Randolph AFB, TX

Shaw AFB, SC Sheppard AFB, TX

Tyndall AFB, FL Vance AFB, OK

**Scheduling.** CAMI's Airman Education Programs obtains a current list of training dates available from each base and makes them available to those interested in the training. You can access these dates by calling (405) 954-4837.

To schedule the training, we need the following information:

- Full Name
- Date of birth
- Mailing Address
- Daytime phone number

- Date & class of FAA medical held
- Gender
- Primary aircraft type
- Country of origin (if other than U.S., include passport number)
- Driver's license number and issuing state
- If driving your vehicle to training, list vehicle year, make, model, color, tag number, and licensing state

**Applying.** When you are assigned a training date, you will receive an application and a confirmation letter. The application must be completed and mailed to the address provided no later that 14 days prior to the scheduled training, along with the fee (personal check or U.S. money order), made payable to the Federal Aviation Administration. Take the notification letter, along with your current medical certificate, to the base on the day of training. There is a course fee, which is non-refundable and is not transferable.

**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, students receive a certificate noting that they 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.

**Note:** While it is not necessary to be a pilot to attend the training, an FAA medical certificate of any class is required to participate in the altitude chamber flight.

**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

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

**Human Factors in Aviation**. Course is being developed and will be available soon.



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.



An instructor monitors and guides a spatial disorientation flight profile.

## Information you can use from the FAA Web site

- Looking for an aviation medical examiner? See our on-line database for 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/safety/programs\_initiatives/health/physiologyvideos/
- 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/

#### 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).

#### **Medical Facts for Pilots**

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#### 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 inquire about aviation physiology courses conducted at military facilities:

(405) 954-4837

## Other useful telephone numbers

• Aerospace Medical Certification Division

(405) 954-4821

• CAMI Library

(405) 954-4398

• Shipping Clerk

(405) 954-4831

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