

FAASTeam presents:

Helicopter Aerodynamics

Airfoils are used to create lift on airplanes, and the same is true for helicopters. On the helicopter, the airfoil is the rotor blade, and the spinning rotors create their own relative wind. At the airfoil level, much of aerodynamics is the same for both categories of aircraft, but when you look at the aerodynamics of the entire helicopter in flight substantial differences appear. Join us for a discussion of the aerodynamics associated with a helicopter in flight. Topics will include: induced downwash, translating tendency, gyroscopic precession, dissymmetry of lift, ETL, retreating blade stall, and transverse flow effect. We'll end with a brief discussion about the aerodynamics of autorotation - the ability of a helicopter to glide to the ground without engine power and touch down in a very small landing area. Interestingly, the material covered in the Private Pilot ground school course offered at San Carlos Flight Center is almost entirely aircraft unspecific. Although most of the students are going for an ASEL rating, nearly all of the content applies to both airplane pilots and helicopter pilots. The one noticeable difference is the lesson on aerodynamics. This free safety seminar contains the helicopter specific aerodynamics that supplements the Lesson #1 class of ground school - Airplanes and Aerodynamics. Presenters

Event Details

Wed, Jul 16, 2014 - 7:00 pm

San Carlos Flight Center

655 Skyway Rd

Suite 215

San Carlos, CA 94070



**Contact: San Carlos Flight Center
(650) 946-1700**

info@sancarlosflight.com

Select #: WP1556683

Representative Terry Fiala

for this seminar will be Paul Harris and Dan Dyer. Paul Harris is a helicopter CFI from the UK and has been instructing for just over 5 years and over 1,000 hours of dual instruction experience in Robinson R22 and R44 aircraft. Although he has training in management accounting, he prefers flying aircraft to flying spreadsheets. For the last four years he has been a SF Bay Area native instructing out of Golden Gate Helicopters in Hayward and Diamond Aviation in San Carlos. He recently joined San Carlos Flight Center to bring helicopter training to our members. Dan Dyer is Chief Pilot of San Carlos Flight Center and has been instructing for 11 years, first in helicopter and now in airplanes. He has almost 4,000 flight hours and is the Bay Area's local expert in crosswind landing instruction. For years, he has taught a highly regarded Private Pilot ground school in San Carlos and is known for finding simple and innovative ways to explain complex topics. He regularly speaks on advanced ground school topics, and was one of the founders of the Bay Area FlyOutGroup - a social club of over 350 pilots that meet for lunches, dinners, and other fun aerial adventures. San Carlos Flight Center was voted Best Flight School in the US in the 2013 AOPA Flight Training Excellence Awards. We are committed to

promoting safety in general aviation through our evening safety seminar programs. For more information about this and any of our weekly seminars, please visit <http://sancarlosflight.com/activities-and-events>.

Directions: Located in the Skyway Building, next to the Hiller Aviation Museum. Parking and entrance behind building. Suite 215 is upstairs in the northwest corner. Pilots who fly in should park in transient parking and call the Flight Center for a ride (650) 946-1700.

A message from the National FAASafety Manager

Invite a fellow pilot to the next WINGS Safety Seminar in your area.

Sign up for the FAA's safety services at www.FAASafety.gov!

The FAA Safety Team (FAASafety) is committed to providing equal access to this meeting/event for all participants. If you need alternative formats or services because of a disability, please communicate your request as soon as possible with the person in the "Contact Information" area of the meeting/event notice. Note that two weeks is usually required to arrange services.