



CHAPTER
613

May 2003

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Culp's Special Takes To The Air!!



**Pilot Zoltan Veres puts the Culp's Special through it's paces at
Franklin County Airport**

Views and News

By Bill Morelli

On the cover is a Culp's Special biplane that was built at Gesoco at FSO.

I missed its first flight but was able to see the second. The pilot and owner, Zoltan Veres of Hungary is the 2001 European aerobatic champion.

The aircraft sports a 400 hp M-14P radial engine and a large three bladed prop. After the test flights, the aircraft was shipped back to Hungary for final painting and preparation for the upcoming aerobatic season.

See page 8 for some additional photos.

If you thought building an aircraft was difficult, check out the article submitted by George Coy on page 9. This was from a book published in early 1900's!!

April Minutes

By Marge Butterfield

There was a big turnout for the April 27th pancake breakfast at the Franklin County Airport. **Donald Taylor** went all out to make the last pancake breakfast of the season a great success. An Easter theme for the decorations included jellybeans at each table and a marshmallow Easter bunny on each plate. In addition to the standard fare of pancakes, there were also eggs cooked to order and Donald even baked a ham. Needless to say, no one went away hungry! Donald's efforts in preparing for the pancake breakfasts at Franklin County Airport have not gone by unnoticed and have been appreciated by all members. The meeting was called to order by President, **Terry Griffin**, at 10:10 a.m. Following are the minutes of the meeting:

- Thanks were extended to **Donald Taylor** and Joe Gardner for setting up for the breakfast.

- The cooks, **Steve Couzelis**, **Bill Morelli** and **Donald Taylor** received a round of applause for the cooking such a fine breakfast.



- The Secretary's Minutes were accepted as published in the April newsletter.
- The Treasurer's Report was presented by **Dave Harrison**, which covered the period from March 16, 2003 through April 27, 2003. There is a current balance of \$10,229.28 in the general account and a balance of \$683.35 in the *Edmando Roberti Scholarship Fund*. The present value of the Mary J. McGrath Scholarship Fund is \$22,969.27. The Treasurer's Report was accepted as presented.



- **John Butterfield** announced that he would have a list of summer flyouts for this month's newsletter. **Moe Boisvert** said that Marcy, NY is a great place for a flyout. It has a grass strip about as long as the grass strip at the Shelburne

Airport. There is a great restaurant within 20 minutes walking distance from the airport.

- **Moe Boisvert** announced that he has room for one person in his plane for anyone needing a ride to a flyout. You can call Moe at 863-3583 or e-mail him at mnboisvert@netscape.net.
- **John and Marge Butterfield** also have room for two people. See the backpage of the newsletter for their phone number or e-mail address. Does anyone else have room to bring another member to a flyout? If so, let our newsletter editor, **Bill Morelli**, know so that he can publish it in the newsletter.
- The EAA Air Academy Scholarship was awarded to Lea Sporzynski of South Burlington. Lea is 15 years old and has previously attended ACE Camp and has had a Young Eagle ride. We are still waiting to hear if we will have recipients for the *Edmando Roberti Scholarship* (you are eligible for this scholarship if you have soloed but do not have your private) and the Mary J. McGrath Scholarship (you are eligible for this scholarship if you already have your private, but want to get your CFI rating). The deadline for these two scholarships is May 15th. If you know of anyone who would like to apply for these scholarships, please contact **John Elgert** or **Terry Griffin**. Their phone numbers and e-mail addresses are on the backpage of the newsletter.
- **Mary Harrison** thanked everyone for the get-well wishes, cards and flowers. (We were all glad to see Mary up and about again!)
- **George Coy** brought up the idea of possibly building an EAA hangar which would have specialty tools for those members building a homebuilt or restoring an airplane. **Mike Chrastina** suggested that a donation could be made by the member for using a specialty tool, which could be used towards purchasing another needed tool. **Terry Griffin** advised that we should have committees to work on this to see what it would cost to build a hangar. Jim Beams said he has tools he could donate and he even volunteered to spearhead the hangar project. **Bob Hall** also volunteered to help.
- **Moe Boisvert** announced that he has a drill jig for drilling attachment holes for 2-1/4" and 3-1/8" aircraft instruments for any member who

would like to borrow it. You can contact Moe at 863-3583 or e-mail him at mnboisvert@netscape.net.

- **Donald Taylor** brought up the subject of the Chapter purchasing four 6-foot long tables and 24 folding chairs. It was voted that the Chapter spend up to \$500.00 for these tables and chairs.
- **Bill Yendrzkeski** advised that he has two or three sets of stainless steel flatware he could donate to the Chapter.
- Young Eagles Coordinator, **Donald Taylor**, announced that we have given 9 Young Eagle rides so far. The confirmed Young Eagles Rallies are May 29th at Dean Memorial Airport in Haverill, NH, June 14th at the Franklin County Airport and Wednesday, June 25th at the Springfield airport. So far the pilots who have volunteered for all three events are **Bill Yendrzkeski**, **Donald Taylor** and **John Butterfield**. **Bill Morelli** is available for June 14th and June 25th and **Steve Couzelis** is available for June 25th. We will need more pilots and of course the ever important ground crew for the paperwork. If you can volunteer for these events please contact either **Donald Taylor** or **Marge Butterfield**. See backpage of the newsletter for e-mail and telephone numbers.
- **John Butterfield** informed the group that he recently attended a meeting in Plattsburgh, NY on the development of Plattsburgh International Airport (the former Plattsburgh Airbase). Within two years Clinton County Airport will close and all aviation activities will be consolidated at Plattsburgh International.
- The winner of the 50/50 raffle was none other than **Bill Yendrzkeski**. Bill won \$17.50 and he donated it to the Chapter. Thanks Bill!

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***** New Members*****

We have two new members to our Chapter: **Phil Beaulieu** of South Hero. Phil has his private pilot's license and is interested in warbirds and aerobatics. He also enjoys working on airplanes. **Bohdan Lawruk** is a retired mathematician who lives in Canada. He has his private pilot's license and owns a Piper L4J which is based at the Franklin County Airport. Bohdan also is interested in homebuilts, warbirds and aerobatics.

Welcome to EAA Chapter 613!!



YOUNG EAGLES

by
Donald Taylor

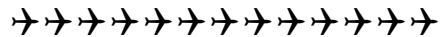
We have 3 pilots reporting Young Eagle flights so far this year.

George Godin	2
Donald Taylor	16
George Coy	1

Ergonomic Incorrectness

At some time in our aviation lives, we have all tried to push an airplane backward by ourselves. You know the drill: one hand on the prop (pushing as hard as you can), while the other hand reaches down to grab the towbar and steer the nosewheel. Did you ever think about how your body is positioned during this maneuver? At high-thrust configuration your feet are stretched out behind you, your pushing hand is above your shoulders, and your other hand is pointing down at the towbar. If your feet suddenly slip, your body goes down, leaving your outstretched prop pushing hand to catch your falling weight. Exceeding the design load of your shoulder can result in a very painful injury. Please think about his next time that you decide to play the role of human airplane tug. With X-rays, doctor visits and physical therapy, you could almost justify the purchase of that \$700 battery powered towbar you thought about!!!

That leaves us 281 to go for our goal of 300. If you have flown Young eagles in 2003 – Please let me know. 868-3809



Things are beginning to shape up for Young Eagles

**Haverhill, NH - Dean Memorial Airport (5B9)
Saturday, May 31, rain date, Sunday, June 1**

Pilots: Donald Taylor Marge Butterfield
John Butterfield Don Nowakowski

Could use 2 more pilots
Ground crew is OK, they have their own.

International Young Eagles Day – Franklin County Airport (FSO) June 14 Sat. 9 – 5

Pilots: John Butterfield Steve Couzelis
Bill Morelli Bill Yendrzkeski
Don Nowakowski Donald Taylor
Frank Gibney

Ground: Marge Butterfield Gail Bevins
 Lisa Gorton Carol Morelli
 Joe Gardner Neal Slocam
 Sonja Burbank

Could us a few more pilots and ground crew. If you can make it, give me a call 868-3809

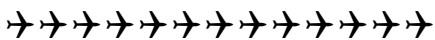
**Young Eagles Rally
 Springfield – Hartness State Airport (VSF)
 Wednesday, June 25th, 9:00 – 4:00**

Pilots: John Butterfield Steve Couzelis
 Bill Morelli Donald Taylor
 Bill Yendrzeski

Pilots OK, need ground personell

**Shelburne Airport (25VT)
 Date to be announced**

**Underhill, VT
 Date to be announced**



Did You Know

Wright Brother’s plane goes back to Ohio

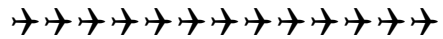
A biplane built by Wilbur and Orville Wright was once a familiar sight in the skies near Philadelphia, zooming over rooftops during 748 flights from 1912 to 1914.

Now the plane, centerpiece of the Franklin Institutes Hall of Aviation for nearly 70 years is being dismantled and shipped to Ohio for a \$100,000 restoration.

Grover Cleveland Bergdoll went to Dayton, Ohio in 1912 and paid \$5000 – equal to about \$100,000

today – for one of the planes the Wright brothers built after making their first flight just nine years earlier.

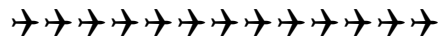
The plane will be restored by the aeroplane works in New Carlisle, Ohio. It will be the centerpiece of a revamped hall of aviation the Franklin Institute plans to open in 2003 in time for the 100th anniversary of the Wright brother’s first flight over Kitty Hawk, N.C.



Safety Tip

Crosswind landings are a breeze for those who practice.

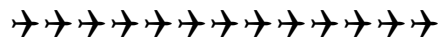
Gusts and crosswinds on takeoff or landings cause 80% of wind related accidents. Make crosswind landings a regular part of your proficiency flying.



Dead Men Tell No Tales

and they don’t complain about noise or low flying aircraft either. So it makes sense to place cemeteries next to airports.

In New York state, just west of the southern tip of lake St. Catherine, is Granville Airport (R01) which has a cemetery at both ends of the runway. No problem there!!!



Anyone Interested In A Tour?

I have talked with Bill Dahler of Champlain Air, to tour the DC hangar at the old Plattsburg AF Base. Also Bob Sterling is checking to see if we can tour the hangar where they are refurbishing 747’s. If we go it will give us a chance to land on that nice long runway. It has to be on a weekday. Also I have to find out how many are interested. If you are, call Donald Taylor – 868-3809

Kids Fly Free



International Young Eagles Day

Franklin County Airport, Highgate, VT (FSO)
(I-89 Exit 21, East on Rte. 78, 1 mile, Airport across from John Deere Dealer)

Saturday – June 14 - 9 AM till 5 PM

Rain Date: Sunday – June 15 - 9 AM till 5 PM

Free plane rides for kids between ages 8-17.

A parent or guardian must attend.

- A tour of the airport and airplanes.
- There will be a barbecue at noon.
- An Air guard helicopter will be on display.
- A display of radio controlled model airplanes.
- Scouts may qualify for their aviation merit badge.
Merit badge counselor on staff.

Sponsored By:
EAA Young Eagles Program
Chapter 613



For more information contact: Donald Taylor 868-3809 or
Franklin County Airport 868-2822

Don't Miss This Seminar

Flying in Canada

Have you ever wondered what you have to do when you're flying in Canada?

Dick Ferno is going to put on an FAA seminar for Thursday, **June 5th** from **6:00 - 9:00 p.m.** at the **Clarion** on Williston Road. The guest speaker is **Michel LeDuc**.

The room that Dick has reserved will hold 75 people. Dick would like to have a heads up on who is planning to attend so he will know if he has a big enough room to accommodate everyone.

Make sure and contact Dick at 433-6691 or e-mail him at angus@innevi.com

complex aircraft endorsement where needed and when passengers are carried, 3 takeoff and landings within the last 90 days.

Experience is evaluated relative to the flight to be performed. The important thing is experience in similar type aircraft. Many a pilot with vast experience in "heavy iron" has come to grief in a light aircraft. In evaluating relative experience, flight time in aircraft with similar parameters is of most value. Characteristics to be considered are wing loading (lbs/sq. ft.), power loading (lbs/ hp), handling /response, and visibility. Aircraft with light wing loading (i.e. J3 Cub) are more affected by air currents/winds and require better "stick & rudder skills". High power loading (low hp) aircraft (i.e. 65 hp Cub) require better planning as they will not "power out" of adverse situations, such as down flows on the lee side of a ridge. . For another example, the Cessna 152 and a Grumman American Yankee have the same engine, but the Yankee's wing loading is about the same as a Beech Bonanza. As the people who tried to use Yankees for trainers found out, the Yankee requires a more experienced pilot. (The Yankee is similar in handling qualities to the popular Van's aircraft series.) Low power loading (high hp) aircraft have rapid throttle response & torque issues. Homebuilt/aerobatic aircraft tend to have much faster control response, while antique/vintage aircraft are much slower to respond to control inputs. Antique/vintage tailwheel aircraft can have significant visibility issues, especially those with radial engines.

Flight Advisor Corner

by **Hobie Tomlinson**

The **Man** (Pilot)

This month we will look at evaluating ourselves for the purpose of undertaking that "first" (or any) flight. In doing so, we will look at four areas, these are:

Eligibility	(Certificates & Documents)
Experience	(Flying background)
Knowledge	(Systems & Procedures)
Proficiency	(Recency of Experience)

Eligibility involves reviewing our personal paperwork to insure that all required documents are present. These are our pilot certificate with appropriate category and class ratings, medical certificate & a photo identification which may be a valid driver's license, U.S. government or armed forces I.D. card or an official passport. It also involves a review of our logbook to insure currency. This would include a current biennial flight review, a tailwheel, a high performance (over 200hp) or a

Knowledge is the next area to be considered. This item specifically relates to the systems and procedures of the aircraft to be flown. Time spent "in the cockpit" while on the ground pays big dividends later in flight. The military uses a "blind cockpit check" to insure pilots can instantly locate items in the cockpit. Suffice to say that we should be able to readily locate all controls and indicators in the cockpit. The four things we want to know about everything in the cockpit are: *where is it, what does it do, when do I use it & and lastly what do I do if it doesn't work?* Learning these items by using the actual aircraft as a "cockpit procedures trainer" means we will have the knowledge at the "point of use", i.e., when we reach for an item our

minds will recall the stored information about that item.

Proficiency is where “the rubber meets the road”, so to speak. This is different from currency and has more to do with the pilot’s desire to continually improve than it does with high total time.

The best evaluation of proficiency is by flying a similar type aircraft with a qualified instructor pilot. Particular attention should be paid to takeoffs and landings under varying wind conditions, pattern work & flying stable approaches. If contemplating the “first flight” of a new type airplane, previously flying several different types of aircraft will help improve your “adaptability” to a different aircraft type. So until next month, **Think Right to Fly Right!**

More Culp’s Special





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How to Make a Monoplane Glider

By WILLIAM DROTZINGER

A simple glider of the monoplane type can be easily constructed in a small workshop; the cost of materials is not great and the building does not require skilled workmen. Select the material with care and see that the wood is straight-grained and free from knots. The following list of spruce pieces is required:

- 1 main wing spar, 1 1/2 by 2 1/2 in. by 27 ft.
- 1 rudder spar, 1 1/2 by 1 in. by 12 ft.
- 1 wing crossbar, 1 1/2 by 1 in. by 4 ft.
- 1 rudder crossbar, 1 1/2 by 1 in. by 12 ft.
- 1 piece for each rib of wing spar, 1/2 by 1 in. by 27 ft.
- 1 main spar, 1 1/2 by 1 in. by 27 ft.

The following list of poplar pieces is required in making the supports for the cloth covering on the wings and rudders.

- 20 main wing ribs, 1/2 by 1 1/2 by 27 in.
- 1 rudder rib, 1/2 by 1 1/2 by 12 in.
- 1 rudder rib, 1/2 by 1 1/2 by 12 in.

The following list of oak pieces is needed:

- 1 piece, 1/2 by 1 1/2 in. by 12 ft.
- 1 piece, 1/2 by 1 1/2 in. by 4 ft.
- 1 piece, 1/2 by 1 1/2 in. by 27 ft.
- 1 piece, 1/2 by 1 1/2 in. by 27 ft.
- 4 pieces, 1/2 by 1 1/2 in. by 27 ft.

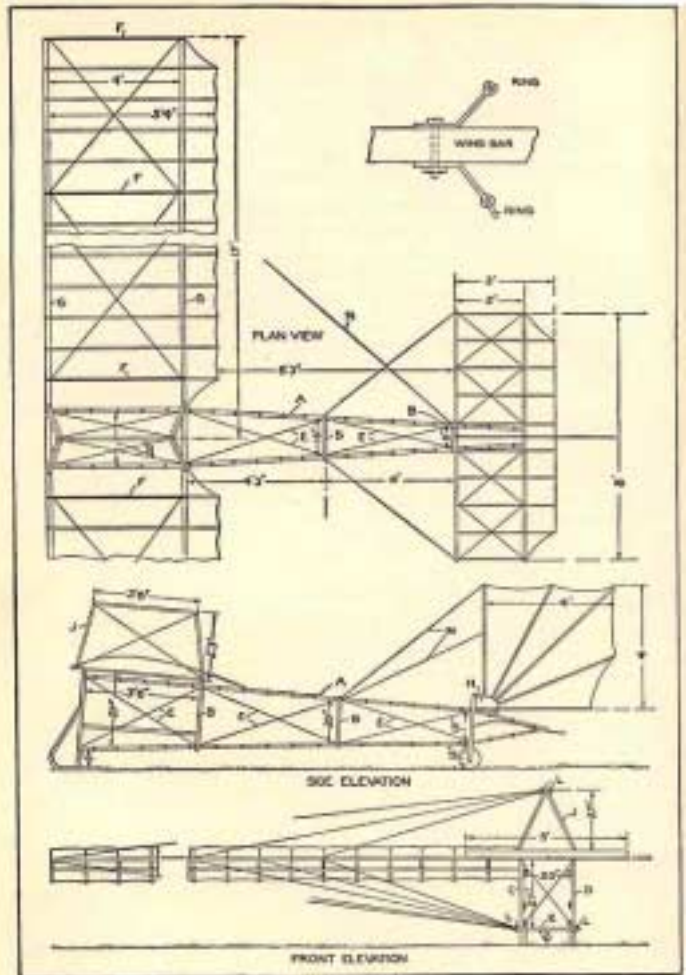
In addition to the lists given, four pieces of bamboo, 1 1/2 ft. long, tapering from 1 or 1 1/4 in. at the large end to 3/4 in. at the small end, are used for the main frames.

Construction

The first part to make is the main frame A which is constructed of the four bamboo poles. They are made into a rectangular frame with crossbars marked B cut to the right length from the 12-ft. piece of spruce, 1/2 in. by 1 in. The bars C and D are of oak



Monoplane Glider in Flight



Details of Monoplane Glider

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cut from the 4-ft. piece, 3/4 in. by 1 1/4 in. All of these crossbars are fastened together in rectangular form by means of stove bolts. The bamboo poles are then bolted to the inner corners of the frames with 3/8-in. bolts. Place the bolts through the bamboo close to a joint to prevent splitting. The frame is then rigidly trussed by diagonal wires marked E crossing all rectangles. The wire used for trussing all the parts throughout the glider is piano wire, 30 gauge. The arm pieces are bolted to the sides of the rectangular frames beneath the wings.

The framework of the main wings or planes should be put together by bolting the cross struts F at regular intervals on the under side of the main spars G. Brace the frame diagonally with the piano wire. The ribs are nailed to the main spars by using 1-in. brads. The ribs are spaced 1 ft. apart, and curved so that the highest part will be 8 in. from the horizontal. Each rib extends 15 in. back of the rear spar. The rudder is made in the same manner.

The vertical rudder is made to fold. A small pocket arrangement H is made from which the ribs of the vertical rudder diverge.

The covering of the wings and rudders should be a good quality of muslin or some light aeronautical goods. The cloth should be tacked to the front spar, to the ribs, and then sewn to a wire which connects the ends of the ribs.

Construct the triangular arrangement marked J to which the wings are braced. The wing bar supports are

shown in the illustration. The bottom wires are braced to the crossbar K shown in the front elevation.

The bracing wires are all fastened to a snaphook which can be snapped into the rings at the places marked L. This method will allow one quickly to assemble or take apart the plane and store it in a small place. The vertical rudder should be braced from each rib to the front spar of the horizontal rudder and then braced by the wires M to hold the rudder from falling back. The rudder is then braced to the main frame and the main frame is braced by the wires N to the wings. This will hold the plane rigid. Use snaphooks and eyebolts wherever possible so that the plane can be quickly assembled.

Assembling

The triangular arrangement J is bolted to the wings and the top wires put in place. The wings are then put on the main frame and bolted to the bars marked C and D, after which the bottom wires are fixed in place.

Gliding

Take the glider to the top of a hill, step into the center of the main frame just a little back of the center of the wings. Put your arms around the arm pieces, face the wind and run a few steps. You will be lifted off the ground and carried down the slope. The balancing is done by shifting the legs. The glides should be short at first, but by daily practice, and, as the operator gains skill, glides can be made up to a length of several hundred feet. Do not attempt to fly in a wind having a velocity of more than 15 miles an hour.

EAA CHAPTER 613

Bill & Carol Morelli, NLE's
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May 2003

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