

The Frederick Flyer

EAA Chapter 524 and Aviation Learning Center Frederick Municipal Airport (FDK), Frederick, Maryland



Volume 13

September 2011

Issue 8

President's Message

Greetings Chapter 524 Members!



When you come to the next meeting you will see that the hangar has undergone some rearranging and cleaning. We still have a ways to go but what a difference we see already! A little more work and we'll have a much more efficient and user-friendly space in which to have meetings and aviation education workshops. I thank all of you who stopped by to help spruce up the hangar!

I am extending my last request for help with the Chapter leadership; there are plenty of opportunities open for all levels of volunteering. Offices open are: President, Vice President, Secretary, Treasurer, Program Director, Historian, Librarian and Webmaster. If you would like to run for one of these offices, or just help out with them, please let me

know before the next meeting so I can place your name on the ballot for our final vote.

I have been approached by several Chapter members over the last year about increasing our membership. If we expect to draw new members we must have interesting programs, educational support, and fun, well organized activities. As we all know, the Chapter does not run itself. It takes a group effort for things to run smoothly. I appreciate the support that Chapter members have given while I have been in office and hope that those of you who have not been able to fully participate will feel welcome to do so as your schedules permit.

We will have the final picnic of the year on October 22, 2011, starting at 5 p.m. The workshop that is being presented that weekend will be ending for the day and we are extending an invitation for those attending to join us as well. The Chapter will supply the main course and drinks. Chapter members are asked bring a dish to round out the meal. We always have a great time at these events so don't miss out on the chance to meet some fellow builders and potential new Chapter members!

Wishing you clear skies, *Mark Gosselin, President*

General Membership Meeting Minutes-September 1, 2011

The meeting was brought to order at 7:33 p.m.

The Program

The program was presented by Kevin Daugherty, Airport Manager. He spoke on access roads, navaid update and also updated us on the tower, signage and markings. He is expecting to receive the Occupancy Certificate on October 12 (completion date). The FAA Shout Line is due to be completed January 2, 2012. On January 25, 2012, AOPA will be conducting a delta training workshop. February 20, 2102 is the scheduled date for the tower to be in service. All dates are subject to change. Also, Kevin announced the first year the tower will be in service from 7:00 a.m. to 11:00 p.m.

Treasurer's Report for July

A motion was made and seconded to accept the Treasurer's Report as printed in the newsletter.

The Secretary's Report was accepted as printed in the newsletter.

Progress Reports

Jerry Blake reported that one wing is on the plane and the other is pinned in place. They are looking for new members.



Jerry also reported that the Turbulent is now at the Hagerstown Air Museum. Herb Jones is creating a history to go with it.

Announcements

The Electrical Course scheduled for last weekend was canceled due to hurricane Irene. It is rescheduled for Oct. 1.

Joe Halleman needs a definite commitment from the Chapter in order to bring the B-17 here. There will need to be 10–15 people volunteering. Several members agreed to commit to bringing the B-17 here.

September 17, 2011 is Hangar Clean-up Day.

This is election year—all offices are open. We need to vote on our officers in November. If anyone is interested, please see one of the Board members.

There will be a picnic held on October 22, 2011. There is a workshop that weekend. Any Chapter member or workshop participant is invited to attend. Bring a dish to share.

Mark Gosselin won the 50/50 raffle—\$27 to Mark & \$27 to the Chapter.

The meeting was adjourned at 8:30 p.m.

Respectfully submitted, Kris Crone, Secretary

Space Available in AEC for Final Assembly

Now that the Zodiac is in its new home, we have space in the AEC for any members who want to take advantage of it for the final assembly of their project. For a monthly donation to the Chapter, you can work in climate-controlled comfort. Some restrictions apply. See a Chapter Board member for details if interested.

Zodiac Builders' Report as of September 22, 2011

Since our last report at the end of April, we (Frederick Sport Flyers Inc., aka Zodiac Builders Group) have moved our operations to hangar 16.

Since our move, we have completed the wiring of the engine starter system, electric fuel pump and all the engine monitoring instruments. We have purchased a GPS and an EFIS glass panel for the avionics. These have yet to be fully installed and wired up.

We have purchased a Sensenich 72-inch ground-adjustable propeller. This will be installed at a later date.

Two big milestones were accomplished since our last report: the fitting and installation of the canopy and the fitting and installation of the wings.

Getting the canopy to fit took countless fittings by setting the canopy in place, scribing the cuts for the material to be removed, removing the canopy and trimming the Plexiglas. This process was repeated many times until the proper fit fore and aft was attained. The Plexiglas was then attached to the supporting hardware and the latches installed. After the completion of the canopy installation, it was removed from the fuselage to make the installation of the wings easier.

As with the canopy, each of the wings had to be fitted many times to produce the fit to the fuselage, set them perpendicular to the aircraft center line and set the proper angle of incidence for each wing. When all the fittings were finalized, wiring and fuel lines were routed into the fuselage and the final bolts were installed and torqued.

As this is being written, we are connecting the control cables to the ailerons and working on the wiring for the strobes, running lights, landing light, aileron trim and fuel gauges.

Things are progressing slowly but surely and we are still looking for additional members. Come on down to hangar 16 most any Tuesday or Thursday afternoon. You'll find some of us there working or just hanging around.

Attached are pictures showing the canopy in place and of the final wing installation.

September 2011



The Wright Brothers In 1904 and Their Quest To Develop A Practical Airplane Part 5 – September 7 through September 29, 1904

In a letter to Octave Chanute dated August 28, 1904, Wilbur summarized the flights of that month. He did not mention Orville's accident that occurred on August 24. He does mention, in the last sentence, "Our starting apparatus is approaching completion and then we will be ready to start in calms and practice circling."

Fred C. Kelly in his book, "The Wright Brothers" describes the starting apparatus. "A 1,600-pound weight, falling a distance of 16½ feet, was so geared with ropes and pulleys that it produced a 350-pound pull on the machine through a distance of 49½ feet. By this arrangement the machine could be put into the air after a run of only 50 feet, even in a dead calm. Shifting the track was now seldom necessary."

As we shall see, it took a little experimenting until the Wrights settled on the proper amount of catapult weight to effectively launch the airplane.

The first attempted flight with catapult assist was attempted on Wednesday, September 7, 1904. Flight #40 used a catapult weight of 600 pounds and resulted in a straight ahead flight of 136 ft. in 6.0 seconds. For the second flight of the day, #41, the catapult weight was increased to 800 pounds and this resulted in a flight of 200 ft. in 7 seconds. For this flight attempt, Wilbur's Diary comments, "Almost got start." Apparently Wilbur did not consider #41 a successful sustaining flight. No pilot is named for flights #40 and #41. For the third trial of the day, flight #42, the catapult weight was increased to 1,000 pounds and with Wilbur as pilot, flew for a distance of 1,360 ft. in 37 seconds. This last flight of September 7 was witnessed by the Wrights' sister, Katherine, and her friend Melba Silliman.

On Friday, September 9, Wilbur flew three times in practically dead calm wind conditions, flights #43, #44, #45, using a catapult weight of 1,200 pounds; the flights resulted in distances of 160, 496 and 556 ft. respectively. The flying times were 5.0, 13 ¾ and 14 ½ seconds. By this time the Wrights were using a wheel (origin unknown) with an 8.0 ft. circumference to measure the distance flown. They simply rolled the wheel along the track of each flight, counted the revolutions and multiplied by 8.

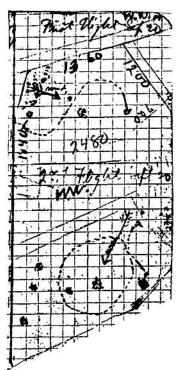


Four days later, on September 13, the brothers mounted their number 2 Flyer on its dolly atop the launching rail and Wilbur made two flights. Again using 1,200 pounds of catapult weight, the first flight, #46, was for 280 ft. in 9 ½ seconds. Wilbur's diary entry for this flight ends with a terse "Broken tail sticks." He does not elaborate as to the extent of the damage but it could not have been too serious because after the appropriate repairs, one more flight was made that day. Flight #47, again with Wilbur as pilot, was for 296 ft. in 8 ½ seconds. This last flight was made with a 90 degree crosswind (velocity not indicated) from the left and indicates some confidence in the catapult launching system.

Wilbur's Diary entry for Wednesday, September 14 records only one flight, # 48. On that day he flew a distance of 656 ft. in 19⁴/₅ seconds. The combination of a 1,200 pound catapult weight and a 12-18 MPH wind from the north required only a 50 ft. run down the launching rail. In this entry, Wilbur also indicates for the first time the fact that Charles E. Taylor, the Wright machinist and engine builder, was also a time keeper for this and many other of the 1904 flights. In fact, for most of the 1904 flights, three stop watches were usually employed to record the time of the flights. One watch was mounted on the airplane and controlled by the operator; the second stop watch was used by the brother not flying, and a third by a trusted observer, on most occasions, Charles E. Taylor.

The next day, Thursday, September 15, 1904 was a significant day in the Wrights' 1904 experience of learning to fly and developing their airplane. On the 49th flight of the year, Wilbur took off with catapult assist into a north wind of 4-9 MPH and flew 2,288 ft. in about 55 ½ seconds and "made half circle, landing with wind." This is the first time that Wilbur's diary indicates that anything but a straight ahead flight was attempted. In his second flight of that day, flight #50, with Orville and Charley Taylor keeping records, Wilbur flew another half circle for a distance of about 2,400 ft. in 50½ seconds. His diary entry also states "Almost touched west fence with wing tips." He wasn't flying very high and his diary entry omits his landing incident. In a letter to Octave Chanute on the 18 Wilbur writes, "On Wednesday, [Thursday] Sept. 15, we made our first attempts to encircle the field but did not quite succeed, though on both trials a distance of half a mile was covered. In the second trial, [flight #50] the machine rose after partly landing [undulating flight?] and came down slightly crossways. As the speed was above 35 miles, several of the wires staying the skids were broken and let the latter fold sidewise. Considering the fact that we have made fifty starts and landings with this machine, it is yet in remarkably good shape."

Flight #51 occurred on Tuesday, September 20 under cloudy skies with the wind from the northwest. On that day Wilbur flew a distance of 2,520 ft. in 1 minute, 1 % seconds. Although Wilbur's diary entry does not mention any attempt to circle, a diagram hand drawn by him on graph paper details the flight. The drawing indicates that he took off downwind, made a 90 degree turn to the left, flying between two of the trees on Huffman Prairie, made about a 150 degree turn to the right and landed. On that same day, in the rain and with the wind now from the northeast, for the first time in the short history of powered flight, Wilbur Wright made a complete full circle within the confines of Huffman Prairie on flight #52. The recorded distance was 4,080 ft. in a time of 1 minute, 35 ½ seconds. Wilbur's drawing also details this historic second flight. The takeoff was made into a quartering headwind from the northeast and a complete 360 degree circle around the two trees that he had previously flown between was accomplished. A. I. Root of Medina, Ohio was present for this flight and would later publish his eyewitness account in the January 1, 1905 edition of his journal, "Gleanings in Bee Culture".





On Monday September 26, 1904, Orville, who had not flown since his August 24 crash, attempted two flights. On the first attempt, #53 for the year, he took off under calm wind conditions and after traveling 156 ft. in 5 $\frac{1}{5}$ seconds the flight was terminated. Apparently Wilbur did not consider the attempt a flight because his diary entry says, "No start." The second, #54, went better. Using 1,400 pounds of catapult weight Orville flew 888 ft. in 25 seconds. The diary entry for this flight ends with, "Unable to stop turning." The reason for these four words "Unable to stop turning" and the solution to this phenomenon will ultimately be solved as part of the Wrights flying training and experience. The fact that Orville had apparently not flown for more than thirty days begs the question: Why?

For the rest of the month of September 1904, five flights, #55-60, were attempted with Orville as pilot for all but one. Most of the flights were straight ahead and of short duration except for flight #60 when Orville flew 1,520 ft. in 33³/₅ seconds. Flight #55 had the "Tail set to one side to turn left." Flights #56 and 59 are labeled "Eng.[ine] Tests."

September 1904 was a significant month for the Wrights. Their catapult launching device enabled their somewhat underpowered airplane to become airborne after traveling only 50 ft. down the launch rail regardless of the wind conditions enabling maneuvering flight for the first time. Things were looking up.

To be continued. Gerard Blake

Events

Chapter Meetings

October 6, 2011 @ 7:30 p.m. – Monthly General Meeting October 13, 2011 @ 7:00 p.m. – Chapter Board Meeting

Chapter Events

November 3, 2011 – Board of Directors Election

Chapter Program Schedule, 2011(under construction)

Month	Program	Month	Program
January		July	Picnic
February	Dan Morris, Nav/Landing Lights	August	Zodiac Wing Incidence Setting
March		September	Kevin Daugherty: Frederick Tower
April	Dan Morris: Aircraft Lighting Part II	October	Mark – Radio Comm. at towered airports
Мау	Tower Controller for new FDK tower	November	
June	FAA: Light Sport Safety	December	

Chapter Program schedule is subject to change without notice.

Hagerstown Wings & Wheels Expo 2011 – October 15 & 16

Details in their flyer. Sounds like a good excuse to check out the new home of the Turbulent!



Refreshment Volunteers, 2011

Here is the list of volunteers supplying refreshments for 2011. The Board of Directors thanks you for your support (and munchies). This list will be included in the monthly newsletter as a reminder.

January	Chris Gunther	July	Kris Crone
February	Mark Gosselin	August	Jack Fromm
March	N/A–Banquet	September	Wally Wells
April	Jack Savage	October	Mark Gosselin
Мау	Justice Pak	November	
June	Bill Barci	December	

Volunteers, if you cannot make the meeting, call the Treasurer (301-639-9801).

EAA SportAir Workshops

October 1-2: Electrical

October 21-23: RV Assembly

January, 2012, SportAir LSA Repair-Inspection Course, Airplane

Parties interested in enrolling in workshops should contact Mark Forss or Joe Norris at EAA (1-800-236-4800) as soon as possible. You can find course information on the workshop schedule at <u>http://www.sportair.com/schedule.html</u>. To volunteer and help out with setup and observe the course, contact Doug Kelly, 301-963-2217.

EAA Events

Go to EAA Events at: <u>http://www.eaa.org/news/</u> Go to EAA Aviation Calendar of Events at: <u>http://www.eaa.org/calendar/</u> Go to AirVenture at: <u>http://www.airventure.org/index.html</u> Go to EAA SportAir Workshops at: <u>http://www.eaa.org/sportair/</u> Unless otherwise noted, all events occur at the Chapter Hangar.

2011 Membership Dues

Reminder, 2011 collection will start in January 2011.

For those of you that have paid your dues for 2011, *THANK YOU FOR YOUR SUPPORT!!*

The money goes for the rent and upkeep on our fine AEC hangar, insurance, the newsletter mailing, and other activities. Membership dues for 2011 are \$50.00 for individuals and \$75.00 for families to cover the fixed expenses. These funds are not applied to your national dues, you must pay them separately.

Please bring your dues and membership form (see last page) to the meeting or mail it to the Treasurer. The mailing address is: EAA Chapter 524, c/o Joe Halleman, 76 Victoria Square, Frederick, MD 21702.

Joe Halleman, Treasurer

Chapter Officers President Mark Gosselin N511JG@comcast.net 240-994-7903 Vice President Tom Proctor proctortp@starpower.net 301-972-8115 Secretary Kris Crone tomcrone123@msn.com 301-473-5699 Treasurer Joe Halleman jmhalleman@gmail.com 301-639-9801 Contacts **Newsletter Editor** Jack Fromm EAA524.News@gmail.com 410-628-2689 **Facilities Coordinator** Tom Proctor proctortp@starpower.net 301-972-8115 SportAir Workshop Coordinator Doug Kelly mulligan32@verizon.net 301-963-2217 Chapter Historian Vacant Young Eagles Coordinator Vacant **Program Coordinators** Tom Crone tomcrone123@msn.com 301-473-5699 Jerry Blake gerardblake@aol.com 301-416-0491 EAA Flight Advisors Vacant EAA Technical Counselors Jerry Blake gerardblake@aol.com 301-416-0491 Doug Kelly mulligan32@verizon.net 301-963-2217 Tom Young 301-667-0964 The Frederick Flyer EAA Chapter 524 and

Aviation Education Center

Frederick, MD 21702

(FDK)



Chapter Discussion Group

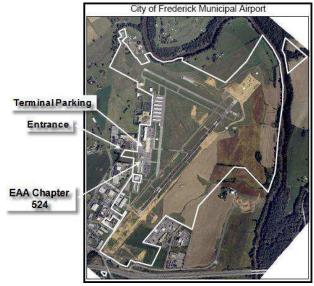
Our Chapter has an e-mail discussion group hosted by Yahoo groups. This is a moderated group so we do not get spam. About a third of the Chapter participates. Chapter members are eligible for membership by joining at: <u>http://groups.yahoo.com/group/eaa524/</u>

Chapter Meeting Location and Time

Chapter 524 meets the first Thursday of each month at 7:30 pm at the Aviation Education Center which is located at the Frederick Municipal Airport. As you enter the airport, park in the Terminal Parking lot. Walk south past the flight school (yellow building). There are signs on the end of the second row of hangars for the Chapter.

Additional information can be found at the Chapter website:

http://www.angelfire.com/space/eaa524/



Classifieds

RV-7A wing stand, free to a good home. Contact Bob Calo at 301-639-2533 or <u>igoifr@yahoo.com</u> to make arrangements for pickup.

Osprey Amphibious Project: \$16,000.00.

Includes all major parts completed, including overhauled Lycoming 0320 engine (160 HP). Contact Skip at 301-994-2717 (c 301-247-2965).



EAA Chapter 524 Membership Registration

- For new members, annual dues are \$50 for individual membership or \$75 for 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 *Joe Halleman, 76 Victoria Square, Frederick, MD 21702*.
- If you have a question about your membership, contact the Treasurer at 301-639-9801 or <u>jmhalleman@gmail.com</u>. 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 (\$75.00)					
Other name(s) if Family Membership						
EAA Membership Number Member Since:						
Phone Number (H) (C)	(W)					
Address						
City S	tate Zip					
E-mail Address (for receiving notices & newslet	tter)					
Aircraft/Projects/Interests						
II. For Official Use Only						
Status: New Renewal Individual	E Family:					
Dues Paid: Check Number 0						
Date Received//	Fiscal Year (Jan. – Dec.) 20					
	// Deposited//					
Cut here. Ke	ep Section III for your records					
III. Member's Receipt for EAA Chapter 524 Dues						
Date paid//	Dues paid for fiscal year 20					
Renewal - Individual Membership Dues: \$5	0.00					
Renewal - Family Membership Dues: \$7	5.00					
New - Individual Membership Dues: \$5	0.00					
New - Family Membership Dues: \$7	5					