

### Experimental Aircraft Association Chapter 1246 Volume 10, Issue 2 www.EAA1246.org

McKinney, Texas February, 2008

# **Geology Rocks!**

# **Collin County Community College**

# 7:00 PM, Pike Hall

# Collin County Community College, McKinney, Texas

### **Geology Rocks...even from the air!**

F lying offers us all a wonderful "bird's eye" view of the ground below. Do you ever wonder about the landscape beneath you as you fly? Are you intrigued by geologic features and wonder how they formed? Why do rivers sometimes flow in straight channels and sometimes wind madly along their course? Why don't we have mountains here in North Texas? Why are the beaches in Texas so flat while those along the Pacific Coast have towering cliffs? These questions and more will be answered at the February McKinney EAA meeting. Aileen Duc, a geologist and pilot (member of Texins Flying Club), will provide a brief synopsis of some geologic features you might see flying around the local area and further afield. She'll illustrate how these features formed and show examples in photos from her flying trips.

Aileen Duc has several degrees in geology from SUNY at Buffalo, Indiana University and University of South Carolina, respectively. Aileen was introduced to the joy of flying at USC in the late 70's. As a student of coastal geomorphology, Aileen often flew the coast of South Carolina to make observations of coastal features such a barrier islands, tidal inlets and tidal creeks. Her first 2 flying lessons were through the USC flying club with a fellow geology grad student as instructor. Between those first two lessons and now,



Aileen has raised three kids, worked as a geologist for ARCO, lived in England for 5 years, taught middle school science in Plano, and is now back in the oil industry as a consulting geology tech. It's taken 27 years for her to get back in the left seat, but she's enjoyed riding right seat beside her husband during all that time. With the kids grown and her husband Chaz a part-owner of a Mooney 231, Aileen is enjoying flying now more than ever.

# Testing Your Homebuilt Like a Pro!

Experimenter - 6/97

by Ben Owen

Most of us who fly believe that we are one of the best pilots we know. It is quite common among pilots to have a great deal of self-confidence (or we wouldn't be flying in the first place). Optimists can accomplish a great deal, but in test flying, it is best to temper your enthusiasm with caution.

When a person has not flown for some period of time, their flying skills degrade. Usually a person building an aircraft has very little time or finances to also continue flying and keeping as current as he/ she might wish. There is also frequently a very strong ''I built it, I am going to fly it'' attitude when we think of all the work that we have invested in our aircraft.

It is precisely out of consideration of "all that work you have invested" that leads us to recommend you take a very strong look at your ability to test fly your creation. It may be better to find someone who is a more current and active flyer to test the airplane that you have spent thousands of hours and a great amount of money building. It might be the best investment you make! For example, in a catastrophic situation, would your first thoughts be to save the aircraft . . . and all that money you've spent . . . or yourself? How many precious seconds would you spend weighing your options before you make the best decision?

Before flying your aircraft, we suggest that you contact an EAA Flight Advisor. An EAA Flight Advisor is a volunteer who can go over your logbook with you, discuss the flying characteristics of the airplane, and help you arrive at a sound decision as to whether or not you should test fly the airplane yourself or if someone more experienced should test fly it for you. A Flight Advisor does not "approve" your flying the aircraft and is not a test pilot; he or she just provides you with some impartial guidance.

EAA's Aviation Information Services and Government Programs offices have information on test flying. FAA has prepared an excellent Advisory Circular (AC 90-89, Amateur-Built Aircraft Test Flying Handbook) that will help those who are test flying or supervising the testing phase of a homebuilt aircraft. It is available from EAA's Information Services office (920/426-4821) at no charge. Two instructional videos are also available from EAA's Order Department (1-800-843-3612): First Flights in Your Homebuilt Aircraft details what you can expect on your first flight while First Flights in Your Ultralight/Light Plane focuses on flying a lighter recreational aircraft and their different handling characteristics.

In picking a test pilot to do your testing flying, you want to ask the same questions of the test pilot as the Flight Advisor would ask of you. A person who has a great deal of time in military or transport aircraft and very limited time in sport aircraft would not necessarily make the best test pilot for a new sport plane. You are looking for an individual with a great deal of varied experience in a multitude of different types of aircraft and who has recent experience in handling aircraft of the same type, weight and performance that you have built. You want a person with experience in taildragger flying for test flying in a taildragger; high performance time for test flying a high performance aircraft such as Glasair or Lancair; seaplane time for a seaplane; and ultralight or light plane time for flying the lighter aircraft.

The test pilot has some responsibilities to you to do the very best job. You, as the owner, also have some responsibilities to the test pilot.

Some insurance firms will cover your aircraft for the first ten takeoffs and landing or first ten hours if you work with an EAA Flight Advisor, but some firms will not otherwise cover this period.

Working with a Flight Advisor is best done with an open attitude, not one of just covering yourself for insurance during that period. Any insurance company will want to know the qualifications of your proposed test pilot and whether or not they have worked with a Flight Advisor, as any pilots who fly the aircraft will have to be approved by the insurance company.

The test pilot who is flying your aircraft should be covered by insurance for any damage done to the aircraft and also any personal injury. Some firms will provide life insurance and AD&D insurance for the initial test flying of an experimental amateurbuilt aircraft. You may contact EAA's Insurance Department at 920/426-4822 for the names of these companies. A prudent owner might want to purchase this insurance on his pilot, and a prudent test pilot would want this type of insurance as well.

There have been cases where people have test flown aircraft for others, caused damage to the aircraft and have been held responsible by the owner of the aircraft for the damage. In some cases the owner of an aircraft has been held responsible for the injury or death of a test pilot of an aircraft they owned and built. It is best to cover all events in advance and not to take a casual attitude regarding either the owner's or test pilot's responsibilities. Since the startup of the EAA Flight Advisor program, the number of serious accidents happening on first and second flights has been dramatically reduced. For this reason, every builder/owner of an experimental aircraft, or new owner of an experimental aircraft, really needs to take a hard look at his/her personal capacity to fly the airplane . . and the responsibilities to and from anyone else who test flies it.

For more information about licensing a homebuilt in the experimental amateur-built category, contact EAA's Aviation Information Services Office at 920/426-4821. For more information about EAA's Flight Advisor Program, contact EAA Safety Programs Office at 920/426-6864.

### Flight Instruction in an Experimental/ Amateur-Built Aircraft

Am I allowed to receive flight Instruction in an Experimental /Amateur -Built aircraft?

The short answer is yes, you can receive flight training in an amateur-built aircraft. However, there are some issues that may limit this opportunity.

First, the aircraft in question must have already completed it's flight test phase (called "phase one operations"). Phase one is usually either the first 25 or 40 hours of operation, depending on what engine/ prop combination is installed. During phase one operations, only the pilot can be in the aircraft, so no dual flight instruction could take place in the aircraft during this time. Assuming that the aircraft has completed phase one operations and has been moved into phase two (normal) operations, flight training in the aircraft would be allowed. The next issue is finding a CFI (certified flight instructor) who is willing to provide primary training in the homebuilt aircraft in question. Not all CFI's are willing to give instruction in homebuilt aircraft.

Another issue is whether the aircraft in question meets all the requirements of training for the license or rating sought. For private pilot certificates and above, there are requirements for night and instrument training, as well as radio navigation, so the aircraft used for training must be equipped for these operations. If the amateur-built aircraft does not have the appropriate equipment, a second aircraft will have to be used for those portions of the training. Splitting your training between two aircraft will certainly add additional hours to the flight training but will provide the added benefit of experiencing more than one aircraft's flight characteristics.

The next thing to consider is the practical test

(checkride). This is governed by 14 CFR 61.45, which states that the applicant must present a standard, limited, or primary category aircraft for the practical test. However, this regulation also allows the Designated Pilot Examiner (DPE) the discretion to administer the test in an Experimental-Amateur Built aircraft. Some DPE's are not willing to give a practical test in an amateur-built aircraft, so you may have to find an aircraft acceptable to the DPE in which to take your checkride. Also, the aircraft used for the checkride must be equipped to perform all the tasks listed in the Practical Test Standards for the license or rating sought. Depending on the level of equipment in your homebuilt, you may end up taking your checkride in the aircraft in which you did your night and instrument training

As a practical matter, you will only be able to do your primary training in a homebuilt that you own. This is due to the fact that the operating limitations (which are issued as a part of the aircraft's airworthiness certificate) for a homebuilt prohibit the carriage of persons or property for compensation or hire. This means that the owner of a homebuilt aircraft cannot rent the aircraft to you, as that would constitute carrying a person for compensation or hire.

Finally, you need to make sure you can properly insure the aircraft for primary training (including solo). Depending on the aircraft, insurance may not be available for an owner that is not yet a certificated pilot. Even if you can acquire aircraft insurance as a student pilot, this may or may not be costeffective. You'll have to balance the cost of this insurance against the cost of renting an available training aircraft from your local FBO (Fixed Base Operator). Note that even if you rent an aircraft from an FBO it is strongly recommend that you carry non-owner insurance (often called "renter's insurance") to protect you in the event of an accident. The insurance premium for your homebuilt will probably drop considerably once you get your pilot certificate and a few hours of experience in your logbook.

Flying is so many parts skill, so many parts planning, so many parts maintenance, and so many parts luck. The trick is to reduce the luck by increasing the others.

David L. Baker

A 10 cent fuse will protect itself by destroying the \$2,000 radio to which it is attached.

— Robert Livingston, 'Flying The Aeronca.

### Web Site of the Month

http://gearsdown.com/index.php

or

gearsdown.com

Gears Down: Fly! is a web site for pilots and aviation enthusiasts.

It provides tools to evaluate the big sky, and resources to point you in the right direction. <u>Tools</u>, like aeronautical charts, airspace information, flight planning, and weather briefing, can be used to browse destinations, navigate routes and check weather. <u>Resources</u>, like a gallery of weather maps, and a library of links to sources of information, can ultimately be used to carry out critical decision making. Gears Down: Fly! is all about flying. If this is your first time here you may want to start with <u>Help</u>, otherwise, see what's new in <u>About</u>. Or, dive right in with "Quick Start".

**B** eing part of EAA Chapter 1246 allows you to associate with some of the greatest people on earth. You can be part of a close family of aviation enthusiasts and participate in many rewarding adventures and events. All you need to do is renew your annual membership of \$20.

Your support and participation is what makes our chapter great. The dues you pay help finance the special events that we have every year and allow us to afford our monthly meeting place at Collin County Community College.

If you have not already done so, please send \$20 to renew your membership in EAA Chapter 1246. To make it easier, you can now pay online at: <u>http://www.eaa1246.org/</u> <u>payyourdues.asp</u>

Do not spin this aircraft. If the aircraft does enter a spin it will return to earth without further attention on the part of the aeronaut.

- first handbook issued with the Curtis-Wright flyer

AGENDA EAA Chapter 1246

Officer's Meeting January 16, 2008

7:30 p.m.

#### **Annual reports**

Annual Report being filed with TX Sec. Of State

**Future speakers** 

March Movie is "The Great Circle Air Safari"

February Speaker is "Aileen Duc will discuss Geology from the air"

**Calendar Updates** 

Jan 19 Fly-Out to Stevenville for Heartache BBQ

Feb 16 Fly-Out to Lancaster

April Fish Fry discussed

Status of finances

Year ended with \$2783 in the bank

PayPal increasingly being used for membership payments

\$190 donated to Samaritan Inn

Reimbursements

Several were made

Newsletter

Possible column discussed

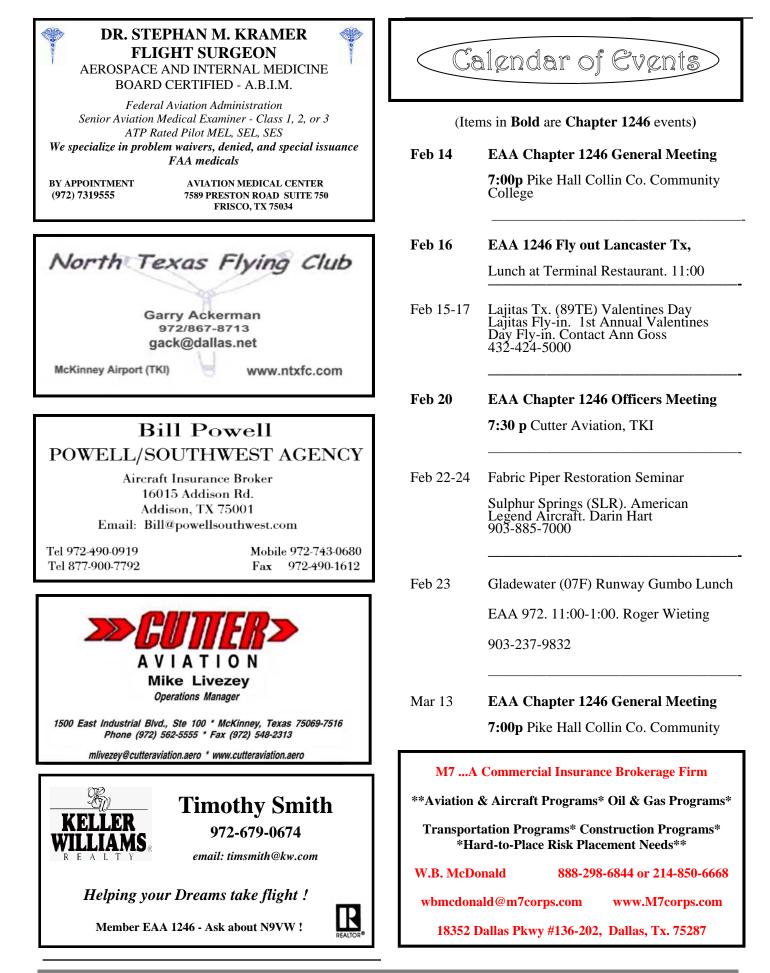
Web site

Possible functionality discussed

Other?

Info. case discussed

Andy voted in as Sue's replacement as Treasurer



February 2008

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2250 Purdue Drive Lucas, Texas 75002



McKinney EAA Chapter 1246 Membership Application or Renewal				
New Member: or Renewal: Name:			Membership dues are \$20 per year due Jan 1. Make checks payable to <b>EAA Chapter 1246.</b> Mail applications to: Sue Cowan 2250 Purdue Dr. Lucas, Tx 75002 * National EAA membership required. National EAA Offices:	
Address:				
City:	State:	Zip:	<ul> <li>EAA Aviation Center</li> <li>P.O.Box 3086</li> <li>Oshkosh, WI 54903-3086</li> </ul>	
Phone: Wk ()	Hm ( )		Chapter Officers: Bob Rogers (President) President@EAA1246.org	972-761-2280
E-Mail Address:			James Redmon (Vice Presider VicePres@EAA1246.org	nt)972-335-9474 972-335-0516
* EAA Number:	* Exp. Date:		<ul> <li>Russ Henson (Secretary) Secretary@EAA1246.org Andy Cowan (Treasurer)</li> </ul>	972-535-0516
Pilot/A&P Rating:			Treasurer@EAA1246.org Chapter Volunteers: Timothy Smith (Newsltr)	972-679-0674
Notes/Comments/Projects:			scooterpilot028@yahoo.con Dick Stephens (Flight Advsr) Dave Bertram (Flight Advsr) Mike Pollock (Tech Cnslr) Ann Asberry (member Profile) Chuck Godber (Bulletin Bd) David Godber (Bulletin Bd) Jim Smith (Fly-Out Co- ordinator / webmaster)	972-517-1647 972-562-5967 972-530-8400