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The Frederick Flyer

President's Message

Greetings, EAA Chapter Members. Happy New Year to everyone and your families!

Your Board members have been working on events for

the year. The chapter budget is set at \$4,899 for the 2013 year. Projected income: Dues: \$2,000 Fund Raisers: \$300

Total: \$2,300 Expenses: Hangar rent: \$2,928 Water and sewer: \$284 EAA Insurance & Chapter fee: \$715 Chapter hangar maintenance and picnic: \$375 Total: \$4,302

As you can see, the income from dues and the fund raiser does not cover our expenses. The Board members are working on additional ways to raise funding. Stay tuned......

Mark your calendars; Women Fly It Forward will take place March 9, 2013. We hope the weather will cooperate and it will be as successful as it was last year. I would like to thank everyone who has volunteered to help. This means an enormous amount to the aviation community. The safety factor we bring to the event is paramount. We presently have about a dozen people signed up but we could use another six people to help direct ground traffic. Contact Mark Gosselin if you would like to help.

I would like to thank Pam Dickinson who is our Chair for the annual banquet. I am looking forward to a great time for all who attend! The banquet will take place March 16, 2013 at the chapter hangar at 7:00 p.m. Please sign up early, space is limited.

We should have another outstanding year with events at the airport, speakers at our meetings, fly outs to other chapter events, picnics at our hangar, and other events that promote aviation education!

Wishing you clear skies, Mark Gosselin

President EAA Chapter 524



February Membership Meeting Program

Earlier this month, Claudius Klimpt told us about his new gyrocopter and how that class of aircraft is fundamentally stall-proof. Unfortunately, the airplanes most of us fly do not share this immunity. In next month's program, Chapter



Vice President Tom Proctor will present "Stalls, Spins and Fear in the Cockpit", part of our Chapter's continuing discussions on safe practices.

Thursday, February 7 at 7:30.



Battle for the Heart of EAA – Part 3

Hopefully, you will recall parts 1 and 2, wherein we described the on-going and rapidly-changing scene at EAA headquarters. It is still in flux. Now we note that Dick Van Grunsven (Founder and CEO of Van's Aircraft) has weighed in on the matter through a recent Facebook article. He makes good points which we all should consider and support, particularly as members of the homebuilt aircraft community. For your consideration a link to the article can be found <u>here</u>.

Matters are still in a state of recovery in Oshkosh; a lot of damage to address with a shortage of personnel. Our workshops remain in jeopardy, although the RV sheet metal session is scheduled to go forward March 2-3. Stay tuned.

Doug Kelly.

Rare Warbird Coming to Virginia Beach

Sent in by Charlie Becker — The only flying De Havilland Mosquito will be coming to **Warbirds Over the Beach** in Virginia Beach, May 17-19. Check out <u>this link</u> for more information and a terrific video of this beautifully restored aircraft. Charlie says that practically the entire AOPA/524 contingent is planning on going. Contact Charlie if you are interested.

The Painting of Frederick Sport Flyers' 601XL-B Zodiac

At some time during the final phase of putting our airplane together the subject of paint came up. I forget how we arrived at consensus, but we decided to complete the construction, obtain aircraft certification, fly off the

test flight requirement (fixing the bugs as they appeared) and then pay someone else to paint the airplane. And that's what we did. Prior to the first flight, all five of us, Bill Barci, Rudy Bartoldus, Pete Sweeney, Robert



Johnson and I, took transition training with Buzzy Devoll in a Cont. 0-200 powered SLSA 601XL-B at Lawrenceburg, TN. Although the flight test period went rather smoothly, the bugs appeared. An oil pressure indicating problem was fixed by properly grounding the pressure transmitter. The left canopy locking mechanism was adjusted. A 150 RPM engine over speed at full throttle was corrected by increasing our propeller pitch one notch. This was easily accomplished on our Sensenich ground adjustable prop. A "no EGT" indication was solved by reversing the electrical leads at the instrument. A failed grease seal on one of the nose wheel bearings required replacement of the integral grease seal/nose wheel bearing, (Matco wheel). By the time the first oil change occurred, (50.0 hours) things had settled Hendrick's RV-12. He has a wall of pictures of many other homebuilts that he has painted. He would allow us to help with the mechanical preparation of the airplane prior to painting. He is a 601HD builder, appeared to be an easy going guy and was the cheapest. Prices from the other paint shops went from \$7,500.00 to \$12,000.00. Jim's estimate was, \$5,000.00 to \$6,000.00.

On December 15, 2013, Robert Johnson and I delivered the airplane to his shop where he had just finished another RV-12. Robert and I spent the next couple of hours removing the canopy, disconnecting the ailerons & rudder, removing the cowling, removed the rudder fairing, removed the prop spinner, and removed the wing tip strobes & nav lights. Also while there, Robert and I

down. Oil consumption was one quart in twenty hours; the oil filter was clean so we changed from mineral to detergent oil. It was time to consider paint.

I found many pictures of 601's on the Zenith web site with varying colors and paint designs, printed about thirty

of them on 8 $\frac{1}{2}$ x 11 paper and posted them in our hangar. We started talking about colors first and in a relatively short time decided on a basic white airplane with blue trim. The design took a little longer but we decided to copy one of the pictured airplanes with a simple straight lines design. Next question, where to get it painted?

We checked out three paint shops. One in Pottsville, PA, recommended by some Chapter 524 members, a paint facility on Hagerstown airport, and one in Farmington, DE. We ultimately choose Jim Russell's Russell Aircraft Finishing located on Chorman airport near Farmington. Why did we choose him? I flew the airplane to Jim's facility and visited with Jim twice before we committed. Jim painted Gust Mitchell & Malinda Orlin & Mike



decided on the final colors of very light Grey with Blue trim. Rob Craig flew his C-172 from FDK to pick us up and we were back at 3:00 that afternoon.

Jim emailed me progress pictures throughout the painting process and on December 31 he sent me an

itemized bill and said that the airplane could be picked up the following week. The final bill was \$5.422.19.

On January 3, 2013 Chapter member Neil Wright kindly drove me over to Chorman and helped me begin putting the airplane back together. I finished at 4 p.m., filed a SFRA flight plan, took off at 4:15, and after an uneventful, but chilly flight through the SFRA, landed at FDK at 5:30.

So finally all of the major work on our airplane is finished. We have about \$70,000.00 and almost five years' time invested in the airplane. As of now the airplane has 72.4 hours time in service, and is flying well.

Gerard Blake



The Wright Brothers in 1905 and Their Quest to Develop a Practical Airplane Part 16, October 24 – 31, 1905



1905 Flyer Wright.NASA.gov

When we left the Wright Brothers last issue, it was October 24, 1905 and the year's flying season was coming to an end. After seven long years of disciplined invention, development and learning to control their airplane in flight, the brothers' confidence in their flying machine had reached a point where both brothers had made flights in excess of thirty minutes. They initially offered to sell an airplane to the U.S. Army but after being rebuffed twice, made overtures to both Britain and France. After Wilbur's flight of 39 minutes and 23 4/5 seconds on Thursday, October 5, Wilbur's diary entry for the day ended with "Experiments discontinued for the present." Wilbur made another flight, #49 for the year, on Monday, October 16 of only 1 minute and 4 3/5 seconds. In a letter to Octave Chanute dated Thursday, October 19, Wilbur invited Chanute to come to Dayton and witness a flight. "We wish to go out someday and make an effort to put the

record above one hour. If you wish we will try to give you notice in time for you to be present." Wilbur sent Chanute a telegram on October 30, 1905, "Trial Tuesday. Can you come?" On the back of Wilbur's October 19 invitational letter that is now part of Chanute's Papers he wrote, "Went to Dayton to see last flight of season at beginning of November. Prevented by great storm."

The Wrights would not fly again until Wednesday, May 6, 1908 when Wilbur flew a new airplane at Kitty Hawk during preparations for demonstration flights for the U. S. Army.

Wilbur Wright's Summary of the Experiments of 1905.

The following is an excerpt from the "First Rebuttal Deposition of Wilbur Wright," Feb.-Mar. 1912, in Wright vs. Herring-Curtiss, vol. 1, p. 495 ff.

In 1905 we built another machine and resumed our experiments in the same field near Dayton, Ohio. Our Particular object was to clear up the mystery which we had encountered on a few occasions during the preceding year. During all the flights we had made up to this time we had kept close to the ground, usually within ten feet of the ground, in order that, in case we met any new and mysterious phenomenon, we could make a safe landing. With only one life to spend we did not consider it advisable to attempt to explore mysteries at such great height from the ground that a fall would put an end to our investigations and leave the mystery unsolved. The machine had reached the ground, in the peculiar cases I have mentioned, too soon for us to determine whether the trouble was due to slowness of the correction or whether it was cue to a change of conditions, which would have increased in intensity, if it had continued, until the machine would have been entirely overturned and quite beyond the control of the operator. Consequently, it was necessary, or at least advisable, to discover the exact cause of the phenomenon before attempting any high flights. For a long time we were unable to determine the peculiar conditions under which this trouble was to be expected. But as time passed we began to note that it usually occurred when we were turning a rather short circle. We, therefore, made short circles sometimes for the purpose of investigating and noting the exact conduct of the machine from the time the trouble began until the landing was made. At one time we thought it might be due to the fact that the machine, in circling, did not face exactly in the direction of the line of motion. To test this point we disconnected the rudder wire from the warping wire and operated the rudder by an entirely separate handle. The trouble, however, continued as before. A flight . . . was made on the 28th of September, 1905, with the rudder wires entirely disconnected from the warping wires. When it was noticed that the machine was tilting up and sliding toward the tree, the operator turned the machine down in front and found that the apparatus then responded promptly to the lateral control. The remedy was found to consist in the more



skillful operation of the machine and not in a different construction. The trouble was really due to the fact that in circling, the machine has to carry the load resulting from centrifugal force, in addition to its own weight, since the actual pressure that the air must sustain is that due the resultant of the two forces. The machine in question had but a slight surplus of power above what was required for straight flight, and as the additional load, caused by circling, increased rapidly as the circle became smaller, a limit was finally reached beyond which the machine was no longer able to maintain sufficient speed to sustain itself in the air. And as the lifting effect of the inner wing, owing to its reduced speed, counterbalanced a large part of the increased lift resulting from the greater angle of incidence on that wing, the response to lateral control was so slow that the machine sank to the ground, usually before it had been brought back to the level again. When we had discovered the real nature of the trouble, and knew that it could always be remedied by tilting the machine forward a little, so that its flying speed would be restored, we felt that we were ready to place flying machines on the market. *

Some of the Changes incorporated in the 1905 Airplane.

- 1. The total operating weight of the airplane at the beginning of the 1905 flying season was about 845 pounds and included 6 pounds of gasoline, 30 pounds of water and 145 pounds for the pilot.
- 2. The aft rudder and wing warping controls were independent from one another.
- 3. The area of the canard and rudder surfaces was increased from that on the 1904 airplane.
- 4. The outboard wing sections on both upper and lower wings were rigged to a reduced angle (washed out) relative to the inner wing sections.
- 5. Semicircular vertical surfaces (blinkers) were installed between the two canard surfaces.
- 6. Propellers of new design were used.
- 7. Fuel tank changed from 1 to 3 gallons.

Highlights of the 1905 Flying Season.

- 1. First flight on Friday, June 23. Although maneuvering flights were attempted early on, the first complete circle was not accomplished until flight #15 on August 28. The last flight was on October 16.
- 2. On September 8, Orville completed a figure-eight flight.
- 3. On September 26, Wilbur makes a flight of more than 18 minutes and 16 circles.
- 4. On October 4, Orville completes a flight of more than 34 minutes.
- 5. On October 5, Wilbur completes a flight of more than 39 minutes.

Approximate 1905 Monthly Flight Times

Month	Wilbur Wright	Orville Wright
June	31.9 seconds	29.6 seconds
July	0.00	12.0 seconds
August	333.4 seconds/5.5 minutes	28.6 seconds
September	2,365.85 seconds/39.4 minutes	4,278.55 seconds/71.3 minutes
October	2,505.2 seconds/41.7 minutes	3,502.0 seconds/58.4 minutes
Total	5,236.35 seconds/86.6 minutes	7,850.75 seconds/130.8 minutes

Accidents/Incidents

Of the 49 attempts to fly in 1905, records list damage to the airplane nine times versus twenty-one times in 1904. The airplane was damaged three times in June, one time in July, three times in August, and two times in September. No damage occurred in October. Wilbur was the pilot in four accidents and Orville in five.

To be continued. Gerard Blake

^{*} Jerry described the Eureka moment the brothers had during this flight in Part 14 of this series back in the August newsletter. I thought this later analysis by Wilbur really captured how well the two men understood the fundamental concept they had just discovered — the dreaded accelerated stall. [Ed.]

The Frederick Flyer



Upcoming Events Chapter Meetings

February 7, 2013 @ 7:30 p.m. — Monthly General Meeting February 14, 2013 @ 7:00 p.m. — Board Meeting March 16, 2013 — Annual Chapter Banquet

Other Events

March 9, 2013 — Woment Fly It Forward, FDK April 9-14, 2013 — SUN 'n FUN, Lakeland Florida May 17-19, 2013 — Warbirds over the Beach, Virginia Beach

Chapter Program Schedule — 2013

Month	Program
January	Learning My New Gyrocopter Claudius Klimpt
February	Stalls, Spins and Fear in the Cockpit Tom Proctor
March	Banquet Speaker Adam Smith
April	Adventures of a DAR Bobby Thomas
Мау	Evolution of the Wright Brothers' Control System Jerry Blake
June	
July	Electric Flight — Part II Rodney Martz
August	
September	
October	
November	
December	

Refreshment Volunteers — 2013

Here is a list of volunteers supplying refreshments for 2013. The Board of Directors thanks you for your support (and munchies).

January	Jack Fromm	July	OPEN
February	Charlie Becker	August	Joe Halleman
March	Banquet	September	OPEN
April	Peg Jones	October	OPEN
Мау	Bill Barci	November	OPEN
June	Mark Gosselin	December	OPEN

Chapter Officers

President Mark Gosselin EAA524.President@gmail.com 703-966-8226

Vice President Tom Proctor ProctorTP@starpower.net 301-972-8115

Secretary Kris Crone TomCrone123@msn.com 301-473-5699

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Program Coordinator Doug Kelly Mulligan32@verizon.net

301-963-2217 Young Eagles Coordinator Vacant

EAA Flight Advisors Vacant

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Doug Kelly Mulligan32@verizon.net 301-963-2217

Tom Young 301-667-0964



Workshops EAA SportAir Workshops March 2-3, 2013 — RV Assembly

EAA Events

Go to EAA Events at: http://www.eaa.org/news Go to EAA Aviation Calendar of Events at: http://www.eaa.org/calendar Go to AirVenture at: http://www.airventure.org/index.html Go to EAA SportAir Workshops at: http://www.eaa.org/sportair

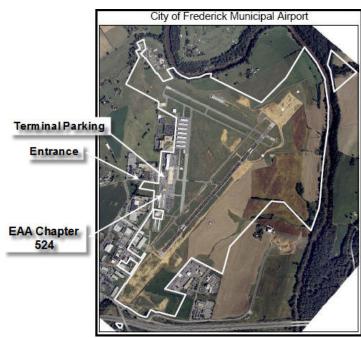
Chapter Website

The EAA Chapter 524 website can be found at: www.524.eaachapter.org. The website has contact information and details about current Chapter events. Also on the website, you can find archived newsletters and a membership join/renewal form. The webmaster can be contacted at EAA524@gmail.com.

Chapter Meeting Location and Time

Chapter 524 meets the first Thursday of each month at 7:30 p.m. at the Aviation Education Center, located at the Frederick Municipal Airport. As you enter the airport, park in the Terminal Parking log. Walk south past the Frederick Flight School (yellow building). There are signs on the end of the second row of hangars for the Chapter. Additional information can be found on the Chapter website:





EAA Chapter 524 Membership Application

Annual dues are \$50 for individual or family membership. Fill out this form and return it with your dues to the Chapter Treasurer. Cash or check accepted. Make check payable to EAA Chapter 524 . Bring the form and dues to the next meeting or mail to Neil Dickinson, 119 Heritage Lane, Sykesville, MD 21784 . If you have a question about your membership, contact the Treasurer at 443-340-3401 or RNeilDickinson@netzero.net. These dues help support the Chapter and are not applied to the national organization.					
I. Registration Information (Print please)					
Last Name First Name					
Member Status: New Renewal:	No Changes:				
Membership Type: Individual (\$50.00)	Family (\$50.00)				
Other name(s) if Family Membership					
EAA Membership Number	Member Since:				
Phone Number (H) (C)	(W)				
Address					
City State	Zip				
E-mail Address (for receiving notices & newsletter) Aircraft/Projects/Interests					
II. For Official Use Only					
Status: New Renewal Individual:	Family:				
Dues Paid: Check Number Cash	Amount \$				
Date Received//	Fiscal Year (Jan. – Dec.) 20				
Treasurer's Initials Roster updated/					
Cut here. Keep Section					
III. Member's Receipt for EAA Chapter 524 Dues					
Date paid//	Dues paid for fiscal year 20				
Renewal – Individual/Family Membership Dues: \$50.00)				
New – Individual/Family Membership Dues: \$50.00)				