

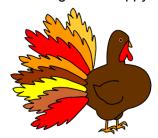
EAA Chapter 524 and Aviation Learning Center Frederick Municipal Airport (FDK), Frederick, Maryland



Volume 13 November 2011 Issue 10

President's Message

Greetings and Happy Thanksgiving wishes to you all!



November is a time for giving thanks. I would like to take this opportunity to thank all of you for making our Chapter so successful.

The Chapter 524 Board works diligently to make this chapter fun for all. It has been my privilege to work with such a dedicated group. We just held an election for the EAA Chapter 524 officers and the following people have stepped up for two (more) years of service: President, Mark Gosselin; Vice President, Tom Proctor; Secretary, Kris Crone; Treasurer, Neil Dickinson; Newsletter Editor, Jack Fromm. We are still looking for Librarian, Web Master, Historian and Program Chairs. The Board Members are already

working on programs and events for next year. If anyone has anything they would like to see happen, now is a good time to let us know.

I am also grateful that many of you have participated in Chapter events. It has been a fun year for me and I hope that you have found it fun and rewarding as well.

Wishing you clear skies,

Mark Gosselin, President

Tom Prevost, Rans S-19 - Engine Start and Taxi Test

Update from Tom: "Still lots of detail (and paper) work to do, much more than originally expected. With the holidays factored in, the first flight is expected around the new year."

Video of the slow-speed taxi test.

October RV Assembly Workshop

Courtesy of Wally Wells: "Attached are some pictures I took at the recent class. Feel free to use any you think fit in the next newsletter. The instructor was Jack Dueck and the Chapter assistants were Doug Kelly, Jerry Blake and me. An added benefit was a balloon launch just before the start of the first day of class."













The Wright Brothers In 1904 and Their Quest To Develop A Practical Airplane Part 8 – December 1 to December 20, 1904

On Thursday, December 1, 1904, Orville Wright attempted three flights, numbers 98 through 100 for the year, only one of which was exceptional. Flight #98 would probably be classified as a non- start by the Wrights. Wilbur's Diary states, "Broke cross stick carrying front truck before leaving track." After making repairs, the second flight attempt of the day, #99, resulted in a flight of only 8 % seconds for a distance of 312 feet. Orville's third flight, #100, was an exceptional 5 minutes and 8 seconds. Wilbur's Diary states, "Almost four rounds." In a letter to Octave Chanute dated December 20, 1904 Wilbur writes, "The best flights since my last letter were on Nov. 16th and Dec. 1st, the flights being 2½ turns of the field on the first named date, and almost four rounds on the last. Although 70 lbs. of steel were carried in the last flight to balance the machine, it was still insufficient and the flight was made with pressure on the top side of the front rudder [canard, elevator]. Fred C. Kelly in his book "The Wright Brothers" explains the reason why the Wrights placed 70 lbs. of ballast on the framework under the front rudder. "The center of gravity of their machine was so far back of the center of pressure on the wings that an air pressure of 70 pounds was required on the top side of the horizontal elevator in front to make the center of lift and center of gravity coincide."

On Monday, December 5, things did not go so well. With Wilbur as pilot on the first flight attempt of the day, #101, he notes in his diary, "Propeller struck truck [launching dolly] soon after leaving track and broke to pieces."

With the appropriate repairs made, on Tuesday, December 6, Wilbur took off on flight #102 but did not get far. He says in his diary, "Shut off gasoline by mistake soon after start." On Wednesday, with Orville and Charles Taylor assisting, he made one short straight ahead flight, #103, of 7½ seconds.

The last flight attempts of 1904 occurred on Friday, December 9 and can only be classified as being unsuccessful. Wilbur describes his flight, #104, in two short sentences. "No start. Shut off gasoline from force of habit." For his second flight attempt of the day and the last flight attempt for 1904, #105, "Front rudder [canard/elevator] loose at lower end of skids, unmanageable."

A Summary of the Wright's flying experiments of 1904 can be found in "McFarland, Marvin, W., The Papers of Wilbur & Orville Wright, Volume One: 1899-1905, Salem, New Hampshire: Ayer Company, Publishers, INC, Reprint Edition, 1990. Paraphrased, they are:

- 1. After familiarizing themselves with the operations of the machine in straight flights the first three attempts to fly a complete circle were aborted due to not knowing how much control input was required to stay within the boundaries of the Huffman Prairie flying field.
- 2. On September 20, 1904, Wilbur Wright accomplished the first complete circle.
- 3. Circling flights continued and on November 9, 1904, Wilbur Wright completed a flight of just over five minutes that included almost four circles of the field.



- 4. Except for a few flights, the warping wires and the wires connecting the vertical tail were interconnected. For a few of the flights in 1904, the vertical rudder was not connected, so as to automatically operate in conjunction with the wing warping, but instead was coupled up to a lever, so that it could be operated either independently of the warping or in conjunction with it.
- 5. While circling, the Wrights experienced adverse yaw and discovered that by gradually moving the hip cradle toward the high wing, it could be corrected. They attached a yaw string in late September or early November to aid in observation and corrective action. "A sudden movement of the cradle toward the high side gave the wings an increase warp and brought the machine to the level. Then on setting the cradle back to its central position, thus restoring the wings and tail to the central positions, the machine proceeded in a straight line with the wings level."
- 6. "On a few occasions the machine did not respond promptly and the machine came to the ground in a somewhat tilted position." The cause of the difficulty proved to be very obscure and the season of 1904 closed without any solution of the puzzle.

Highlights of the 1904 Flying Season

- 1. First flight on May 26. The last flight December 9, 1904.
- 2. A total of 105 flights was attempted; 77 were successful starts, 1 was characterized as a poor start and 21 were classified as no starts. There are no records for flight numbers 9, 10, 11, 12, 13 and 20.
- 3. Wilbur Wright is identified as the pilot on 37 attempted flights.
- 4. Orville Wright is identified as the pilot on 44 attempted flights.
- 5. Un-catapulted launching track lengths varied among 100, 145, 160, 195 and 236 feet lengths.
- 6. Catapult weights were 600 lbs. on the first test, 800 lbs. second test, 1000 lbs. third test. Flights attempts thereafter used 1,200 or 1,400 lbs.
- 7. Approximate monthly flight times:

Wilbur Wright		Orville Wright		
August	171.85 seconds	August	97.75 seconds	
September	363.35 seconds	September	89.60 seconds	
October	109.20 seconds	October	465.90 seconds	
November	765.55 seconds	November	266.00 seconds	
December	7.00 seconds	December	296.05 seconds	
Total	1,416.95 seconds	Total	1,215.30 seconds	
	23.62 minutes		20.25 minutes	

Maneuvering Flights

- 1. Flight #49: Wilbur Wright, September 15, 55.2 seconds. Completed half circle.
- 2. Flight #52: Wilbur Wright, September 20, 95.4 seconds. Completed full circle.



- 3. Flight #68: Orville Wright, October 14, 76.0 seconds. Completed part circle.
- 4. Flight #69: Orville Wright, October 14, 91.0 seconds. Completed part circle.
- 5. Flight #70: Wilbur Wright, October 14, 83.2 seconds. Completed circle.
- 6. Flight #75: Wilbur Wright, November 2, 85.0 seconds. Completed circle.
- 7. Flight #80: Wilbur Wright, November 3, 88.0 seconds. Completed circle.
- 8. Flight #82: Wilbur Wright, November 9, 304.0 seconds. Completed three circles.
- 9. Flight #87: Wilbur Wright, November 16, 190.75 seconds. Completed two and one quarter circles.
- 10. Flight #100: Orville Wright, December 1, 290.8 seconds. Completed almost four circles.

Accidents/Incidents

Of the 77 successful starts/flights in 1904, records list damage to the airplane 21 times. Damage occurred fourteen times during the first fifty flights and seven times during the last fifty-five flights. Extensive damage occurred seven times.

Accident Summary

May		Orville Wright, 1 accident	
June	2 accidents, pilot not identified		
July	No records		
August	Wilbur Wright, 5 accidents	Orville Wright, 3 accidents	
September	Wilbur Wright, 2 accidents		
October	Wilbur Wright, 1 accident	Orville Wright, 2 accidents	
November	Wilbur Wright, 1 accident	Orville Wright, 1 accident	
December	Wilbur Wright, 1 accident	Orville Wright, 1 accident	
Total	Wilbur Wright, 10 accidents	Orville Wright, 7 accidents	

In November, 1904, the United States Patent Office rejected for a second time the Wrights' patent application that was based primarily on the flight control system of their 1902 glider.

To be continued.

Gerard Blake



Events

Chapter Meetings

December 1, 2011 @ 7:30 p.m. – Monthly General Meeting December 8, 2011 @ 7:00 p.m. – Chapter Board Meeting

Chapter Program Schedule, 2011

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	Jerry – 100 Years of the Airplane
May	Tower Controller for new FDK tower	November	
June	FAA: Light Sport Safety	December	Mark, Radio Comm. @ Towered Airports

Chapter Program schedule is subject to change without notice.

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
May	Justice Pak	November	
June	Bill Barci	December	Kris Crone

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

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)



EAA SportAir Workshops

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 http://www.sportair.com/schedule.html. To volunteer and help out with setup and observe the course, contact Doug Kelly, 301-963-2217.

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/

Unless otherwise noted, all events occur at the Chapter Hangar.

Classifieds

703-819-1810

Wing stand (large one - used to hold the wings from a Stearman) is available to anyone wants it. Thanks!

Mark Pankratz

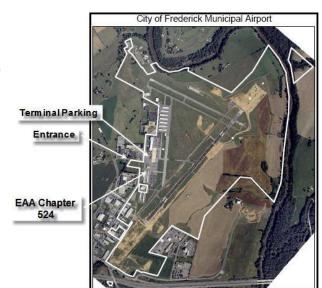
Chapter Discussion Group

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: http://groups.yahoo.com/group/eaa524/

Chapter Meeting Location and Time

Chapter 524 meets the first Thursday of each month at 7:30 p.m. 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/





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 jmhalleman@gmail.com. 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:				
Other name(s) if Family Membership				
EAA Membership Number Member Since:				
	(C) (W)			
Address				
City	State Zip			
E-mail Address (for receiving notices & no	ewsletter)			
Aircraft/Projects/Interests				
II. For Official Use Only				
Status: New Renewal Indiv	vidual: Family:			
	Cash Amount \$			
	Fiscal Year (Jan. – Dec.) 20			
	lated/ / Deposited//			
Cut her	re. Keep Section III for your records			
III. Member's Receipt for EAA Chapter 5				
Date paid//				
Renewal - Individual Membership Dues:	· · · · · · · · · · · · · · · · · · ·			
Renewal - Family Membership Dues:	· · · · · · · · · · · · · · · · · · ·			
New - Individual Membership Dues:				
New - Family Membership Dues:	· ————			