



**Federal Aviation  
Administration**

## Physiological Training Courses for Civil Aviation Pilots

### ***PILOTS ARE WELCOME HERE***

#### **ADD THESE TRAINING COURSES TO YOUR AVIATION SAFETY CHECKLIST:**

- One-day aviation physiology course with altitude chamber and vertigo simulator demonstrations
- One-day survival course

### **PHYSIOLOGICAL TRAINING COURSE**

The FAA Civil Aerospace Medical Institute offers a 1-day training course to familiarize US civil aviation pilots and flight crews with the physiological and psychological stresses of flight.

### **BASIC SURVIVAL COURSE**

Topics include:

- 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

**FROM THE FEDERAL AVIATION  
ADMINISTRATION'S  
CIVIL AEROSPACE MEDICAL INSTITUTE IN  
OKLAHOMA CITY, OKLAHOMA**

## 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 US Code of Federal Regulations, Title 14, Part 61.31 (g)(2)(i), indicates that high altitude flight physiology training be attended by a person acting as a pilot in command of a pressurized airplane that has a service ceiling or maximum operating altitude, whichever is lower, above 25,000 feet MSL. Contact your local Flight Standards District Office (FSDO) to identify all training requirements to comply with this regulation.

For these reasons, the Civil Aerospace Medical Institute, 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, as well as a safe, practical demonstration of spatial disorientation in the General Aviation Spatial Disorientation Demonstrator.



Altitude chamber training session at CAMI.

## FOR A TRAINING SITE CLOSER TO YOU

The FAA's aviation physiology course is offered to civil aviation pilots at some US Air Force and the US Army physiological training facilities across the US. 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

Little Rock AFB, AR  
Moody AFB, GA  
Peterson AFB, CO  
Randolph AFB, TX  
Shaw AFB, SC  
Tyndall AFB, FL  
Vance AFB, OK



Locations of physiological training courses in the US

## **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
- Social Security Number
- Date of birth
- Mailing Address
- Daytime phone number
- Date & class of FAA medical held
- Gender
- Primary aircraft type
- Country of origin (if other than US, 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 notification letter. The application must be completed and mailed to the address provided no later than 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.

## **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.

## **ABOUT THE CAMI PHYSIOLOGICAL TRAINING STAFF**

The training team has extensive military and civilian experience in aviation physiology, survival, first aid, and SCUBA diving.

## **ALTITUDE CHAMBER 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



## 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

### 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

#### Larry Boshers

Larry.Boshers@faa.gov

#### Eric Simson

Eric.Simson@faa.gov

#### D.J. Demuth

Donald.Demuth@faa.gov

## OTHER USEFUL TELEPHONE NUMBERS

Aerospace Medical Certification Division  
(405) 954-4821

Kathy Wade, CAMI Librarian  
(405) 954-4398

Kathy.Wade@faa.gov

Gail Gentry, Shipping Clerk  
(405) 954-4831

Gail.Gentry@faa.gov

## To Find Us on the Internet

For more information about our training courses and to view aviation survival tips, visit the Civil Aerospace Medical's Web site—[www.cami.jccbi.gov/AAM-400/index.html](http://www.cami.jccbi.gov/AAM-400/index.html) (Click on either Global Survival Training or Physiological Training).

## Information you can use from the CAMI Web site

- ✓ Looking for an aviation medical examiner? See our on-line database for AMEs near you—  
<http://ame.cami.jccbi.gov/>
- ✓ Unable to attend a course in person? View information about an informative 13-part videotape series on aviation physiology—  
[www.cami.jccbi.gov/AAM-400/videoseries.html](http://www.cami.jccbi.gov/AAM-400/videoseries.html)
- ✓ To view pilot safety brochures—  
[www.cami.jccbi.gov/AAM-400A/400brochure.html](http://www.cami.jccbi.gov/AAM-400A/400brochure.html)
- ✓ Health information *Just for the Health of Pilots*—  
[www.cami.jccbi.gov/AAM-400A/FASMB/HOP/HOP\\_index.htm](http://www.cami.jccbi.gov/AAM-400A/FASMB/HOP/HOP_index.htm)

## Medical Facts for Pilots

Publication AM-400-01/1 (12/3/03)

Written by: Larry Boshers

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



**Spatial Disorientation Simulators** are used to demonstrate the effects of vertigo in a safe, ground-based environment. Students have access to trainers as part of the physiology training course. These trainers are often seen at air shows and special aviation events throughout the U.S. Built to specifications for the Civil Aerospace Medical Institute, the trainers are awaiting your clearance to “take off” on a personal training mission to improve your personal vertigo awareness and enhance aviation safety awareness.