

Seeking Cloud Dancer Jenny

I'm trying to locate anyone who was involved in or has knowledge of a project started but not completed by a group at the Delaware, Ohio, airport nearly 30 years ago. A small company called Cloud Dancer made a legal ultralight version of the Jenny. I had one.

I had occasion to visit the factory, and they had an 80-percent scale model of a two-place Jenny nearly completed. It was a great-looking aircraft.

A short time later, I received a call from the head of that organization. He said they were going out of business; the investors had seized all their assets. I assume the two-place prototype was included.

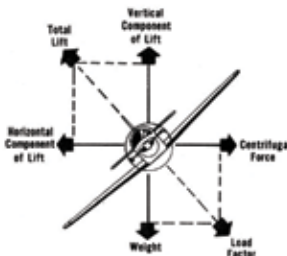
I've lost track of the original designer and others who might have knowledge of this airplane. If anyone has information about any plans or parts that may still exist, I'd appreciate a call. Check out my website, www.NavalAirEstates.com, for pictures of the ultralight Jenny and other aircraft designed by Lew Parsley.

Thanks to anyone that can help me with this quest.

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Another Response for Don Berk

Mac Knapp's force diagram ("Adverse Yaw and Rudder," January) brings up yet another question: Why should the aircraft turn just because we have it rolled?



It's because Mac's horizontal component of lift, acting at the center or

gravity (CG), pulls the aircraft in the direction in which it is rolled. Since the aerodynamic centers of the aircraft, governed mainly by the stabilizer and fin, are aft of the CG, the aircraft is forced to yaw and will do so in the desired direction. As the old saw has it, "The feathers have to be at the back of the arrow." If you were to tie a string to the arrow's CG, holding the end of the string at a distance, and launch the arrow, it too would travel in a circle.

We know that in a perfectly designed aircraft the rudder need have nothing to do with turning. In less perfectly designed aircraft, "The rudder is there to correct the errors of the designer," in the rather unkind words of Wolfgang Langewiesche (*Stick and Rudder*, 1944).

Aircraft can be turned with ailerons alone or, if there is dihedral, with rudder alone as you can demonstrate in your own aircraft any time you like. Some aircraft respond politely, but some hate it and will let you know!

The Frise aileron is shaped and hinged to introduce extra drag on the down-going wing. This offsets the extra drag of the up-going wing and can pretty well eliminate adverse yaw. So-called "geared" ailerons don't use gears but do go farther up than down, which has the same effect.

Frank Gue, B.Sc., MBA, P.Eng.

Light Sport Call Signs

I was just reading my weekly e-mail newsletter (*e-Hotline*), which I enjoy very much, and noticed the question from the person flying an Allegro 2000 and talking to air traffic control (ATC)

My thought is there are basically four types of light-sport aircraft: T-tail high wing, T-tail low wing, high wing, and low wing. I believe we can use this as our initial call to ATC. The Allegro 2000 and similar airplanes would be Sport High T; Flight Design CTs and similar would be called Sport High; and Zodiac XLs and Tecnam Sierras and others could be called Sport Low.

We and ATC should know from this information what we are looking for in traffic.

Donato A. Martino

Donato, an international team that includes the FAA determines the proper ATC call signs for various aircraft including LSA. Team members are aware of the many LSA that have been introduced into the marketplace over the last two years and are in the long process of developing call signs for the aircraft, just as they have for the new Cirrus, Columbia, and Diamond aircraft in recent years. There is a very specific and internationally agreed upon process for this nomenclature, and this group is in the process of determining what the appropriate call signs will be.—Earl Lawrence, EAA Vice President of Industry and Regulatory Affairs

About Fuel Contamination

Congratulations to Dave Matheny for his article "There's a Monster in My Tank," September 2006, regarding the cleanliness of fuel we put into our tanks. Better designed fuel systems could have prevented the problems. As a mechanical engineer with 30 years of fuel system design experience, I offer this:

Fuel starvation caused by contaminants is probably far more common than we would like to admit. A well-designed fuel system provides for the containment and removal of contaminants on a regular basis to supply clean fuel to the engine. The following is a quick look at the design features that should be included in the fuel system of any aircraft, large or small.

Each tank should have a sump drain located at the low point in each tank with the airplane on a level ramp. The ASTM standard for light-sport aircraft (F2245, Paragraph 7.3.7) does not require a sump drain in the fuel tank. The fuel outlet (engine feed line) should not be flush with the bottom of the tank. It should be elevated slightly, resulting in a small volume for the collection of contaminants to be removed through the sump drain

valve. Water and solid contaminants will settle during ground storage or flight and be removed through the sump drain valve. This is the first line of defense in preventing contaminants from entering the engine feed system. This is a requirement in larger military and commercial aircraft; 0.25 percent of your tank volume is a good ballpark quantity. This is called unpumpable fuel.

Avoid finger screens at the tank outlet. They cannot be readily inspected during preflight. They will, over time, plug up from a normal degree of contaminants. These are rarely removed and cleaned during an annual inspection, which may not be in time.

The engine feed line between the tank and engine is addressed in ASTM F2245, Paragraph 7.3.1. "A fuel strainer or filter accessible for cleaning and replacement must be included in the system." An inline, all-metal filter must not be used. This cannot be inspected during preflight nor can a finger screen. Nonmetallic inline fuel filters are available but must be located aft of the firewall. However, these are seldom easy to remove and clean or replace during preflight. Only a gascolator allows easy collection and removal of contaminants during preflight. This is the last line of defense in preventing contaminants from entering the engine fuel system.

What does all this mean if your fuel system does not meet these requirements? If your tank does not have a sump drain, install a large gascolator in your engine feed line. In this situation, the engine feed line should probably be flush with the bottom of the fuel tank. A high-quality gascolator with a replaceable filter element is better than an inline filter. A well-designed fuel system is not an excuse for using unfiltered or unclean fuel. A fuel system should only need periodic cleaning of the filter or gascolator along with regular sumping of the tank and gascolator.

Agree with Don

I would like to "ditto" the Mem-

bers' Forum letter by Don Zank in the February issue. I have been more than a little disappointed in the articles month after month of the so-called "affordable" sport aircraft coming onto the market. I can't believe the average person wanting to learn how to fly can be going to spend \$50,000 to \$100,000 on a new sport plane.

The majority of the guys and gals involved with our local clubs are looking at planes \$20,000 or less. One of the main selling points discussed in the same breath with the sport pilot concept is how it will make flying financially possible for the average person. I, too, would like to see more in EAA Sport Pilot about truly affordable options. And as Mr. Zank stated, there are reasonably priced options available. The EAA has done a tremendous job helping to make the sport pilot dream a reality, and the magazine could and should be the platform to bring the average dreamer and the affordable plane together.

Walt Harris
EAA 238886

I enjoyed the article "Need less expensive light sport aircraft" by Don Zank. Amen! I have owned some 29 experimental aircraft and helped to build only one. I will be 71 in April, am a private pilot and have owned over 70 total airplanes...so far.

I got my private (certificate) on the G.I. Bill, soloed in 1957, purchased my first airplane—a Piper J-3—joined the EAA in 1959. In 1961, I lost my brother and his family in an accident in a 1953 Piper Tri-Pacer. I quit flying until 1966 and rejoined EAA sometime later. I've been flying ever since. I presently own a Wag Aero Cuby that I hangar on my 2,000-foot sod strip, about one mile from the Mississippi River.

Low and slow is still my type of flying; lots of stories could be told. But to get back to the article, the cost of these light sport planes are too high to try to accomplish what it was designed for—getting younger pilots more interested and older pilots like myself re-interested. \$60,000 to 70,000 is way out of range for the young or retired. Don's suggestion was great. I, too, think there are still a lot of experi-

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mental aircraft sitting in the back of hangars, garages, and barns that can be bought for less than \$20,000. I would urge the owners of these to advertise them for sale in the many EAA magazines. Let the future pilots know there is a cheaper way to get into flying. The hardest part of becoming a sport pilot will not be deciding which aircraft to choose, but rather being able to afford one on your income or budget.

Thanks again, Don, very good article.

Bill Kelley
EAA 532634

Book News

The Pietenpol Story by Chet Peek
Reviewed by William J. Schlapman

Chet Peek's newest book, *The Pietenpol Story*, is to my knowledge the first and only book available on the life of B.H. "Bernie" Pietenpol and the Pietenpol Air Camper. It was an airplane of modest cost and good reliability during the Great Depression of the 1930s when flying was beyond the reach of most young people. (The Air Camper remains a popular homebuilt today.)

The key that Bernie recognized was the need for a suitable but reasonable cost engine to power a plane for the entry level of flying. When Henry Ford introduced the Model A car in 1928, its engine became the answer to Bernie's search. Chet's book provides an informative and exciting picture of the period,

so totally different from today. Another factor that enabled Bernie to achieve his goal was the basic wood construction he chose, again for cost and because builders were familiar with working with wood.

Chet's book includes a firsthand report on his personal efforts in building a Pietenpol Air Camper using the Model A engine—a project he interrupted to write the book. He offers an interesting explanation of how the plane was named and how strongly the identity carries worldwide.

During the post World War II era, new generations of automobiles (and engines) were developed. In the Chevrolet Corvair air-cooled engine Bernie again recognized a special opportunity and in 1960 adapted the six-cylinder engine to the Air Camper, offering more horsepower at less weight. That story is detailed in the chapter on Corvair power.

Entertaining, of reference quality, and historically educational, *The Pietenpol Story* is well worth reading; for those who love airplane history, it's a must have.

The Pietenpol Story is available through EAA. Call EAA Membership Services, 800-564-6322, and request catalog number F08070. The cost is \$24.95 plus shipping and handling.

Finders Keepers

EAAer Pens Book, Donates Proceeds to EAA Scholarships

Al Vandegriff, a longtime EAAer and Chapter 833 Young Eagles supporter, published a book entitled *Finders Keepers* that tells the fictional story of pilot Padriagh Carmody. After landing on a deserted air force field in the Arizona desert because of bad weather, Carmody has a series of adventures when a small jet crashes there soon after his own unintended arrival.

Al is contributing a portion of the profits from his book to EAA scholarships for "fashioning and fanning the flames of the passion for building and flying experimental aircraft."

The book is available from Desert Willow Press, P.O. Box 715, Carlsbad, NM 88221; special discounts are offered for bulk purchases. Al may be contacted at avandegriff@warpedriveonline.com.

